HHP Care Model and Disease Management Webinar Series

Psychiatric Pearls for the Primary Care Provider

Thursday, May 27, 2021 5:30pm – 6:30pm





Moderator - 05/27/21

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Chief of Staff, Pali Momi Medical Center
Hawai'i Pacific Health



Disclaimer:

 The following is intended as information resource only for HHP/HPH providers, clinicians, administrative and clinical leaders.

 Specific areas may not pertain directly to your clinical practice area and/or may not be applicable to your practice based on your existing workflows, infrastructure, software (e.g. EHR), and communications processes.

Webinar Information

- You have been automatically muted.
 You cannot unmute yourself.
- You will be able to submit questions via the Q&A section.
 - Due to time constraints, any unanswered questions will be addressed this week and posted on the HHP website
- A recording of the meeting will be available tomorrow on the HHP website and intranet.



How to Claim CME Credit

1. Step 1: Confirm your attendance

 You should have completed a brief questionnaire before joining today's live webinar.

2. Step 2: HPH CME team will email you instructions

- Complete and submit evaluation survey that will be emailed to you within one week of the offering.
- Your CE certificate will be immediately available to you upon completion of your evaluation.
- Questions? Email <u>hphcontinuingeduc@hawaiipacifichealth.org</u>



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- In support of improving patient care, Hawai'i Pacific Health is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.
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Psychiatric Pearls for the Primary Care Provider



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May is Mental Health Month

YOU ARE NOT ALONE

It's essential to prioritize our mental health and stay connected with friends, family and peers. No one should feel alone in their mental health journey or without the resources and support they need.



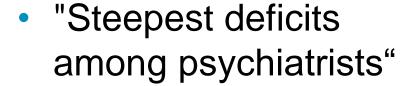


Prevalence of Mental Illness

- Pre-pandemic
 - 1 in 5 US adults experience mental illness each year
 - 1 in 20 US adults experience serious mental illness each year
 - 1 in 6 US youth (6-17) experience a mental health disorder each year
 - Suicide is the 2nd leading cause of death among people aged 15-34

The shortage of physicians in the US

Known PCP shortage



 Fewer than ½ the adults get the help they need in a given year



Examining topics affecting the recruitment and retention of physicians and advanced practice professionals

A resource provided by Merritt Hawkins, the nation's leading physician search and consulting firm and a company of AMN Healthcare (NYSE: AMN), the largest healthcare workforce solutions company in the United States.

Corporate Office: Merritt Hawkins 8840 Cypress Waters Blvd #300 Dallas, Texas 75019 800-876-0500

Eastern Regional Office: Merritt Hawkins 100 Mansell Court East Suite 500 Roswell, GA 30076 800-306-1330

The Silent Shortage

A White Paper Examining Supply, Demand and Recruitment Trends in Psychiatry

Introduction

Merritt Hawkins, the nation's leading physician search and consulting firm, produces a series of surveys, white papers, speaking presentations and other resources intended to provide insight into physician recruiting, physician supply and demand, physician compensation trends and a range of related topics.

In addition to its own research and analysis, Merritt Hawkins is contracted by third parties to conduct various research projects. Third parties that Merritt Hawkins has partnered with on such initiatives include The Physicians Foundation, the American Academy of Physician Assistants, the North Texas Regional Extension Center/Office of the National Coordinator for Health Information Technology, the Society for Vascular Surgery, Trinity University, the Indian Health Service, the American Academy of Surgical Administrators, and the Association of Managers of Gynecology and Obstetrics. Merritt Hawkins also has submitted oral and written expert testimony to Subcommittees of the Congress of the United States.

This white paper examines supply, demand, and recruiting trends in the specialty of psychiatry.



Screening Tools

- PHQ-9 (Patient Health Questionnaire, 9 items)
 - Self-administered (<5min)
 - Excellent sensitivity and specificity, including postpartum depression
 - Suicide item is sensitive in primary care settings
 - Measured against clinical interview

- GAD-7 (Generalized Anxiety Disorder Scale, 7 items)
 - Self-administered (<5min)
 - Good sensitivity and specificity for GAD
 - Fair sensitivity for panic and social phobia
 - Low sensitivity for PTSD

Mulvey- Day, N. et al. Screening for Behavioral Conditions in Primary Care Settings: A Systematic Review of the Literature. J Gen Intern Med. 2017. 33(3): 335-346.



PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

| Over the <u>last 2 weeks</u> , how often have you been bothered by any of the following problems? (Use "" to indicate your answer) | Not at all | Several days | More than half the days | Nearly every day |
|--|---------------|-----------------|-------------------------------|------------------------|
| 1. Little interest or pleasure in doing things | 0 | 1 | 2 | 3 |
| 2. Feeling down, depressed, or hopeless | 0 | 1 | 2 | 3 |
| 3. Trouble falling or staying asleep, or sleeping too much | 0 | 1 | 2 | 3 |
| 4. Feeling tired or having little energy | 0 | 1 | 2 | 3 |
| 5. Poor appetite or overeating | 0 | 1 | 2 | 3 |
| Feeling bad about yourself — or that you are a failure or have let yourself or your family down | 0 | 1 | 2 | 3 |
| Trouble concentrating on things, such as reading the newspaper or watching television | 0 | 1 | 2 | 3 |
| Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual | 0 | 1 | 2 | 3 |
| Thoughts that you would be better off dead or of hurting yourself in some way | 0 | 1 | 2 | 3 |
| For office coni | NG <u>0</u> + | | Total Score | |

If you checked off <u>anv</u> problems, how <u>difficult</u> have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all Somewhat difficult

Very difficult Extremely difficult

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Proposed Management by PHQ-9 Score

| Score | Depression Severity | Proposed Action |
|-------|------------------------|---|
| 0-4 | None-Minimal | None |
| 5-9 | Mild | Watchful waiting; repeat at follow up |
| 10-14 | Moderate | Treatment Plan, consider counseling, follow up and/or pharmacotherapy |
| 15-19 | Mod Severe | Active treatment with pharmacotherapy and/or psychotherapy |
| 20-27 | Severe | Immediate initiation of pharmacotherapy and, if severe impairment or poor response to therapy, referral to mental health specialist and/or collaborative management |

Kroenke K, Spitzer RL. The PHQ-9: a new depression diagnostic and severity measure. Psychiatric Annals 2002;32:509-521.



Treatment Response and Plan by Change in PHQ-9 Score (after 4-6 weeks)

| Score | Treatment Response | Treatment Plan |
|----------------------------------|-----------------------|--|
| Drop of 5 points from baseline | Adequate | No treatment change needed Follow up in 4 weeks |
| Drop of 2-4 points from baseline | Possibly inadequate | May warrant an increase in antidepressant dose or increase therapy intensity Follow up in 2- 4 weeks |
| Drop of 1 point from baseline | Inadequate | Increase dose; Augmentation Add psychotherapy if not done Informal or formal psychiatric consultation Follow up in 1-2 weeks |



GAD-7

| Over the <u>last 2 weeks</u> , how often have you been bothered by the following problems? | Not at all | Several days | More than half the days | Nearly every day |
|--|---------------|-----------------|-------------------------------|---------------------|
| (Use "✔" to indicate your answer) | | | | |
| 1. Feeling nervous, anxious or on edge | 0 | 1 | 2 | 3 |
| 2. Not being able to stop or control worrying | 0 | 1 | 2 | 3 |
| 3. Worrying too much about different things | 0 | 1 | 2 | 3 |
| 4. Trouble relaxing | 0 | 1 | 2 | 3 |
| 5. Being so restless that it is hard to sit still | 0 | 1 | 2 | 3 |
| 6. Becoming easily annoyed or irritable | 0 | 1 | 2 | 3 |
| 7. Feeling afraid as if something awful might happen | 0 | 1 | 2 | 3 |

(For office coding: Total Score T___ = __ + __ + ___)



Proposed Management by GAD-7 Score

| Score | Symptom Severity | Proposed Action |
|--------|------------------|---|
| 5-9 | Mild | Monitor |
| 10*-14 | Moderate | Possible clinically significant condition |
| >15 | Severe | Active treatment probably warranted |

^{*}For Panic Disorder, Social Phobia, & PTSD, cutoff score of 8 maybe used for optimal sensitivity/specificity

Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med. 2006 May 22;166(10):1092-7. Kroenke K, Spitzer RL, Williams JBW, Monahan PO, Löwe B. Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. Ann Intern Med 2007;146:317-325.



Suicide Risk Factors

- Known mental health condition
- Family history
- Substance Use
- Intoxication
- Access to firearms
- A serious or chronic medical illness
- Gender
- History of trauma or abuse
- Prolonged stress
- Recent tragedy or loss
- Recent life change



Suicide Warning Signs

- Increase alcohol and drug use
- Aggressive behavior
- Withdrawal from friends, family and community
- Dramatic mood swings
- Impulsive or reckless behavior
- Collecting and saving pills or buying a weapon
- Giving away possessions
- Tying up loose ends
- Saying goodbye



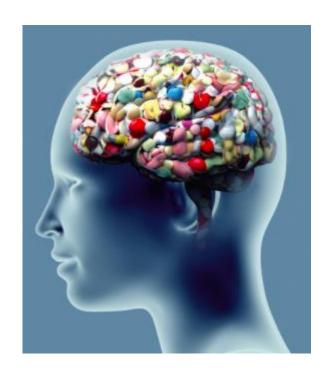
My patient is suicidal...

- Imminent danger
 - Call 911 (if your clinic is not on a medical campus)
 - let them know you have a patient who is in imminent danger and likely needs a MH1
- Not exactly sure if imminently dangerous
 - Local Crisis number: Hawaii CARES



Psychopharmacology

- Antidepressants
 - SSRI
 - SNRI
 - Others
- Antianxiety
 - In addition to SSRI/SNRI
- Antipsychotics
 - Monitoring
 - Managing side effects



Choosing the right treatment(s)

- Basics (Lifestyle interventions)
 - Physical Activity
 - Sleep
 - Avoid Social Isolation
- Psychotherapy
 - Cognitive Behavioral Therapy (CBT)
 - Intrapersonal Psychotherapy (IPT)
- Medications
 - Moderate to severe depression/anxiety
 - First line
 - SSRI/SNRI



FDA Black Box Warning

 Antidepressants increased the risk compared to placebo of suicidal thinking and behavior (suicidality) in children, adolescents, and young adults in short-term studies of major depressive disorder (MDD) and other psychiatric disorders. Anyone considering the use of [Insert established name] or any other antidepressant in a child, adolescent, or young adult must balance this risk with the clinical need. Short-term studies did not show an increase in the risk of suicidality with antidepressants compared to placebo in adults beyond age 24; there was a reduction in risk with antidepressants compared to placebo in adults aged 65 and older. Depression and certain other psychiatric disorders are themselves associated with increases in the risk of suicide.

Fda.gov

Black Box continued

- Possible theories:
 - Antidepressants uncover bipolar
 - Immature prefrontal myelination
 - Younger patients metabolize drugs faster
 - Worse sleep
- Results of the FDA warning
 - Decrease in prescribing of SSRI/SNRI
 - Increase in benzo and antipsychotics
 - Decreased rate of diagnosing MDD
 - Increase psychotropic drug poisoning (Suicide attempts)

Fornaro, M. et al., The FDA "Black Box" Warning on Antidepressant Suicide Risk in Young Adults: More Harm Than Benefits? 2019 Frontiers in Psychiatry, 10:294. Friedman, R. Antidepressants' Black-Box Warning- 10 Years Later, N Engl J Med 2014; 371:1666-1668.

Brent, D. Antidepressants and Suicidality. Psychiatric Clin N AM 39 (2016) 503-512.

Black Box

- Suicidal events tend to occur early in treatment
 - See weekly for the first 4 weeks, or at least call
 - Check on pills remaining--> non adherence associated with nonresponse--> withdrawal symptoms or natural progression of illness
- Stop or lower dose if... mania, agitation, akathisia, worsening depression, severe anxiety, or newonset suicidal ideation

Fornaro, M. et al., The FDA "Black Box" Warning on Antidepressant Suicide Risk in Young Adults: More Harm Than Benefits? 2019 Frontiers in Psychiatry, 10:294. Friedman, R. Antidepressants' Black-Box Warning- 10 Years Later, N Engl J Med 2014; 371:1666-1668.

Brent, D. Antidepressants and Suicidality. Psychiatric Clin N AM 39 (2016) 503-512.



Possible Side Effects of SSRI/SNRI

- Gastrointestinal
- Sexual side effects
- Anti-cholinergic
 - Dry mouth
 - Urine retention
 - Confusion
- Drowsiness
- Insomnia/Agitation
- Headaches
- Bruxism (Teeth grinding/clenching)
- Orthostatic hypotension
- Weight gain
- QTC prolongation



| SSRI | Start | Target Dose | Dose Limits | Half-Life | Pearls |
|------------------------|-------|----------------|----------------|-----------|--|
| Citalopram (Celexa) | 20 | 20-40* | 10 to 40 | 35hr | Less med interaction >40mg need ECG |
| Escitalopram (Lexapro) | 10 | 10-20 | 5 to 30 | 27-32hr | Less med interaction |
| Fluoxetine (Prozac) | 20 | 20-60 | 10 to 80 | *~9 days | |
| Fluvoxamine (Luvox) | 50 | 50-200 | 25-300 | 15.6 hr | Withdrawal |
| Fluvoxamine CR | 100 | 100-200 | 100-300 | | |
| Paroxetine (Paxil) | 20-25 | 20-50 | 10-50 | 21hr | Avoid in pregnancy |
| Sertraline (Zoloft) | 50 | 50-200 | 25-300 | 26hr | Absorption better with food OK c Breastfeeding Possible diarrhea |

Adapted from Up to Date April 2021, www.epocrates.com
CREATING A HEALTHIER HAWAI'I

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| SNRI | Start | Target Dose | Dose Limits | Half life | Pearls |
|---------------------------|-------------|----------------|--|-----------|--|
| Desvenlafaxine (Pristiq) | 25-50 | 50-100 | 50-400 (no evidence that greater than 50 is more effective) | 11hr | Less sexual SE |
| Duloxetine (Cymbalta) | 30-60 | 60 | 30-120 | 9hr | Avoid in patients with renal, liver, and heavy alcohol use |
| Venlafaxine (Effexor) | 37.5- 75 | 75-375 | 75-375 | 11hr | |
| Venlafaxine XR | 37.5 | 75-375 | 75-375 | | |
| Levomilnacipran (Fetzima) | 20 | 40-80 | 20-120 | 12hr | |
| Milnacipran (Savella) | 12.5 | 100-200 | 50-300 | 9hr | |

Serotonin Modulators

| Serotonin Modulators | Start | Target Dose | Dose Limits | |
|-------------------------|-------|----------------|----------------|----------------|
| Nefazodone | 200 | 300-600 | 50-600 | |
| Trazodone | 100 | 200-400 | 100-600 | Take with food |
| Vilazodone | 10 | 40 | 10-40 | |
| Vortioxetine | 10 | 20 | 5-20 | |

| Atypical Agents | Start | Target | Dose Limits | |
|---------------------------|-------|--------|-------------|--|
| Bupropion (Wellbutrin) | 200 | 300 | 100-450 | "No" sexual SE Smoking cessation Not good for anxiety Concern for seizures |
| Bupropion SR (12 hr) | 150 | 300 | 150-400 | |
| Bupropion XL (24hr) | 150 | 300 | 150-450 | |
| Mirtazapine | 15 | 15-45 | 7.5-60 | Increases appetite Increased sedation |

Additional Antianxiety Medications

- SSRI/SNRI
 - Venlafaxine and Duloxetine
- Buspirone (Buspar)

| | Start | Target, dose limit | Relevant to GAD |
|-----------------------|--------------------------|--------------------------------|---|
| Buspirone (Buspar) | 10mg divided doses | 10-60mg in divided doses | Non-benzo anxiolytic Augmentation for partial responders Slow onset and modest efficacy |

Benzodiazepines

Pharmacology for benzodiazepines

| Drug | Adult oral total daily dose (mg)* | Comparative potency (mg) [¶] | Onset after oral dose (hours) | Metabolism | Elimination half- life (hours) [∆] | |
|-------------------------------|--------------------------------------|--|----------------------------------|---|--|--|
| Alprazolam | 0.5 to 6 | 0.5 | 1 | CYP3A4 to minimally | 11 to 15 | |
| Alprazolam extended release | 0.5 to 6 once daily | 0.5 | 1 | active metabolites. | 16 (older adults) 20 (hepatic impairment) 22 (obesity) | |
| Bromazepam ^{0§} | 6 to 30 | 7.5 | 1 | CYP1A2. No active metabolite. | 8 to 20 | |
| Chlordiazepoxide [§] | 5 to 100 | 10 | 1 | CYP3A4 to active metabolites. | 30 to 100 Prolonged in older adults and hepatic impairment | |
| Clonazepam | 0.5 to 4 | 0.25 to 0.5 | 0.5 to 1 | CYP3A4. No active metabolite. | 18 to 50 | |
| Clorazepate | 15 to 60 | 7.5 | 0.5 to 1 | CYP3A4 to active metabolite. | 36 to 200 | |
| Diazepam | 4 to 40 | 5 | 0.25 to 0.5 | CYP2C19 and 3A4 to active metabolites. | 50 to 100 Prolonged in older adults and renal or hepatic impairment | |
| Lorazepam | 0.5 to 6 0.5 to 4 (hypnotic) | 1 | 0.5 to 1 | Non-CYP glucuronidation in liver. No active metabolite. | 10 to 14 | |
| Oxazepam | 30 to 120 15 to 30 (hypnotic) | 15 to 30 | 1 to 2 | Non-CYP glucuronidation in liver. No active metabolite. | 5 to 15 | |
| Prazepam ⁰⁵ | 15 to 60 | 15 | 2 to 3 | CYP3A4 to active metabolites. | 30 to 200 Prolonged in older adults | |

Up to Date, April 2021



Liver Metabolism

| Medication Met | abolism in Ps | ychia | try | | | Updat | ed Feb | 2020, | Copyn | ight 20 | 010, Br | ett Lu | MD/P | D |
|----------------|----------------|-------|--------|-------|---------|-------|--------|--------|----------|---------|---------|--------|------|---------------|
| | | Metab | olized | by P4 | 150 enz | zyme: | | Inhibi | t - / St | imula | te + | | | |
| | | 1A2 | | | 2C19 | 2D6 | 3A4 | | | | 2C19 | 2D6 | 3A4 | |
| SSRIs | citalopram | | | | X | х | х | | | | | | | citalopram |
| | escitalopram | | | | X | х | | | | | | | | escitalopram |
| | fluoxetine | | | х | | Х | | | | - | - | | - | fluoxetine |
| | fluvoxamine | Х | | | | Х | | | | - | | | - | fluvoxamine |
| | paroxetine | | | | | Х | | | | - | | | | paroxetine |
| | sertraline | | | х | х | х | х | | | | | - | - | sertraline |
| NDRI/NRI | atomoxetine | | | | X | Х | | | | | | | | atomoxetine |
| | buproprion | | Х | | | х | | | | | | - | | buproprion |
| SNRIs | desvenlafaxine | | | | | | х | | | | | | | desvenlafaxin |
| | duloxetine | Х | | | | Х | | - | | | | - | | duloxetine |
| | venlafaxine | | | | | Х | | | | | | | | venlafaxine |
| SARIs | trazodone | | | | | | Х | | | | | | | trazodone |
| | vilazodone | | | | X | х | Х | | | | | | | vilazodone |
| | vortioxetine | | | | | Х | | | | | | | | vortioxetine |
| alpha-2 antag | mirtazapine | Х | | | | Х | Х | | | | | | | mirtazapine |
| TCA | amitriptyline | | | Х | X | х | | | | | | | | amitriptyline |
| | clomipramine | х | | | х | Х | х | | | | | | | clomipramine |
| | desipramine | | | | | Х | | | | | | | | desipramine |
| | doxepin | | | | | Х | | | | | | | | doxepin |
| | imipramine | х | | | х | Х | | | | | | | | imipramine |
| | nortriptyline | | | | | Х | | | | | | | | nortriptyline |
| MAOIs/others | selegiline | X | | х | X | | × | | | | | | | selegiline |
| | modafanil | | | | | | | | | | - | | | modafanil |

Lu, Brett, updated 2/2020

Potential Life Threating Responses

| | Serotonin Syndrome | Neuroleptic Malignant Syndrome |
|------------------------|--|---------------------------------------|
| Onset | WIth in 24 hours | Days to weeks |
| Neuromuscular findings | Hyperreactive (tremor, clonus, reflexes) | Bradyreflexia, severe muscle rigidity |
| Causative agent | Serotonin Agonist | Dopamine |
| Treatment agent | Benzodiazepines Cyoheptadine | Bromocriptine |
| Resolution | Within 24 hours | Days to weeks |

HEALTH

Moving on to Bipolar & Schizophrenia

Mood Stabilizers & Antipsychotics

- Treatment of Bipolar Disorder &/Or Schizophrenia
 - Antipsychotics
 - Focus on Second Generation Antipsychotics (SGA)
 - Antiepileptics
 - Valproate
 - Topiramate
 - Lamotrigine
 - Carbamazepine

Antipsychotic Monitoring

Recommendations for metabolic risk factor monitoring in patients with severe mental illness or on antipsychotic medication

| | Timing of assessment | | | | | | | | |
|--|----------------------|---------------|---------------------|--------------|-----------|-----------------------|--|--|--|
| Risk factor | | First year of | Ongoing monitoring* | | | | | | |
| | Baseline | 6 weeks | 3 months | 12 months | Quarterly | Annually [¶] | | | |
| Personal and family history of diabetes, hypertension, or cardiovascular disease | х | | | | | х | | | |
| Smoking status, physical activity, diet ^Δ | Х | х | Х | | х | | | | |
| Weight, body mass index [∆] | Х | Х | Х | | х | | | | |
| Blood pressure [∆] | Х | Х | Х | 10 | Х | | | | |
| Fasting glucose or HbA1c [◊] X | | X5 | X | Х | | Х | | | |
| Lipid profile (fasting or nonfasting) | х | | х | Х | | х | | | |

Up to Date Apr 2021

Urban, A. Therapeutic drug monitoring of atypical antipsychotics. Psychiatr. Pol. 2017; 51(6): 1059–1077



Second Generation Antipsychotics Side Effects

| | Weight gain | Glucose abnormalities | Hyperlipidemia | Akathisia | Parkinsonism | Dystonia | Tardive dyskinesia | Prolactin elevation | Sedation | Anticholinergic | Orthostatic hypotension | QTc prolonga |
|----------------------------|-------------------------|--------------------------|----------------|-----------|--------------|----------|-----------------------|------------------------|----------|-----------------|----------------------------|-----------------|
| Second-generation | econd-generation agents | | | | | | | | | | | |
| Aripiprazole | + | + | + | ++ | + | + | + | + | + | + | + | * |
| Asenapine | ++ | ++ | ++ | ++ | + | ++ | ++ | ++ | ++ | + | ++ | + |
| Brexpiprazole [¶] | + | + | ++ | ++ | + | + | + | + | ++ | + | + | * |
| Cariprazine [¶] | ++ | + | + | ++ | + | + | + | + | ++ | ++ | + | * |
| Clozapine∆ | +++ | +++ | +++ | + | + | + | + | + | +++ | +++ | +++ | ++ |
| Iloperidone | ++ | ++ | + | + | + | + | + | ++ | ++ | + | +++ | + |
| Lumateperone ¶ | + | + | + | + | + | + | + | + | + | + | + | * |
| Lurasidone | + | ++ | ++ | ++ | ++ | ++ | ++ | + | ++ | + | + | * |
| Olanzapine | +++ | +++ | +++ | ++ | ++ | + | + | ++ | +++ | ++ | ++ | ++ |
| Paliperidone | ++ | + | ++ | ++ | ++ | ++ | ++ | +++ | + | + | ++ | + |
| Pimavanserin | - | + | + | + | + | + | + | + | + | + | ++ | + |
| Quetiapine | ++ | ++ | +++ | + | + | + | + | + | +++ | ++ | ++ | ++ |
| Risperidone | ++ | ++ | + | ++ | ++ | ++ | ++ | +++ | ++ | + | ++ | ++ |
| Ziprasidone | + | + | + | ++ | + | + | + | ++ | ++ | + | ++ | +++ |

SGA Weight Gain/Metabolic Syndrome

| Low | Mild | Moderate | High |
|---------------|-----------|--------------|------------|
| Aripiprazole | Asenapine | lloperidone | Clozapine |
| Brexpiprazole | | Paliperidone | Olanzapine |
| Cariprazine | | Quetiapine | |
| Lumateprone | | Risperidone | |
| Lurasidone | | | |
| Ziprasidone | | | |

Aripiprazole < Seroquel = Risperidone < Olanzapine

AACAP Psychopharmacology Intensive Course at Annual Conference 9/2020 Urban, A. Therapeutic drug monitoring of atypical antipsychotics. Psychiatr. Pol. 2017; 51(6): 1059–1077



Treating SGA Weight Gain

- Metformin
 - Start 500mg with dinner
 - Kids <40kg start 250mg
 - Then weekly increase to 500mg BID till 2grams
 - SE: nausea, vomiting, diarrhea, vit B def, lactic acidosis rare if renal function WNL

Topomax

- Start 25mg
- Then increase each week, end dose 100-200mg (pending symptoms)
- Dose limiting- word finding problems

De Boer, N et al. Study Protocol of a randomized, double blind, placebo controlled, multicenter trail to treat antipsychotic induced weigh gain: the Metformin-Lifestyle in antipsychotic users (MELIA) trial. BMC Psychiatry (2021) 21:4. Ellul, P. Metformin for weight gain associated with second generation antipsychotics in children and adolescents: A systematic review and meta-analysis. CNS Drugs (2018) 32:1103-1112.



Treating Movement SE from SGA

Aesthesia

Propranolol 20-40mg initial

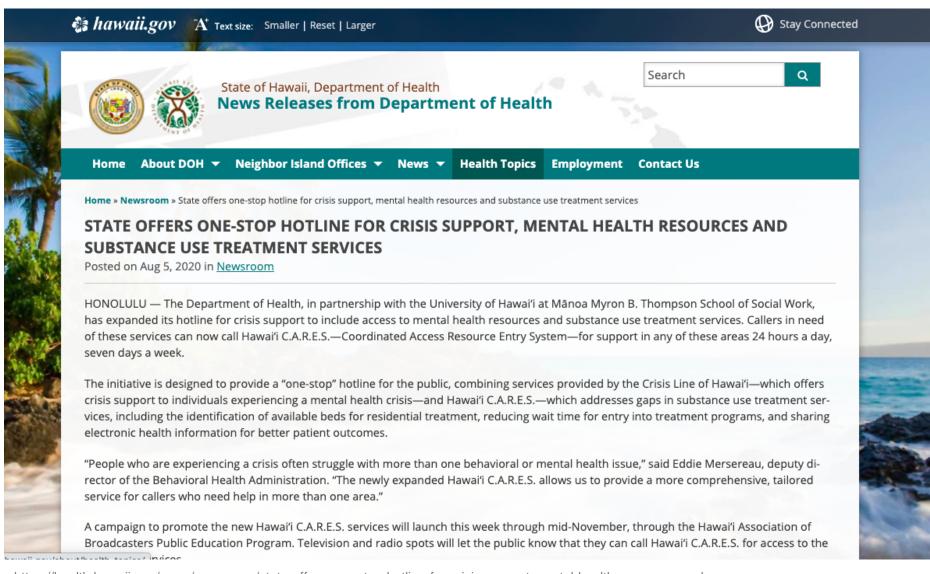
Extra Pyramidal syndrome

- Diphenhydramine 25-50mg
- Benztropine 1-2 mg
 - Anticholinergic Effects

Resources

- Hawaii C.A.R.E.S. 24/7
 - **-** (808) 832-3100
 - Neighbor Islands 1(800)753-6879
 - text ALOHA to 741741
 - Crisis Service Management
 - Case Coordinator
- Insurance Based Assistance
 - HMSA: Beacon Health Options (808) 695-7700
 - Request Case Coordinator
- State Based Mental Health Program
 - Adult Mental Health Division (AMHD)
 - 643-AMHD (2643)
 - Child and Adolescent Mental Health Division (CAMHD)
 - https://health.hawaii.gov/camhd/ 733-9333





https://health.hawaii.gov/news/newsroom/state-offers-one-stop-hotline-for-crisis-support-mental-health-resources-and-substance-use-treatment-

services/#:~:text=To%20access%20services%20through%20Hawai,also%20text%20ALOHA%20to%20741741



National/Web Based Resources

- psychologytoday.com
- Perinatal Psychiatric Consult Line
 - 1-877-499-4773
 - https://www.postpartum.net/professionals/perinatalpsychiatric-consult-line/
- University of Washington: AIMS Program
 - https://aims.uw.edu/resource-library/commonlyprescribed-psychotropic-medications

psychologytoday.com



Insurance

Hawaii Medical Services Association

University Health Alliance

Hawaii Medical Assurance Association

BlueCross and BlueShield

More +

Issues

ADHD

Addiction

Anger Management

Anxiety

Bipolar Disorder

Borderline Personality

Child or Adolescent

Depression

Eating Disorders

Family Conflict

Grief

Obsessive-Compulsive (OCD)

Relationship Issues

Self Esteem

Sex Therapy

Sexual Abuse

Stress

Transgender

Trauma and PTSD

More +

Sexuality

Gay

Lesbian

More +

Gender

Show Me Women

Show Me Men

More +

Age

Toddlers / Preschoolers (0 to 6)

More +

Language

Spanish

More +

Faith

Christian

More +

Types of Therapy

Acceptance and Commitment (ACT)

Attachment-based

Christian Counseling

Cognitive Behavioral (CBT)

Dialectical (DBT)

EMDR

Emotionally Focused

Family / Marital

Hypnotherapy

Internal Family Systems (IFS)

Mindfulness-Based (MBCT)

Play Therapy

Psychoanalytic

Psychodynamic

Somatic

Trauma Focused

More +

Ethnicity Served

Asian

More +



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PERINATAL PSYCHIATRIC CONSULT LINE



PSI Perinatal Psychiatric Consult Line 1-877-499-4773

Medical Providers:

Professionals

Professionals Overview

Perinatal Psychiatric Consult Line

Provider Directory

Perinatal Mental Health Certification (PMH-C)

Certification FAQs

PSI Annual Conference

Training

- · Certificate Trainings
- · Frontline Provider Trainings
- · PSI Webinar Series
- · MMH Free Webinar
- · Request Training

https://www.postpartum.net/professionals/perinatal-psychiatric-consultline/#:~:text=The%20PSI%20perinatal%20psychiatric%20consultation,patients%20and%20pre%2Dconception%20planning.



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Medical Providers:

Fill out this form to request an appointment with one of our psychiatric consultants.

The PSI perinatal psychiatric consultation line is a service provided at no cost.

The consultation line is available for medical professionals who have questions about the mental health care related to pregnant and postpartum patients and pre-conception planning. This consultation service is available for medical providers only.

The Perinatal Psychiatric Consult Line is staffed by reproductive psychiatrists who are members of PSI and specialists in the treatment of perinatal mental health disorders. The service is free and available by appointment.

Call 1-877-499-4773 and we will match you with an appointment. We will respond to your request within one business day.

The presentation of perinatal mental health disorder is not always straightforward, and medication is not always immediately effective. PSI's expert perinatal psychiatrists are available to share their skills and expertise with fellow medical professionals, providing necessary guidance and reassurance on any matter, but particularly those that may be more challenging.

PSI Webinar Series

- MMH Free Webinar
- Request Training

More Resources

- Perinatal Mental Health Alliance for People of Color
- Susan A. Hickman Research Award
- · CW Memorial Training Scholarship
- · Screening Recommendations
- · Perinatal Psychosis Related Tragedies
- State Perinatal Psychiatry Access Programs
- · Research

Learn More about our Frontline Provider Trainings

https://www.postpartum.net/professionals/perinatal-psychiatric-consult-line/#:~:text=The%20PSI%20perinatal%20psychiatric%20consultation,patients%20and%20pre%2Dconception%20planning.



COMMONLY PRESCRIBED PSYCHOTROPIC MEDICATIONS

| | COMMONLY PRESCRI | BED PSYCHOTROPIC MEDICATIONS | | | | |
|--|---|--|--|--|--|--|
| NAME Generic (Trade) | DOSAGE | KEY CLINICAL INFORMATION | | | | |
| Antidepressant Medications* | | | | | | |
| Bupropion (Wellbutrin) | Start: IR-100 mg bid X 7d, then \uparrow to 100 mg tid; SR-150 mg qam X 7d then \uparrow to 150 mg bid; XL- 150 mg qam X 7d, then \uparrow to 300 mg qam. Range: 300-450 mg/day. | Novel mechanism; Contraindicated in seizure disorder because it decreases seizure threshold; stimulating; less effective for treating anxiety disorders; 2 [∞] line TX for ADHD;. | | | | |
| Citalopram (Celexa) | Start: 20 mg qday X 7d, then ↑ to 40 mg. MAX: 40 mg qday (MAX: 20 mg qday if ≥60 y/o, hepatically impaired, a CYP2C19 poor metabolizer, or taking a CYP2C19 inhibitor). | Well-tolerated; minimal CYP450 interactions; good choice for anxious pt. Caution: QTc prolong. dose dependent ¢ | | | | |
| Duloxetine (Cymbalta) | Start: 30 mg qday X 7d, then ↑ to 60 mg qday. Range: 60-120 mg/day. | SNRI; TX for neuropathic pain; need to monitor BP; 2 rd line TX for ADHD. \$ | | | | |
| Escitalopram (Lexapro) | Start: 5 mg qday X 7d, then T to 10 mg qday. Range 10-20 mg/d (~3X potent vs. Celexa). | Best-tolerated SSRIs; minimal CYP450 interactions. Good choice for anxious pt. ∉ | | | | |
| Fluoxetine (Prozac) | Start: 10 mg qam X 7d, then ↑ to 20 mg qday. Range: 20-60 mg/day. | More activating than other SSRIs; long half-life reduces withdrawal (t% = 4-6 d). | | | | |
| Mirtazapine (Remeron) | Start: 15 mg qhs. X 7d, then ↑ to 30 mg qhs. Range: 30-45 mg/qhs. | Unique mechanism; Sedating and appetite promoting; Neutropenia risk so avoid in the immunosupressed. ¢ | | | | |
| Paroxetine (Paxil) | Start: 10 mg qhs X 7d, then ↑ to 20 mg qday. Range: 20-60 mg/day. | SSRI; Anticholinergic; sedating; Significant withdrawal syndrome. ¢ SSRI; limited CYP 450 interactions; mildly activating, usual first-line during pregnancy/postpartum if breastfeeding. ¢ | | | | |
| Sertraline (Zoloft) | Start: 25 mg qam X 7d, then ↑ to 50 mg qday. Range: 50-200 mg/day. | | | | | |
| Venlafaxine (Effexor) | Start: IR-37.5 mg bid X 7d, then ↑ to 75 mg bid; ER-75 mg qam X 7d, then ↑ to 150 qAM. Range: 150-375 mg/day. | SNRI. More agitation & GI side effects than SSRIs; TX for neuropathic pain at 225 mg and above; need to monitor BP; Significant withdrawal syndrome. ## IR ## IR ## IR ## IR ## IR ## IR ## IR ## IR ## IR ## IR ## IR # | | | | |
| Nortriptyline (Pamelor) | Start: 25 mg qhs X 7d, then T 25 mg qhs - q weekly to 75 mg qhs. Range: 75-150 mg/day. | TCA; Sedating; TX for neuropathic pain; Baseline EKG; Max dose in elderly: 100 mg; Lethal in overdose. ¢ | | | | |
| | | in possible (except venlafaxine & bupropion), 3) Sexual side effects common (except bupropion & mirtazapine), 4) Withdrawal symptoms can occur with | | | | |
| | | NSAIDs), 6) Risk for serotonin syndrome (except bupropion), when combined with medications or drugs effecting serotonin metabolism, 6) Hyponatremia | | | | |
| sometimes seen with SSRIs | | | | | | |
| | Antianxiety and | d Sleep (Hypnotic) Medications | | | | |
| Alprazolam (Xanax) | Start: IR-0.25-0.5 mg tid. Usual MAX: 4 mg/d. ER-0.5-1mg qAM Usual MAX:3-6 mg/d | Equiv. dose: 0.5 mg. Onset: rapid . T½: 11 hrs. More addictive than other benzos and has uniquely problematic withdrawal syndrome. Do not use as 1 st line TX. Significant withdrawal syndrome. ¢ | | | | |
| Amitriptyline (Elavil) | Start: 10 mg qhs X 7d, then consider ↑ 25 mg qhs Range: 10-50mg/qhs | TCA; Sedating; TX for neuropathic pain; Lethal in overdose. \$ | | | | |
| Clonazepam (Klonopin) | Start: 0.25 mg bid Usual MAX: 4 mg/day. | Equiv. dose: 0.25 mg. Onset: intermediate . T½: 30-40 hrs. Helpful in TX mania. ¢ | | | | |
| Diazepam (Valium) | Start: 5 mg bid. Usual MAX: 40 mg/day. | Equiv. dose: 5 mg. Onset: rapid. T½: 50-100 hrs. Caution with liver disease ¢ | | | | |
| Lorazepam (Ativan) | Start: 0.5-1 mg bid to tid. Usual MAX: 6 mg/day. Insomnia: 0.5-2 mg qhs. | Equiv. dose: 1 mg. Onset intermediate. T½: 12 hrs. No active metabolites, so safer in liver dz. ∉ | | | | |
| Buspirone (Buspar) Hydroxyzine (Vistarii) | Start: 7.5 mg bid. Range: 10-30 mg bid. Start: 25-100 mg 3-4 X per day. Usual MAX: 400 mg/day. | Non-benzo SSRI-like drug FDA approved for anxiety. May take 4-6 weeks to become fully effective. Non-benzo Antihistamine FDA approved for anxiety. | | | | |
| Prazosin (Minipress) | Start: 1 mg ghs. T by 1mg g 2-3 d. Range: 4-6mg po ghs. Usual MAX: 10 mg ghs. | Non-perizo Aminisamini e TX PTSD-related nightmares. Warn about orthostasis € | | | | |
| Trazodone (Desyrel) | Start: 25-50 mg ghs. 1 by 25-50mg q 1 wk Range: 50-200 mg ghs. | Commonly used as sleep aid: inform about priapism risk in men. 6 | | | | |
| Zolpidem (Ambien) | Start: 5-10 mg ghs. MAX: 10 mg ghs. | This: 2.6 hrs. Potential for sleep-eating and sleep-driving. ¢ Available in longer acting form (CR \$) | | | | |
| | ALENCY(oral administration): clonazepam 0.25mg ≈ alprazolam 0.5mg ≈ lorazepam 1mg ≈ diazep | | | | | |
| | | iratory depression, coma, and death. 2) Benzodiazepines and zolpidem are DEA Schedule IV Controlled substances. | | | | |
| | | Mood Stabilizers | | | | |
| Divalproex (Depakote) | Start: 500 mg/day (bid, DR; qday, ER); increase dose as quickly as tolerated to clinical effect. Target serum concentration: 75 to 100 mcg/mL (DR) & 85-125 mcg/ml (ER). | Multiple black box warnings including for hepatotoxicity, pancreatitis, and teratogenicity (Avoid in women of reprodutive potential or should use effective contraception). Monitor LFTs, platelets, and coags initially and q3-6 mo. Weight gain common. \$ | | | | |
| Lamotrigine (Lamictal) | Start: 25 mg gday for wks 1 & 2; then 50 mg gday for wks 3 & 4; then 100 mg gday for wk 5; and finally 200 mg gday for wk 6+ (usual target dose). Dosage adjustment required when taken w/ drugs that ↓ (e.g., Tegretol, estrogens) or ↑ (Depakote) Lamictal concentration. | Black box warning for serious, life-threatening rashes requiring hospitalization and d/c of TX (Stevens Johnson syndrome @ approx. 1:1-2000). No drug level monitoring typically required. Need to strictly follow published titration schedule. Fewer cognitive and appetite stimulating side effects. No evidence that doses above 200 mg more effective for mood. Oral contraceptives may decrease serum concentration lamotrigine. | | | | |
| Lithium | Start: 300 mg bid or 600 mg qhs. Target serum concentration: acute mania & bipolar depression: 0.8-1.0 meq/L; Maintenance: 0.6-0.8 meq/L. Available in ER form dosed once daily (usually at HS, Lithobid & Eskalith). Plasma levels related to renal clearance. | Black box warning for toxicity. Teratogenic (rare cardiac malform.) and will need to inform women of reproductive potential of this risk. Check Ca ²⁺ , TSH and BMP before starting and q6-12 months thereafter. Advise pt about concurrent use of NSAIDS and HTN meds acting on the kidney which can decrease renal clearance of lithium leading to higher serum concentrations. ¢ | | | | |
| Antipsychotic/Mood Stabilizers** | | | | | | |
| Aripiprazole (Abilify) | MDD adj tx. Start: 2-5 mg/day; adjust dose q1+ weeks by 2-5 mg. Range: 5-10 mg/day.Mania. Start: 15 mg qday; Range: 15-30 mg/day. MAX: 15 mg qday. Schizophrenia. Start: 10-15 mg/day; ↑ at 2 week intervals; Range: 10-15 mg/day; MAX: 30 mg/day. | EPS: Mild; TD Risk: Mild; Sedation: Mild; Metabolic Effects: Mild. Very long half-life: 75 hrs. Least amount of sexual side effects. FDA indication for adjunctive treatment of MDD. Potential increased suicidality in first few months. Need to screen glucose and lipids regularly. \$\$\$ | | | | |
| Lurasidone (Latuda) | Bipolar Dep: Start/Initial: 20 mg qday; Range: 20-60 mg/day. MAX: 120 mg/day. Schizophrenia: Start/Initial Target: 40 mg qday Range: 40-160 mg qday. MAX: 160 mg/day. | EPS: Mild to Moderate; TD Risk: Unknown; Sedation: Moderate; Metabolic Effects: Mild. It is important to take Latuda with food (at least 350 calories) for optimal absorption (increased by up to three fold). Also, grapefruit juice should be avoided. \$\$\$. | | | | |
| Olanzanina (Zynrava) | Mania. Start: 10 mg qhs; Range: 10-20 mg/qhs. MAX: 20 mg/day. Schizophrenia. Start: 5 mg | EPS: Mild; TD Risk: Mild; Sedation: Moderate; Metabolic Effects: Severe. Do not prescribe to patients with diabetes. Need to screen glucose and | | | | |

https://aims.uw.edu/sites/default/files/Psychotropics%20Medications_2018.pdf

https://aims.uw.edu/resource-library/commonly-prescribed-psychotropic-medications



On the horizon

- Integrative and/or collaborative care models
 - MY questions for the AUDIENCE to assist Behavioral Health with understanding your needs and willingness

Q&A



Next Webinar:

HHP Care Model & Disease Management Webinar Series:

Dermatology – Dr. Iris Noh

Thursday, June 10, 2021 5:30pm – 6:30 pm

*Agenda is tentative and is subject to change

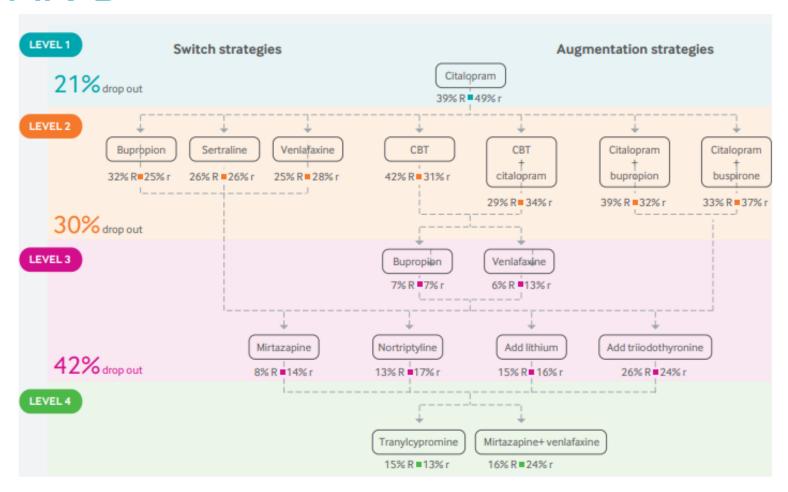


Thank you!

- A recording of the meeting will be available afterwards.
- Unanswered question?
 - Contact us at info@hawaiihealthpartners.org



STAR-D



APPS



Breathe and Think (Kids)

Free Meditation, mindfulness, yoga, acupressure Free 7 day trial
Mindfulness
and meditation,
relaxation,
music, sleep
Celebrities
guide some

exercises (i.e., LaBron James)

Free trial
Panic, anxiety,
stress, 2-3 min
meditation
sessions

Free
Focused on
breathing
rather than
meditation or
mindfulness
training

Free + Coloring book Free version and paid plus Activities, games, meditation Free Changing how you think Free
Just as it sounds













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APPS FOR KIDS

Mindful

powers

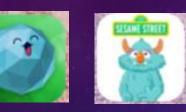


Stop Breathe and Think (Kids)

Meditation, mindfulness, yoga, acupressure Free to try

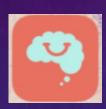
\$9.99/month

Grade schoolers
Free to try
\$4.99 for full
app



Sesame Street app

"Breath, think, do" Toddlers Calming down through breathing Free



Smiling Mind

All Ages Mindfulness & Meditation Free



Super Stretch Yoga

Pre-K and grade school Free



Worried
Wendall &
the Bad
Germ

Ages 4 and up
Managing your
worries about
COVID19

Free



The Happy Child

General Parenting App Free



Solitaire

Just for fun
Just as it sounds
Free

Major Depressive Disorder (DSM-V)

- At least 5 of the following symptoms have to have been present during the same 2-week period (and at least 1 of the symptoms must be diminished interest/pleasure or depressed mood):
 - Depressed mood: For children and adolescents, this can also be an irritable mood
 - Diminished interest or loss of pleasure in almost all activities (anhedonia)
 - Significant weight change or appetite disturbance: For children, this can be failure to achieve expected weight gain
 - Sleep disturbance (insomnia or hypersomnia)
 - Psychomotor agitation or retardation
 - Fatigue or loss of energy
 - Feelings of worthlessness
 - Diminished ability to think or concentrate; indecisiveness
 - Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or specific plan for committing suicide
- The symptoms cause significant distress or impairment in social, occupational or other important areas of functioning.

Generalized Anxiety Disorder (DSM-V)

- Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance)
- The individual finds it difficult to control the worry
- The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms having been present for more days than not for the past 6 months): Note: Only one item required in children.
 - Restlessness, feeling keyed up or on edge
 - Being easily fatigued
 - Difficulty concentrating or mind going blank
 - Irritability
 - Muscle tension
 - Sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep)
- The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

