Consultation – Liaison Psychiatry in COVID-19 times: Thinking Outside the Box

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Moderator: Farid Talih, MD, ABPN
• No conflict of interests
Outline:

- Consultation – Liaison at AUBMC
- Thinking outside the box: restructuring the service workflow
- Thinking outside the box: clinical adaptability to COVID-19 presentations
- Thinking outside the box: L is for meta-“liaison”
- Thinking outside the box: trainees as colleagues
- Thinking outside the box: research implications
Consultation – Liaison Psychiatry at AUBMC:

*Pre-pandemic*

- Restructured in February 2019

<table>
<thead>
<tr>
<th>Coverage Details</th>
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<tbody>
<tr>
<td>Covers inpatient medical and surgical units, outpatient chemotherapy units as well as emergency departments consults</td>
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<td>24 hour in-person staffing – no curbside or telepsychiatry consults</td>
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<td>Includes full-time psychiatrist, a resident, and medical students and a health psychologist upon request</td>
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</table>
COVID-19 as a game-changer

While pandemics have significantly affected the course of humanity, we have had given it little consideration as psychiatrists until now.

Most of our resources have been on infectious disease that are insidious and cause prolonged public health burden (HIV – AIDS etc.).

When rapidly spreading outbreaks occur, mental health response is by default undertaken as a response to a disaster.

Pandemic and epidemic outbreaks have some crucial idiosyncrasies that make their mental health aspect more unique particularly in CL.

There’s a significant exposure risk for population and providers, including mental health providers.

Social disruption due to measures imposed after the global failure to contain the pandemic.

Particularly in Lebanon, allocation of scarce resources including medications and PPE was critical.
Thinking Outside the Box: Dynamic Restructuring

First wave:
- Departmental COVID-19 Mental Health Taskforce
- A **proactive** workflow was implemented: universal screening (PHQ-4) and triage of all COVID-19 patients
- Available free-of-charge daily check-ins

Second (bigger) wave:
- **Reactive** workflow model
- Guidelines implemented internally for type of consultations
- Protocols circulated institutionally for medical management of common psychiatric conditions in COVID-19 patients
Thinking outside the box: Generating Guidelines for Internal use

• Purpose

  • Rapid, high quality, and efficient provision of consultation services
  • Provide liaison and support to medicine, surgery, critical care and ED services
  • Implementation of tele-psychiatry to minimize unnecessary exposure of C-L providers to COVID-19 and to conserve valuable personal protective equipment (PPE)
Thinking outside the box: Criteria for type of consults
Thinking outside the box: Leveraging Telehealth

- Several institutions had instated an eConsult process for COVID-positive patients—a chart review consultative process; to protect patients and HCW while ensuring proper stewardship of resources.

- The modality of evaluation was always agreed upon with the primary team.

- Most telepsychiatry consults were done via the patient’s personal phone.

- Tablets were considered but were deemed not logistically feasible.

- In-person consultations were reserved for capacity consults, especially those that were controversial, for behavioral agitation, and for psychiatric emergencies such as suicidal or self-harm attempts, suspected neuroleptic malignant syndrome, serotonin syndrome and catatonia.
Thinking Outside the Box: Protocols for Clinical High-Yield Consult Questions

• The Bread-and-Butter CL cases:
  
  • **Delirium (especially with agitation)**
    • Guidelines for management of delirium in hospitalized adult COVID-19 patients outside critical care settings
  
  • **And Anxiety** - “I forgot how to Breathe”
**PROTOCOL MANAGEMENT OF AGITATION AND DELIRIUM IN COVID-19 PATIENTS IN NON-CRITICAL CARE SETTINGS**

**Sleep hygiene:** light control, sound control, bundled care if possible
Natural light
Regular frequent sensory: eyeglasses, and hearing aids
PT/QT: early mobilization or PROM in bed
Timely removal of catheters
Avoid restraints

**DELIRIUM MONITORING:**
CAM screening

**Melatonin 3 mg until discharge**
Avoid narcotics for behavioral control
Avoid anticholinergics, antihistamines and benzodiazepines

**DELIRIUM/AGITATION DETECTED**

**HALDOL 0.5 – 1 mg PO/IV at bedtime or BID**
Titrate by up to 1-2 mg/day up to 5 mg a day
Monitor QTC especially if patient on azithromycin
LESS SEDATING

**QUETIAPINE IR start at 12.5 – 25 mg qhs at bedtime or up to TID or 100 mg daily**
Monitor QTC especially if patient on azithromycin
MORE SEDATING

**OLANZAPINE 2.5-5 mg PO/NGT qhs Titrate by 2.5-5 mg qd up to 10 mg daily**
Monitor QTC especially if patient on azithromycin
MORE SEDATING
Available in orally dissolvable form if patient cannot swallow

**DAILY EKG – COVID 19 MEDICATIONS + Antipsychotics increase QTc prolongation risk**

**PREVENTION**
Monitor QTC especially if patient on azithromycin
MORE SEDATING
Available in orally dissolvable form if patient cannot swallow
Monitor for orthostatic hypotension

**TREATMENT**
Monitor QTC especially if patient on azithromycin
MORE SEDATING
Monitor for orthostatic hypotension

**Special Considerations**

**The changing polypharmacy of COVID-19** - If using Azithromycin: **The risk of QT prolongation** is further increased, especially with use of IV Haloperidol.

Sedatives such as benzodiazepines are added to antipsychotics to assist with rapid sedation in a severely agitated patient and must be used judiciously as **benzodiazepines may increase risk of delirium.**

Use of benzodiazepines is appropriate and required in patients with alcohol and/or benzodiazepine withdrawal delirium. Along with high-dose Thiamine 500 mg IV q8 for 3 days.

Consult Psychiatry if needed.

For geriatric patients, use antipsychotics sparingly and start lower, go slower due to increased risk of antipsychotic side effects.

If using IV benzodiazepines for over a week during mechanical ventilation: During the post-extubation stage, reduce standing benzodiazepine dose by 25 to 50%, and continue taper by 20% daily until discontinuation (consider slower taper and using prn benzodiazepines if withdrawal is a concern).
Delirium Protocol – *it’s delirium until proven otherwise*

- Obtain K+, Mg+, maintain K>4, and Mg>2 while on antipsychotics
- Obtain baseline and daily EKG
- If patients can take PO or have enteral route otherwise -> Melatonin 3 mg q 7 pm.
- For all patients with history of Parkinson’s disease, parkinsonism, dementia, schizophrenia, intellectual disability, or bipolar disorder, consult Psychiatry for management of delirium.
- Please review all medication interactions and side effects on UpToDate before use When starting medications from the chart attached, use combination of standing and ‘PRN for agitation’ orders to optimize management.
- Check daily for extrapyramidal symptoms (EPS) including parkinsonism, dystonia, akathisia, and neuroleptic malignant syndrome daily while on antipsychotics medications.
- For patients who require prn IV haloperidol for episodes of severe agitation, consider standing oral haloperidol instead of oral olanzapine or oral quetiapine, with the goal to use one antipsychotic medication.
- Consider Psychiatry consultation if agitation/delirium could not be managed despite Olanzapine 10 mg daily, Quetiapine 100 mg/daily or Haldol 5 mg daily, if there are concerns for antipsychotic side effects (e.g. EPS, QT prolongation), and if needed.

### Taper and Discontinuation of Antipsychotics

- If patient is not agitated for 24 hours, reduce Olanzapine by 2.5-5 mg/ daily down to 2.5 mg/day. The goal is to discontinue Olanzapine before discharge or shortly after.
- If patient is not agitated for 24 hours, reduce Quetiapine by 12.5-50 mg/ daily down to 25 mg/day. The goal is to discontinue Quetiapine before discharge or shortly after.
- If patient is not agitated for 24 hours, reduce Haloperidol by 0.5-2 mg/daily down to 0.5 mg/day. The goal is to discontinue Haloperidol before discharge or shortly after.
Rule of Thumb on Medication Management:

“Depending Where the Patient Is”

### PROTOCOL FOR MANAGEMENT OF ANXIETY IN COVID-19 HOSPITALIZED PATIENTS

**ANXIETY**
- ALWAYS consider non-pharmacological interventions first
- Consider underlying etiologies (e.g., shortness of breath) or utilize medications patient may already be on by adjusting the dose

**ANXIETY with or without INSOMNIA**
- **ANTIHISTAMINE AGENT** (ATARAX 25-50 MG PO OR PROMETHAZINE 25 MG IM BID/TID)
  - Should be avoided in older adults
  - Do NOT use for more than 2-3 days
  - If using benzos instead, use with caution
  - Risk of delirium

**ANXIETY with DEPRESSION and INSOMNIA**
- **MIritzapine** 7.5-15 MG PO at bedtime
  - Monitor neutrophil count - important if patient on immunosuppressants
  - Risk of delirium

**ANXIETY with suspected DELIRIUM + INSOMNIA**
- **QUETIAPINE** 12.5 (elderly) - 25 or 50 mg at bedtime or up to TID
  - Should be supplemented with melatonin 3-5 mg PO at bedtime
  - Monitor QTc on EKG (important if patient on azithromycin)
  - Should NOT be used if QTc>500 ms
  - Use Short-Term

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**IN CASE OF ANY UNCERTAINTY OR QUESTIONS PLEASE CALL/PAGE PSYCHIATRY**

START MELATONIN 3-5 MG PO q 7PM UNTIL DISCHARGE
Clinically, we have noted emerging themes in our COVID and post-COVID patients.

We conducted a chart review on emerging themes encountered in the post-COVID-19 ward at AUBMC.

The post-COVID-19 unit, therefore, encompassed patients with acute (up to 4 weeks from the onset of symptoms) and post-acute (4 to 12 weeks from the onset of symptoms) COVID-19 infection.

Mean LOS: 29.52 days
Delirium is the one where even CL consults present differently. The symptoms of delirium can be initially subtle but can quickly escalate. Here are some key points:

- **Delirium most prevalent** – replicating international studies

- **Delirium duration is a predictor of mortality** – important to SCREEN for it and to treat AGGRESSIVELY

- **Nonresponsive Delirium** – evidence for VPA use in agitated delirium not responding to antipsychotics

<table>
<thead>
<tr>
<th>DSM-5 diagnosis as per the consulting team</th>
<th>Frequency</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Major depressive episode</td>
<td>8 (15.4%)</td>
<td></td>
</tr>
<tr>
<td>Other mood disorder</td>
<td>6 (11.5%)</td>
<td></td>
</tr>
<tr>
<td>Adjustment disorder</td>
<td>2 (3.8%)</td>
<td></td>
</tr>
<tr>
<td>Panic attack/disorder</td>
<td>3 (5.8%)</td>
<td></td>
</tr>
<tr>
<td>Generalized anxiety disorder</td>
<td>1 (1.9%)</td>
<td></td>
</tr>
<tr>
<td>Other anxiety disorder</td>
<td>8 (15.4%)</td>
<td></td>
</tr>
<tr>
<td>Delirium</td>
<td>16 (30.8%)</td>
<td></td>
</tr>
<tr>
<td>Drug intoxication/withdrawal</td>
<td>7 (13.5%)</td>
<td></td>
</tr>
<tr>
<td>Serotonin syndrome</td>
<td>2 (3.8%)</td>
<td></td>
</tr>
<tr>
<td>Normal reaction to stress</td>
<td>1 (1.9%)</td>
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• The ‘suicide tsunami’: 38.5% of patients were found to have suicidal ideations – but only 8% were detected by the primary teams (despite a hospital-wide high-risk behavioral screening being implemented)

• Always screen for suicidal ideations – even in the nondepressed

• Symptoms of psychiatric, neurological, and physical illnesses, as well as inflammatory damage to the brain in individuals with post-COVID-19 syndrome, might synergistically increase suicidal ideations and behaviors

<table>
<thead>
<tr>
<th>Table 2 Characteristics of the psychiatry-liaison team consultations received by patients on the post-COVID-19 unit</th>
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<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Mean ± Standard-deviation</td>
</tr>
<tr>
<td>Day to psychiatry consult</td>
</tr>
<tr>
<td>Frequency (percentage)</td>
</tr>
<tr>
<td>Low mood</td>
</tr>
<tr>
<td>Suicidality</td>
</tr>
<tr>
<td>Anxiety/Panic attacks</td>
</tr>
<tr>
<td>Agitation/Delirium</td>
</tr>
<tr>
<td>Psychiatric symptoms present on assessment</td>
</tr>
<tr>
<td>Depressive symptoms</td>
</tr>
<tr>
<td>Suicidality</td>
</tr>
<tr>
<td>Anxiety symptoms</td>
</tr>
<tr>
<td>Panic symptoms</td>
</tr>
<tr>
<td>Somatic symptoms</td>
</tr>
<tr>
<td>Drug-related symptoms</td>
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<tr>
<td>Delirium-related symptoms</td>
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<tr>
<td>Trauma-related symptoms</td>
</tr>
</tbody>
</table>

CL presentations important findings

- COVID-19 as a hyper-serotonergic state:
  - Close to 4% of consults were missed serotonin syndrome
  - Initial RFC was to rule out agitation in the setting of delirium - patients prescribed several medications that increased their risk of the illness (fentanyl, linezolid, ondansetron, and selective serotonin reuptake inhibitors)
  - Zaid et al. showed that platelets are potentially hyperactivated in individuals with COVID-19, leading to increased plasma serotonin levels (particularly in patients with diarrhea)

- COVID-19 and post-mechanical ventilation “I forgot how to breathe” panic compounded on organic respiratory symptoms:
  - Bigger role for health psychologists in non-delirious anxiety
  - Implemented Johns Hopkins University physical therapy diaphragmatic breathing exercises
  - Meds: low dose antipsychotics preferred over benzodiazepines

https://doi.org/10.1161/circresaha.120.317703
Thinking Outside the Box: “L is for meta-liaison”

- Term coined by Damir Huremovic, MD (ACLP)
- Highlights the need more than ever to liaise with and support our colleagues on the frontlines (but also with everyone else)
- We conducted a survey during the first wave at AUBMC between April and May 2020 – MDs and RNs
  - About half showed a high risk of acute distress (58.7%) on the GHQ-28
  - The IES-R revealed concern for post-traumatic stress in one-third of participants, significantly in nurses ($p = 0.008$) and those living with vulnerable individuals ($p = 0.030$).
  - Mental health history did not increase the risk – assume everyone is at risk!
- The Psychiatry Department at AUBMC launched Mental Health First Aid Support Groups for in-house HCW.

**Table 3.** Prevalence of psychological distress and psychiatric symptoms in the sample of participants as per the GHQ-28, the PSS-10, and IES-R.

<table>
<thead>
<tr>
<th>Scales</th>
<th>N (%)</th>
<th>N = 150</th>
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<tbody>
<tr>
<td>GHQ-28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low risk of acute distress</td>
<td>62 (41.3)</td>
<td></td>
</tr>
<tr>
<td>High risk of acute distress</td>
<td>88 (58.7)</td>
<td></td>
</tr>
<tr>
<td>PSS-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low/Moderate stress</td>
<td>134 (89.3)</td>
<td></td>
</tr>
<tr>
<td>High stress</td>
<td>16 (10.7)</td>
<td></td>
</tr>
<tr>
<td>IES-R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No concern for PTSD</td>
<td>105 (70.0)</td>
<td></td>
</tr>
<tr>
<td>Clinical concern/probable diagnosis/highly suggestive of PTSD</td>
<td>45 (30.0)</td>
<td></td>
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Thinking Outside the Box: Trainees as colleagues

- Two years (So far) out of four years of training affected by COVID-19 conditions, presentations, protective measures, challenges establishing rapport with patients
- You are learning with them
- Embed them in the response – key in psychoeducating nurses and critical care teams on behavioral management of delirium “restraints are the enemy”
- Read and appraise the emerging literature together
- Be open to their suggestions
Thinking Outside the Box: Research Implications

• Create the literature –
• Encourage trainees to write up the anecdotal observations
• This will likely be researched for another few years
In our chart review, one patient required stimulants for the management of post-COVID-19 brain fog and fatigue.

Several emerging reports described a new and common entity of “long haulers”, where patients experience brain fog, fatigue, cognitive changes, and poor concentration among other symptoms months following the resolution of the infection.

The patient in our study responded to atomoxetine, which goes along with the results of a case series that reported modafinil, another stimulant, as an avenue to combat fatigue and maintain wakefulness in patients with COVID-19 infection.

Challenges to delivering CLP care during a pandemic

• Dual objective of maintaining coverage as close to original set up as possible, while maintaining flexibility:
  • Address the massive shift in patient population and mental health needs within the system
  • Identify covid-19 associated neuropsychiatric and psychiatric sequelae and formulate treatment approach within constraints (from medications interactions to medication shortages)
  • Protect the personnel from contracting COVID-19 themselves
  • Provide support to HCP at your facility
  • Be a resource to your institution
  • Be a resource to your department
  • Maintain GME while ensuring safety of trainees
  • Maintain research and academic work
  • Serve as an advocate for both colleagues and patients
  • Optional: serve as a resource to your local or broad community
Skill set to develop

- Psychiatric care for patients in isolation (inpatients with an active or suspected infection)
- Support for the families of the patient with illness or deceased from the illness
- Support for the quarantined (healthy) individuals and groups
- Support for healthcare personnel
- Participation in the development and activation of contingency preparedness plans
- Unique features of this pandemic:
  - a significant exposure risk for population and providers, including mental health providers
  - Social disruption due to measures imposed after the global failure to contain
CL perks at AUBMC
Other References


Thank You!