National Trauma and Substance Use: Lessons Learned from the Lebanese Crisis

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المركز الطبي في الجامعة الأميركية في بيروت

Conflict of Interest

- No conflict of interest to disclose

Outline

- Introduction to Disaster Psychiatry
- Implications of the Lebanese Crisis on SUD
- Substance Use Disorders in Lebanon
- Lessons Learned: anecdotal challenges and solutions

Disaster Psychiatry

Disasters

- Community-wide events
- Result in *collective trauma* and substantial losses
- Demands exceed coping capacity – low-resource setting

Terminology

- US: Disaster Behavioral Health
- WHO/ IASC: Mental health and psychosocial support (MHPSS)

Post-disaster mental health outcomes

Disasters are associated with exacerbation of serious and persistent mental illness and new-onset common mental disorders (CMDs) in previously healthy individuals

New-onset CMDs:

Major depressive disorder (MDD)

Generalized anxiety disorder (GAD)

Acute and posttraumatic stress disorders (ASD/PTSD)

Onset or exacerbation of substance use disorders (SUDs)

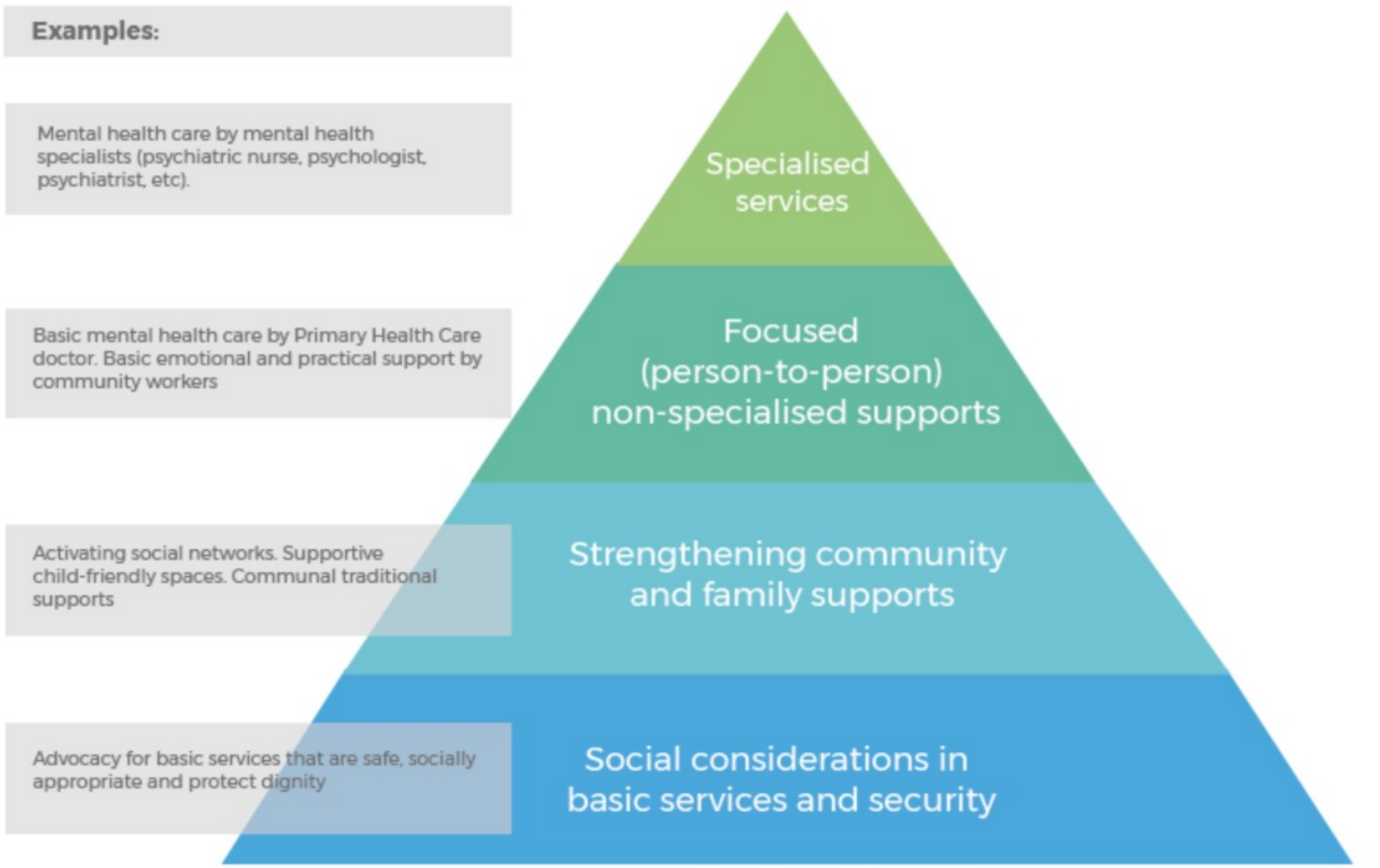
Traumatic bereavement/complicated grief/prolonged grief disorder

Post-disaster behavioral and mental health outcomes affect each other

Patients with postdisaster depression and anxiety smoke more cigarettes and cannabis and drink more alcohol than those without mental health diagnoses

Those who engage in postdisaster smoking or drinking, but are without a mental diagnosis, are more likely to develop mental illnesses.

The IASC intervention pyramid for MHPSS is the international standard



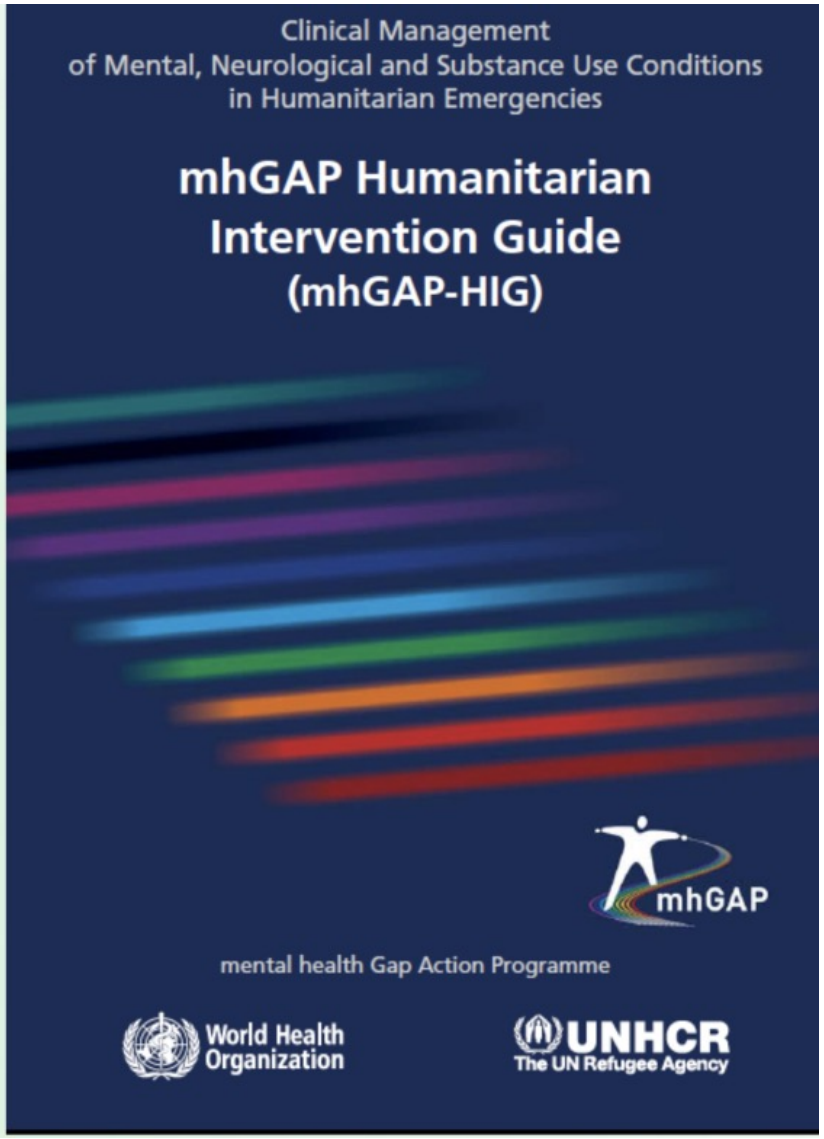
WHO and UNHCR released the *mhGAP Humanitarian Intervention Guide (mhGAP-HIG)* focusing on adaptation and delivery of Specialized Services for persons with diagnosed psychopathology in emergency settings

Examples of modules

Moderate-severe Depressive Disorder **DEP**

Post-traumatic Stress Disorder **PTSD**

Harmful Use of Alcohol and Drugs **SUB**



Lebanon in recent years

- Protracted humanitarian crisis and surge in number of refugees
- Severe economic collapse in 2019
- Political instability
- COVID 19 pandemic as of March 2020
- Beirut Blast August 2020 – 200 deaths, 5000 injured and at least 300,000 homeless
- The most common types of sustained injuries ranged from skin laceration and bruises to head trauma and penetrating injuries.

Implications of the Lebanese Crisis on SUD

- There is substantial clinical evidence supporting a positive association among psychosocial adversity and chronic distress, organic brain injury, and vulnerability to addiction.
- This becomes particularly relevant to Lebanon, a country with an overwhelmed health care system and a large burden of mental illnesses.
- The relentless exposure to repetitive and highly distressing traumatic events has made the recent Lebanese **“quadruple crisis”** a possible breaking point into a worsening epidemic of SUD, along with other psychological sequelae in the country.

SUD in Lebanon

Study	Aim	Sample	Substance	Results	Interventions
Dabaghi and Mack (2008)[1]	Examine the prevalence of HIV and drugs of abuse among inmates.	580 adult inmates at Roumieh prison, chosen randomly between August 2007 and February 2008.	Drugs of abuse.	57% of participants used drugs in prison. These drugs were cannabis (36%), cocaine (23%), and ecstasy (0.8%).	The authors concluded with suggestions to improve the detoxification and rehabilitation processes of the inmates.
Ghaddar et al. (2017)[2]	Assess the effectiveness of combining opioid agonist therapy and psychosocial support in treating patients with opioid use disorder.	181 male patients diagnosed with opioid use disorder and prescribed opioid agonist treatment at Skoun center, recruited between January 2013 and December 2014.	Heroin, cocaine, and cannabis.	86 patients completed the 3 months follow-up and 38 patients completed the 12 months follow-up. The prevalences of heroin, cocaine, and cannabis use were 89.4%, 11.6%, and 17.4% for the 86 patients who completed the 3 months follow-up and 94.7%, 15.8%, and 18.4% for the 38 patients who completed the 12 months follow-up, respectively.	The patients received buprenorphine weekly as a take-home dose and were followed-up for psychosocial support every week. Statistically significant improvements were noted in patients treated for 3 months.
Ghandour et al. (2012)[3]	Identify the prevalence of abusing prescribed psychoactive drugs and the motivations behind it among Lebanese university students.	570 students at the American University of Beirut.	Psychoactive prescription drugs (sleeping, anxiety, stimulant, and pain medications).	The psychoactive drugs used among students for exclusively non-medical reasons were: 4.73% used a sleeping drug, 2.5% used a drug to suppress anxiety, 2.46% used a stimulant, and 3.75% used a pain control drug.	Not applicable.
Ghandour et al. (2013)[4]	Compare alcohol and drug use between medical and non-medical users of prescribed opioids.	570 private university students selected using a proportionate 2-stage stratified cluster sampling technique.	Alcohol, ecstasy, marijuana, cocaine, and opioids.	25% of students used prescribed opioids for only medical reasons. Patients using medically prescribed opioids were more likely to use marijuana (OR = 1.8, 95% CI 1.1-2.8). Nonmedical users of opioids were at a higher risk of using marijuana (OR = 7.8, CI 1.9-32.7), ecstasy (OR 9.1, CI 1.2-71.5), cocaine (OR 30.1, CI 8.6-105.3), and alcohol (OR 3.9, CI 1.0-14.9).	Not applicable.

SUD in Lebanon

Ghandour et al. (2015)[5]	Identify the prevalence of alcohol usage among 7-9th graders to assess the gaps in alcohol purchasing and drinking policies.	5109 middle school students (7-9th graders) from public and private schools and another 2784, surveyed respectively in 2005 and 2011.	Alcohol.	In 2011, 87% of students had tried alcohol (1 glass at least) while 27% reported drinking regularly or had at least one alcoholic drink during the past 30 days. 20% of students had experienced drunkenness.	The authors concluded with harm reduction policy recommendations.
Obeid et al. (2020)[6]	Examine the factors associated with alcohol use disorder.	789 Lebanese residents from the five Mohafazat in the country.	Alcohol.	A more significant percentage of illiterate participants were at higher risk of alcohol use disorder when compared to university students (67% vs. 43%, respectively). The same applies to widowed participants (84%) versus married ones (47%).	Not applicable.
Talih et al. (2016)[7]	Examine the prevalence of depression and burnout among residents and its association with alcohol and drugs of abuse.	All 311 residents and interns at the American University of Beirut Medical Center in 2013. 118 fully completed the questionnaire.	Alcohol and drugs of abuse.	14% of participants reported illicit drug abuse. 12% of participants were found to have a low-level problem with drugs, 2.5% had a moderate one, and none had a high-level problem with drugs. 59% of participants reported drinking alcohol and 10% reported hazardous alcohol use.	Not applicable.
Talih et al. (2018)[8]	Assess the prevalence of depressive and anxiety symptoms, burnout, and attitudes towards substance use in medical students.	All 412 medical students at the American University of Beirut Medical Center in 2016. 176 fully completed the questionnaire.	Alcohol and drugs of abuse.	58.1% of medical students reported using alcohol. 34.9% reported using an illicit drug at some point in their lives. Out of these, 1.7% had a severe drug problem, 8.3% had a moderate drug problem, 43% had a low-grade drug problem, and 46.7% had non-problematic drug use.	Not applicable.

Commonly misused substances

- One of the most commonly seized drugs in the country is **cannabis**.
- Other commonly consumed substances include
- opiate derivatives (natural and synthetic)
- Cocaine
- amphetamine-like stimulants (a common street name/brand is **Captagon)**
- and recreational “party” drugs such as MDMA (ecstasy), LSD, GHB
- Recently, smoking Salvia Divinorum (a psycho- active plant) has also been on the rise.

Healthcare System Related Challenges

- Medication shortages
- National psychiatric bed shortages
- Exodus of healthcare workers – 30-40%
- No national mental health policy act
- No mental health coverage – mostly out-of-pocket costs

A pharmacy employee looks through mostly empty medicine cabinets at the Rafik Hariri University Hospital in Beirut.

How greed fueled Lebanon's deadly milk and medicine shortage

The Washington Post
Democracy Dies in Darkness

Middle East

Lebanon was famed for its medical care. Now, doctors and nurses are fleeing in droves.

Addiction related challenges

- Opioid substitution programs – Buprenorphine shortages
- Financial stressors leading to increased withdrawal presentations
- Patients seek substance replacement
- Lack of data, access and screening to a large population at risk including refugees and the elderly
- People with TBI and frontal disinhibition symptoms at higher risk of addictive behaviors
- People with physical injuries and pain syndromes at higher risk of self medication and substance misuse
- Healthcare workers: strong correlation between burnout and substance misuse

Primary Prevention Lessons Learned

Implementing a Stepped Care System

A system of delivering mental health interventions so that the most effective yet least resource- intensive treatment is delivered to patients first

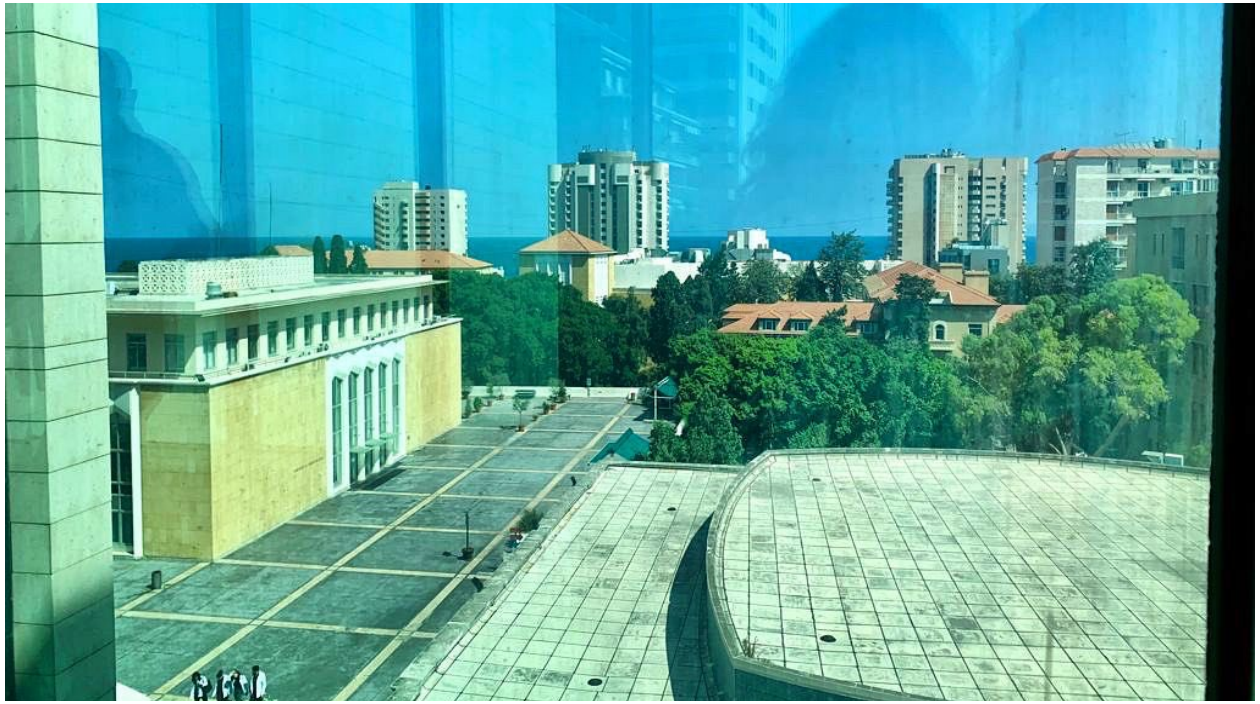
Step up as clinically required

Ambulatory psychiatry visits for high symptom severity or risk of harm

Screening, screening, screening

- Targeted due to limited resources
- Validated screening
- Brief screening – smaller burden on frontliners
- Highly sensitive for high-risk behavior or psychiatric emergencies
- Highly specific for vulnerable groups

Our own experience



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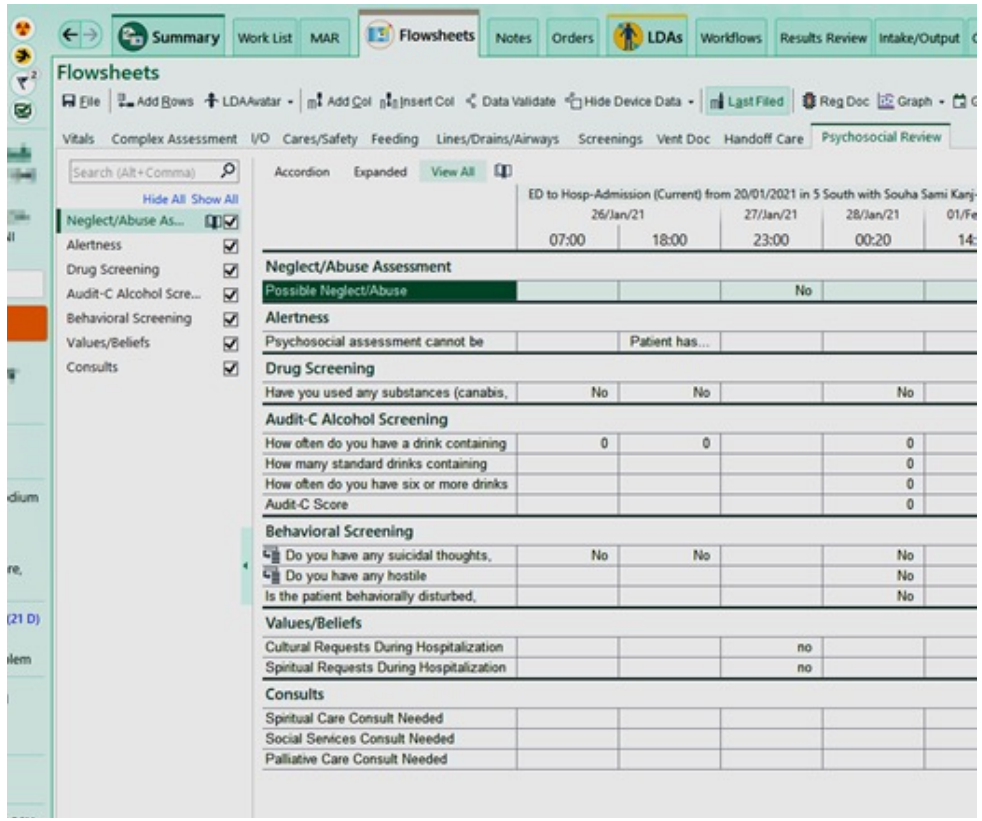
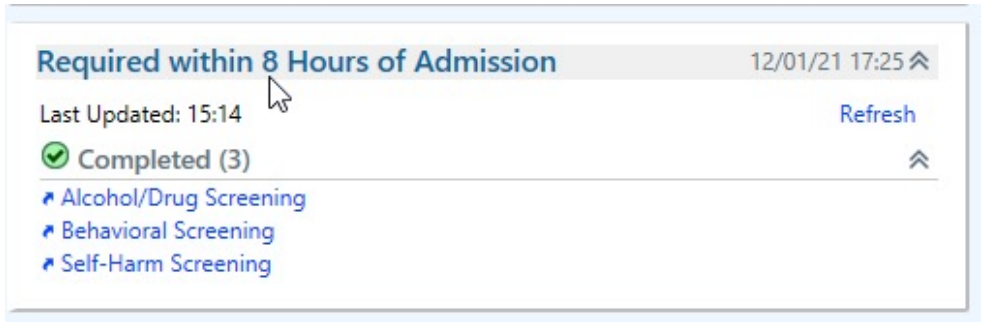
Our CL team in action 👩🏻‍⚕️👨🏻‍⚕️👩🏻‍⚕️


Summary
Work List
MAR
Flowsheets
Notes
Orders
LDAs
Workflows
Results Review
Intake/Output
Flowsheets
File
Add Rows
LDAAvatar
Add Col
Insert Col
Data Validate
Hide Device Data
Last Filed
Reg Doc
Graph
Vitals
Complex Assessment
I/O
Cares/Safety
Feeding
Lines/Drains/Airways
Screenings
Vent Doc
Handoff Care
Psychosocial Review
Search (Alt+Comma)
Hide All Show All
Neglect/Abuse As...
Alertness
Drug Screening
Audit-C Alcohol Scre...
Behavioral Screening
Values/Beliefs
Consults
Accordion
Expanded
View All
ED to Hosp-Admission (Current) from 20/01/2021 in 5 South with Souha Sami Kanj
26/Jan/21
27/Jan/21
28/Jan/21
07:00
18:00
23:00
00:20
Neglect/Abuse Assessment
Possible Neglect/Abuse
No
Alertness
Psychosocial assessment cannot be
Patient has...
Drug Screening
Have you used any substances (canabis,
No
No
No
Audit-C Alcohol Screening
How often do you have a drink containing
0
0
0
How many standard drinks containing
0
How often do you have six or more drinks
0
Audit-C Score
0
Behavioral Screening
Do you have any suicidal thoughts,
No
No
No
Do you have any hostile
No
Is the patient behaviorally disturbed,
No
Values/Beliefs
Cultural Requests During Hospitalization
no
Spiritual Requests During Hospitalization
no
Consults
Spiritual Care Consult Needed
Social Services Consult Needed
Palliative Care Consult Needed


Required within 8 Hours of Admission
12/01/21 17:25
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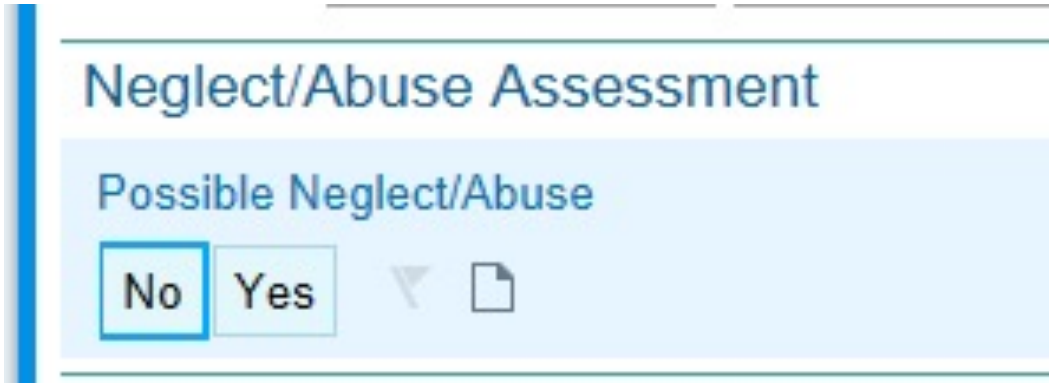
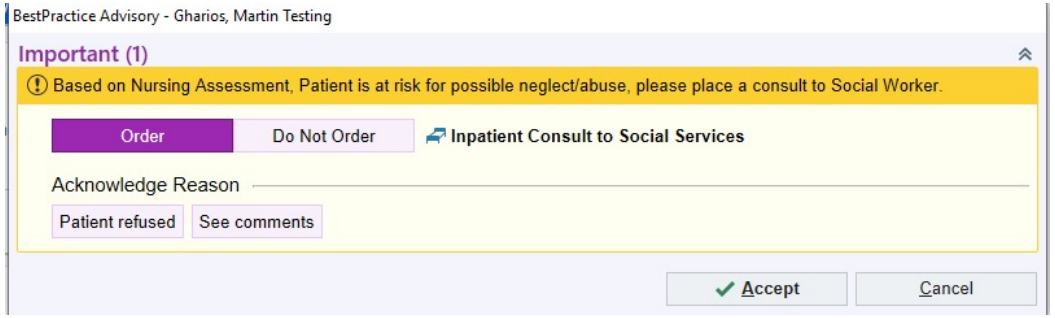
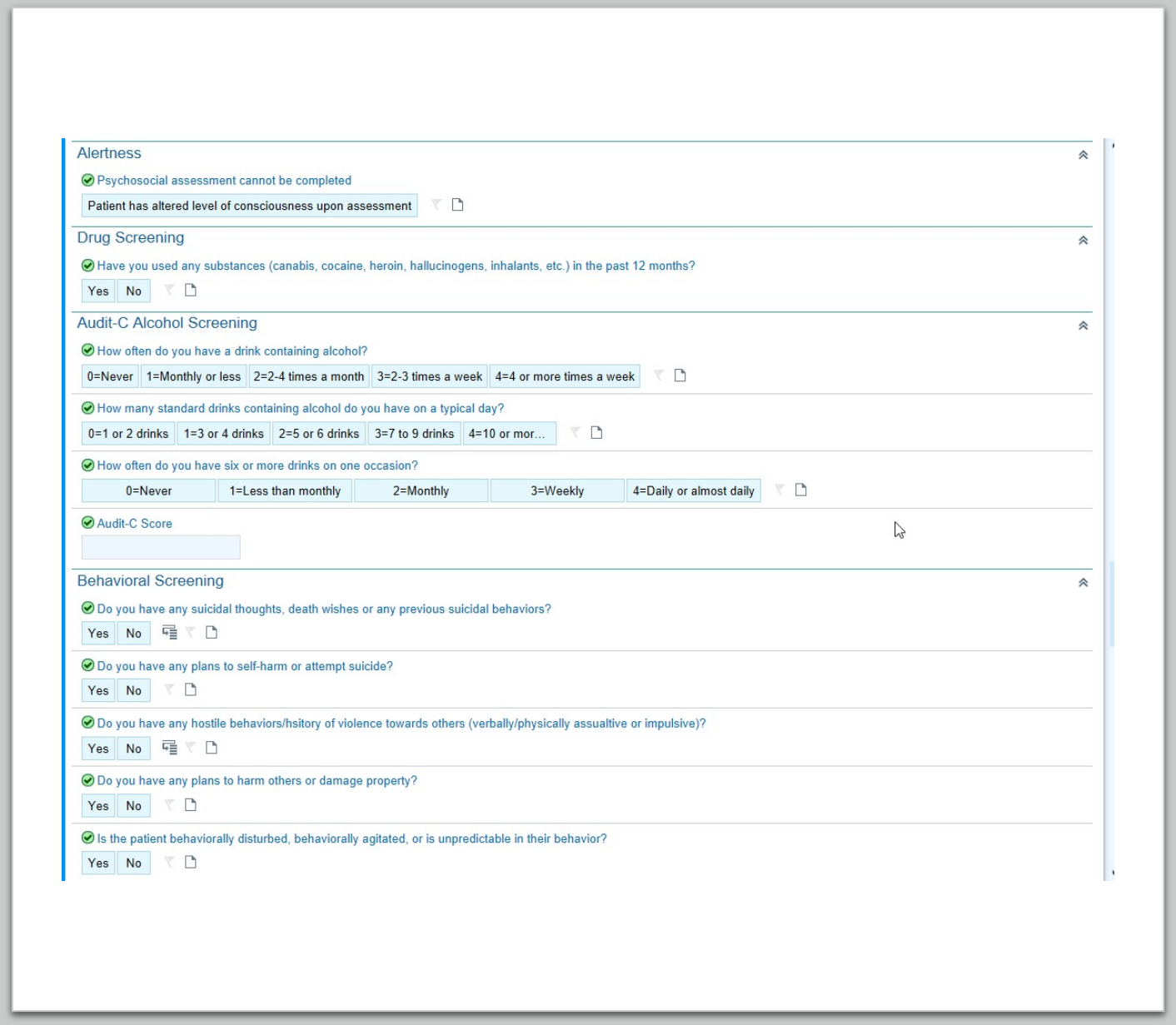
Refresh
Completed (3)
Alcohol/Drug Screening
Behavioral Screening
Self-Harm Screening

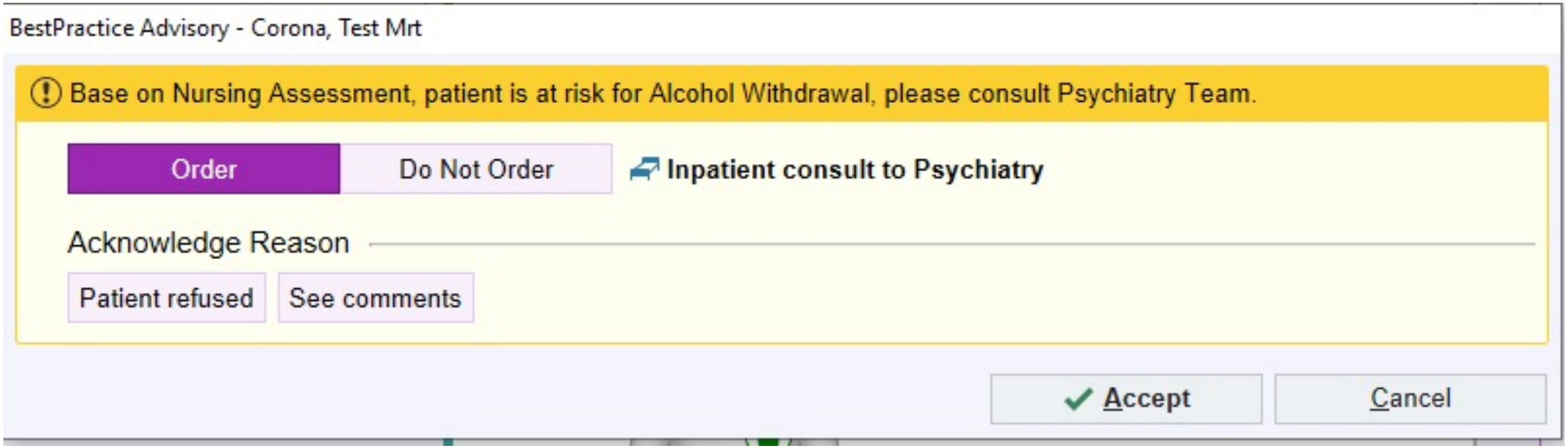
An example of Task Shifting





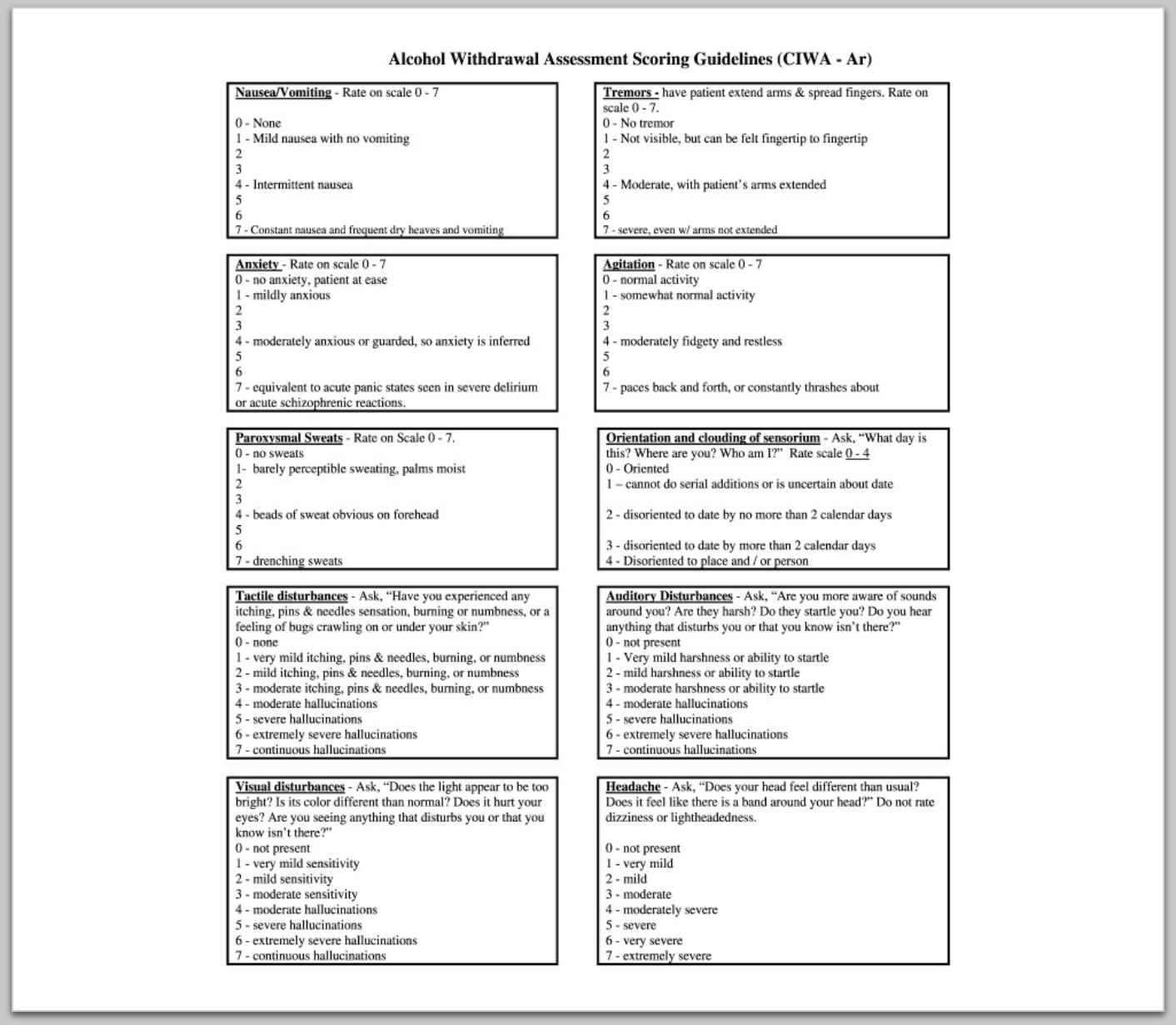
- Based on the documentation completed a BPA for the physician would appear to place a psychiatry consult and suicide precaution orders




BestPractice Advisory - Corona, Test Mrt
Base on Nursing Assessment, patient is at risk for Alcohol Withdrawal, please consult Psychiatry Team.
Order
Do Not Order
Inpatient consult to Psychiatry
Acknowledge Reason
Patient refused
See comments
Accept
Cancel

CIWA- AR

- Consult team held training sessions for medical and surgical nurses along with chief residents



Alcohol Withdrawal Assessment Scoring Guidelines (CIWA - Ar)

Nausea/Vomiting - Rate on scale 0 - 7

0 - None
1 - Mild nausea with no vomiting
2
3
4 - Intermittent nausea
5
6
7 - Constant nausea and frequent dry heaves and vomiting

Tremors - have patient extend arms & spread fingers. Rate on scale 0 - 7.
0 - No tremor
1 - Not visible, but can be felt fingertip to fingertip
2
3
4 - Moderate, with patient's arms extended
5
6
7 - severe, even w/ arms not extended

Anxiety - Rate on scale 0 - 7
0 - no anxiety, patient at ease
1 - mildly anxious
2
3
4 - moderately anxious or guarded, so anxiety is inferred
5
6
7 - equivalent to acute panic states seen in severe delirium or acute schizophrenic reactions.

Agitation - Rate on scale 0 - 7
0 - normal activity
1 - somewhat normal activity
2
3
4 - moderately fidgety and restless
5
6
7 - paces back and forth, or constantly thrashes about

Paroxysmal Sweats - Rate on Scale 0 - 7.
0 - no sweats
1- barely perceptible sweating, palms moist
2
3
4 - beads of sweat obvious on forehead
5
6
7 - drenching sweats

Orientation and clouding of sensorium - Ask, "What day is this? Where are you? Who am I?" Rate scale 0 - 4
0 - Oriented
1 – cannot do serial additions or is uncertain about date

2 - disoriented to date by no more than 2 calendar days

3 - disoriented to date by more than 2 calendar days
4 - Disoriented to place and / or person

Tactile disturbances - Ask, "Have you experienced any itching, pins & needles sensation, burning or numbness, or a feeling of bugs crawling on or under your skin?"
0 - none
1 - very mild itching, pins & needles, burning, or numbness
2 - mild itching, pins & needles, burning, or numbness
3 - moderate itching, pins & needles, burning, or numbness
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

Auditory Disturbances - Ask, "Are you more aware of sounds around you? Are they harsh? Do they startle you? Do you hear anything that disturbs you or that you know isn't there?"
0 - not present
1 - Very mild harshness or ability to startle
2 - mild harshness or ability to startle
3 - moderate harshness or ability to startle
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

Visual disturbances - Ask, "Does the light appear to be too bright? Is its color different than normal? Does it hurt your eyes? Are you seeing anything that disturbs you or that you know isn't there?"
0 - not present
1 - very mild sensitivity
2 - mild sensitivity
3 - moderate sensitivity
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

Headache - Ask, "Does your head feel different than usual? Does it feel like there is a band around your head?" Do not rate dizziness or lightheadedness.

0 - not present
1 - very mild
2 - mild
3 - moderate
4 - moderately severe
5 - severe
6 - very severe
7 - extremely severe

Beirut Blast Victims and COVID patients

All on-site activities and outpatient face-to-face clinical services were paused in both events.

Crisis intervention services and triage services were rapidly designed and implemented.

Psychology interns and psychiatry residents volunteered to apply phone screening protocols and triage assessments for people affected by the quarantine and the blast

Patient Health Questionnaire (PHQ-4)

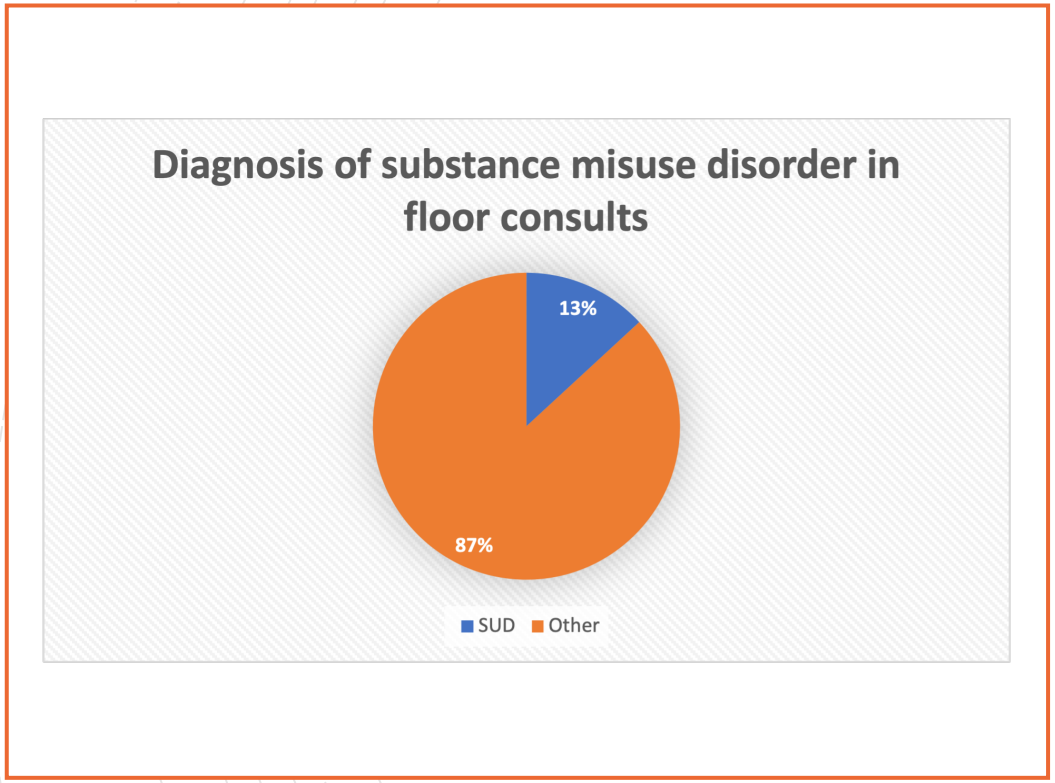
PHQ-4				
Over the last 2 weeks, how often have you been bothered by the following problems? *(Use "✔" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Little interest or pleasure in doing things	0	1	2	3
4. Feeling down, depressed, or hopeless	0	1	2	3

(For office coding: Total Score T____ = ____ + ____ + ____ + ____)

Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc.

ASU College of Health Solutions
ARIZONA STATE UNIVERSITY
Behavioral Health Program

Reconceptualizing SUD as an inpatient diagnosis

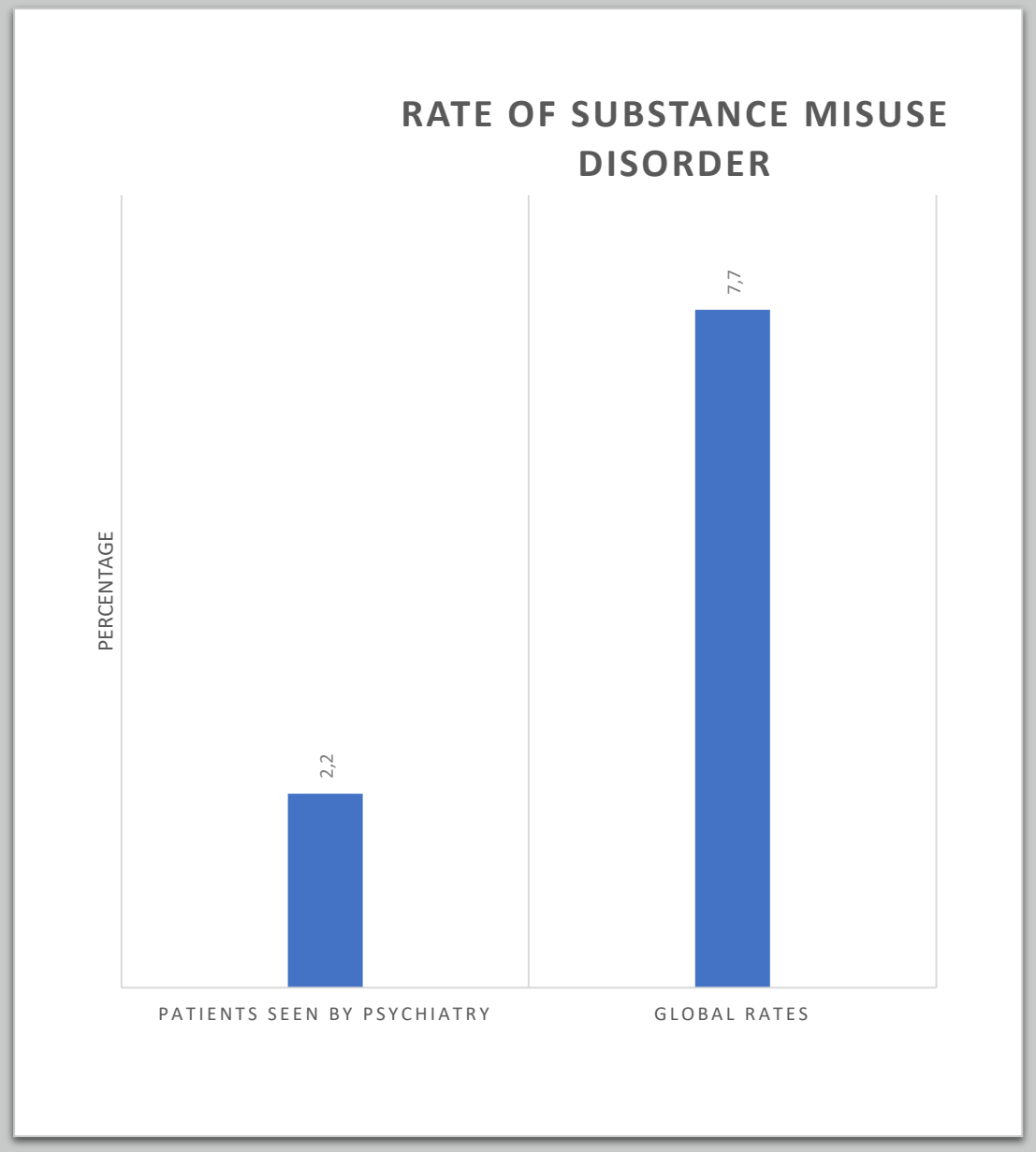


In financial and healthcare shortages, patients are more likely to present in inpatient medical settings compared to ambulatory services

The opportunity is there to provide quality mental health services while patients are hospitalized – including motivational enhancement

Tailoring Data collection – the case of oncology patients and substance misuse

- For opioids and narcotics
- 12.3% patients without cancer used narcotics, compared to 39.4% of patients without cancer
- The global prevalence of misuse is around 7.7% and it’s 2.2% in our sample
- The opioid epidemic is largely an American thing that has come to be considered a global crisis



Task Shifting

- **Psychology interns and psychiatry residents** volunteered to apply phone screening protocols and triage assessments for people affected by the quarantine and suffering from mental health difficulties due to the virus.
- Daily individual online therapy sessions and group sessions were offered to patients in quarantine and to their families who often expressed distress and worry over their family members.

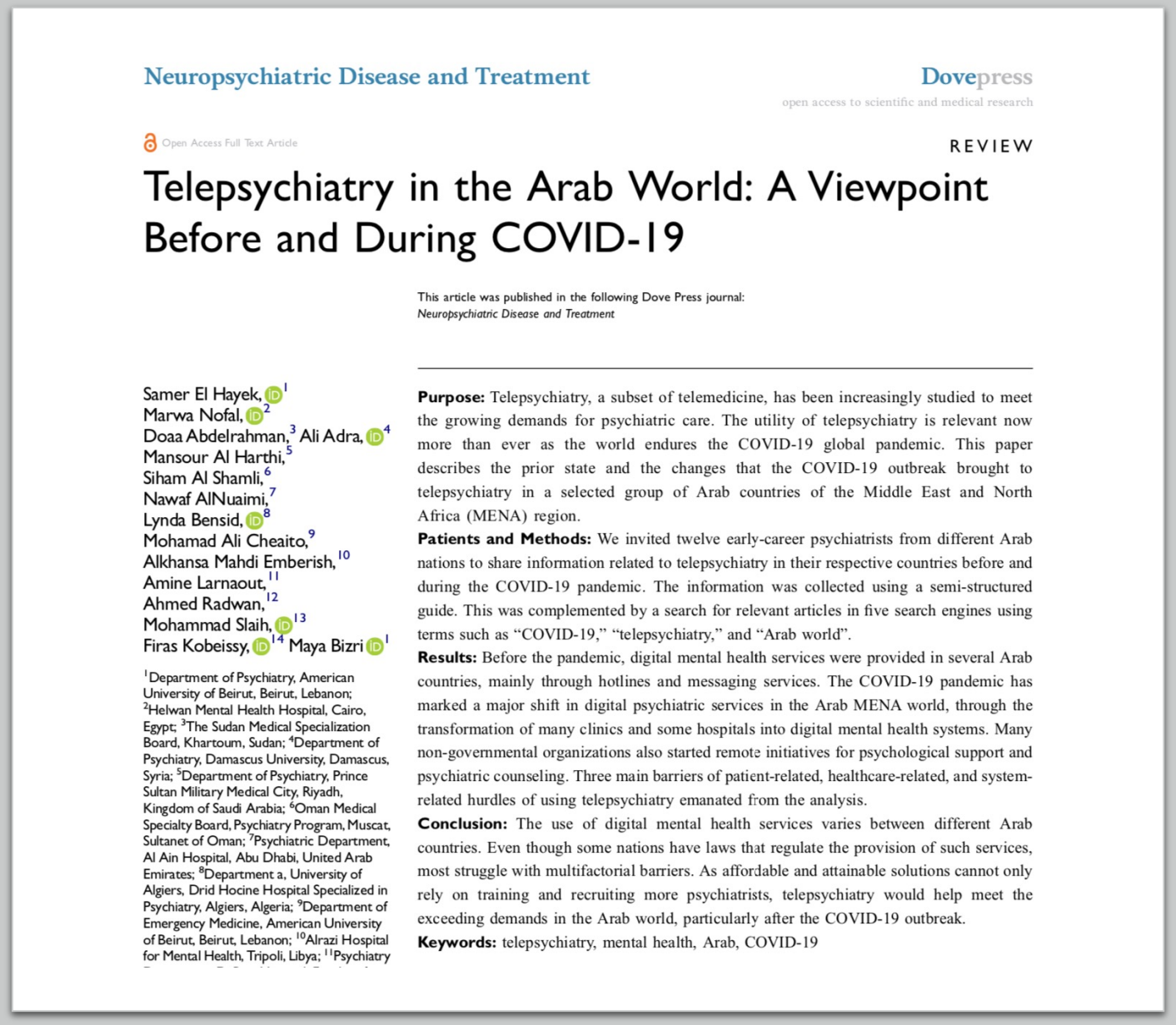
Focusing on deployment of emergency psychiatry services

- During the pandemic and post-blast, most of our services were halted while we directed our human resources towards providing crisis intervention.

- Shortly after the explosion, the Department of Psychiatry launched the Trauma Assessment and Support Clinic (TASC)
  - Immediate mental health support
  - Free of charge to individuals who were psychologically affected by the blast
  - Facilitated access to mental health services to patients not previously in the psychiatric system prior to the disaster

Leveraging telemedicine

- Rapidly deployed during pandemic globally however still poorly implemented in Arab countries including Lebanon
- Access to reliable internet connectivity and electric power remains a challenge in many LMIC settings



Neuropsychiatric Disease and Treatment

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REVIEW

Telepsychiatry in the Arab World: A Viewpoint Before and During COVID-19

This article was published in the following Dove Press journal:
Neuropsychiatric Disease and Treatment

Samer El Hayek,[1] Marwa Nofal,[2] Doaa Abdelrahman,[3] Ali Adra,[4] Mansour Al Harthi,[5] Siham Al Shamli,[6] Nawaf AlNuaimi,[7] Lynda Bensid,[8] Mohamad Ali Cheaito,[9] Alkhansa Mahdi Emberish,[10] Amine Larnaout,[11] Ahmed Radwan,[12] Mohammad Slaih,[13] Firas Kobeissy,[14] Maya Bizri[1]

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Purpose: Telepsychiatry, a subset of telemedicine, has been increasingly studied to meet the growing demands for psychiatric care. The utility of telepsychiatry is relevant now more than ever as the world endures the COVID-19 global pandemic. This paper describes the prior state and the changes that the COVID-19 outbreak brought to telepsychiatry in a selected group of Arab countries of the Middle East and North Africa (MENA) region.

Patients and Methods: We invited twelve early-career psychiatrists from different Arab nations to share information related to telepsychiatry in their respective countries before and during the COVID-19 pandemic. The information was collected using a semi-structured guide. This was complemented by a search for relevant articles in five search engines using terms such as "COVID-19," "telepsychiatry," and "Arab world".

Results: Before the pandemic, digital mental health services were provided in several Arab countries, mainly through hotlines and messaging services. The COVID-19 pandemic has marked a major shift in digital psychiatric services in the Arab MENA world, through the transformation of many clinics and some hospitals into digital mental health systems. Many non-governmental organizations also started remote initiatives for psychological support and psychiatric counseling. Three main barriers of patient-related, healthcare-related, and system-related hurdles of using telepsychiatry emanated from the analysis.

Conclusion: The use of digital mental health services varies between different Arab countries. Even though some nations have laws that regulate the provision of such services, most struggle with multifactorial barriers. As affordable and attainable solutions cannot only rely on training and recruiting more psychiatrists, telepsychiatry would help meet the exceeding demands in the Arab world, particularly after the COVID-19 outbreak.

Keywords: telepsychiatry, mental health, Arab, COVID-19

Engaging community stakeholders

- Community-based initiatives and organizations, including non-governmental organizations (NGOs), are main drivers of psychosocial progress in LMIC .
- Particularly in LMIC, NGOs not only are advocacy champions but can also be **trusted** source of external funding
- In countries with high financial constraints, partnering with NGOs can facilitate priority-setting, resource mobilization, mental health research advancement, staff training and capacity development of substance use services.

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