بنام خدا

رویکرد تشخیصی ودرمانی به اختلالات افسردگی واضطرابی و اختلالات خواب در کوید ۱۹

دکتر فریده رنجبران

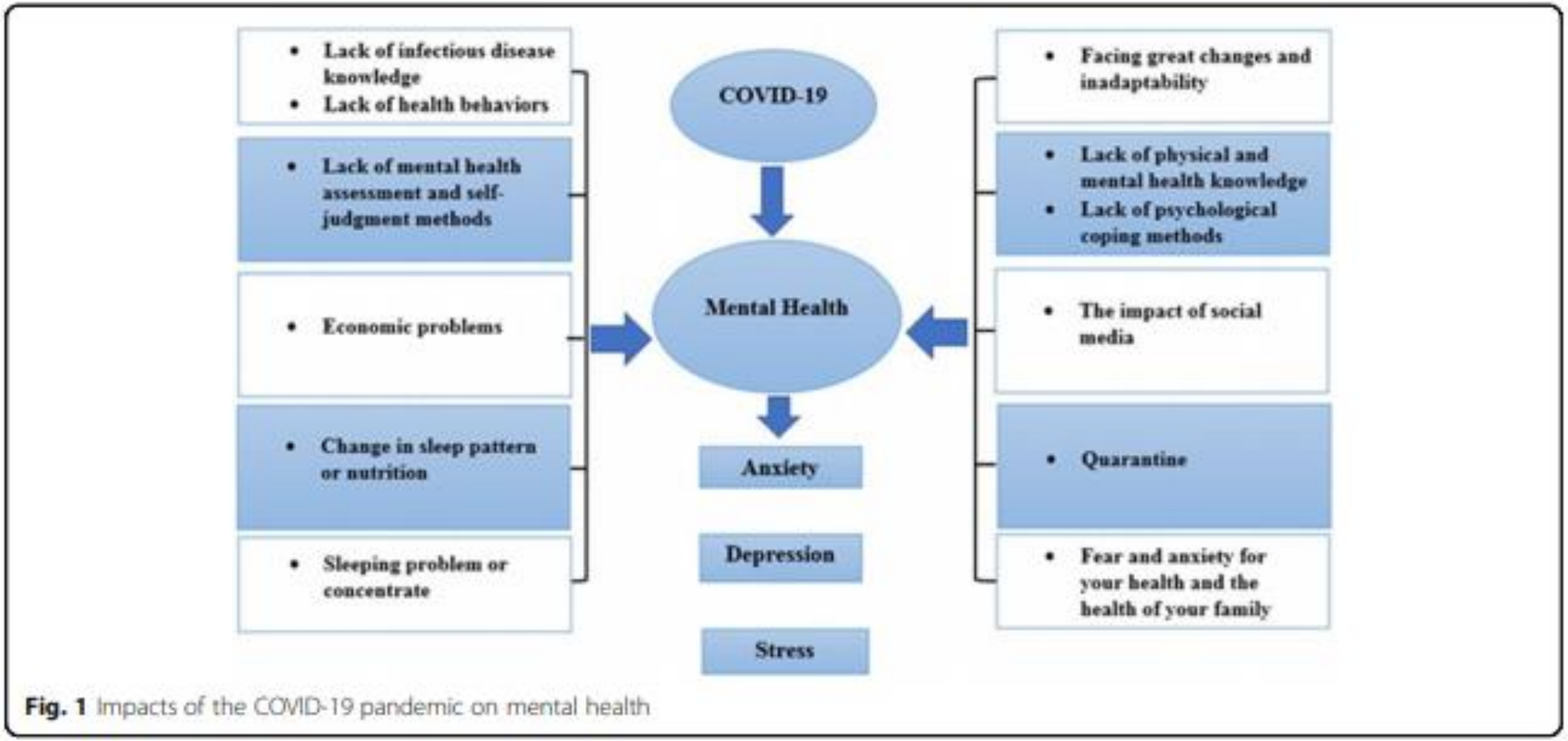

Fig. 1 Impacts of the COVID-19 pandemic on mental health

Adverse psychological outcomes of individuals in quarantine

- anger, anxiety, boredom, confusion, fear, depression, emotional exhaustion, frustration, irritability, and stress.
- PTSD
- Other adverse outcomes included avoidance behaviors (eg, avoiding crowded or public places), detachment from others
- subthreshold symptoms of alcohol use disorder
- excessive preoccupation with distressing somatic symptoms
- Stigma
- domestic violence
- suicidal ideation and behavior

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Globalization and Health

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Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis

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The prevalence of stress in 5 of the studies with a sample size of 9074 was 29.6%

The prevalence of anxiety in 17 studies with a sample size of 63,439 was obtained as 31.9%

the prevalence of depression in 14 studies with a sample size of 44,531 was 33.7%

prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic in different continents

The highest prevalence of anxiety in Asia is 32.9 (95% CI: 28.2–37.9), the highest prevalence of stress in Europe is 31.9 (95% CI: 23.1–42.2), and the highest prevalence of depression in Asia is 35.3

- Anxiety, when above normal, weakens body's immune system
- Research shows that people who follow COVID-19 news the most, experience more anxiety
- Misinformation and fabricated reports about COVID-19 can exacerbate depressive symptoms in the general population
- People who have improved and the progress of medications and vaccines, can reduce anxiety levels
- The results of epidemiological studies show that women are at a higher risk of depression
- In recent studies, the prevalence of anxiety and depression and stress during COVID-19 pandemic is shown to be higher in women than in men

Symptoms of depression

- Sadness
- Tearfullness
- Loss of interst
- pleasureGuilt
- Trouble sleeping
- Decrease or increase appetite
- Low energy
- Diminished sex drive
- Poor concentration

Probable etiology

- Living an urban area
- Reduce exercise
- Dissatisfaction with sleep
- Hypoxia
- Smoking
- Fear of covid 19 reinfection
- Hospitalization
- Past medical disease
- Self medication
- Persistent symptoms of covid 19
- Stigma

May affect several groups

- Patients with COVID 19
  - Disease related stresses
  - Neuropsychiatric sequels of infection
- Medical staff who care for patients (outpatient or admitted)
- Patients with prior psychiatric diagnosis:
  - Exacerbation of Psychiatric illnesses (panic disorder, GAD, OCD)
  - Increased risk of infection for major psychiatric disorders (schizophrenia, Bipolar)
- General Population

Health care workers

- Anxiety – 12 to 20 percent
- Depression – 15 to 25 percent
- Insomnia – 8 percent
- Traumatic distress – 35 to 49 percent
- Need for psychological support – 47 percent

Risk & Protective Factors

- **Risk factors:**
  - increased contact with affected patients
  - a prior history of psychiatric or medical diseases
  - perceived lack of organizational support or social stigma
- **Protective factors**
  - access to personal protective equipment & trust in the institution's infection control
  - access to psychiatric interventions
  - having supportive peers
  - receiving clear communication from supervisors

Psychiatric illnesses in infected patients

- during acute infection, approximately 20 to 40 percent of patients manifested neuropsychiatric symptoms
  - insomnia – 42 percent
  - impaired attention or concentration – 38 percent
  - Anxiety – 36 percent
  - Memory impairment – 34 percent
  - Depressed mood – 33 percent
  - Confusion – 28 percent
  - Altered consciousness – 21 percent
- Depression, anxiety, fatigue, and post-traumatic stress disorder in the post-illness stage of previous coronavirus epidemics (few data yet on COVID-19).

What does stress mean?

- Stress is a normal physiological response to an abnormal situation. As such, it is part and parcel of our lives. It enables our body to adapt to the multiplicity of positive and negative events that we experience, like a birth, marriage, loss of employment, etc. Stress comes and goes on its own, depending of what factors are involved. For example, if you feel stressed on the job but less so at home in the evening or on the weekend, we could deduce that the stressors are work-related.

What does anxiety mean?

- Contrary to fear, which is a response to a well-defined and very real threat, anxiety is a response to a vague or unknown threat. Anxiety manifests itself when we believe that a dangerous or unfortunate event may take place and are expecting it. Everyone experiences anxiety at their own individual degree and intensity. How the anticipated event is perceived will greatly influence the intensity of the anxiety experience.

Physical symptoms:

- Headaches, neck tension, gastrointestinal problems, etc.
- Sleep problems
- Lower appetite
- Lower energy, fatigue
- Etc.

Psychological and emotional symptoms:

- Virus-related worries and insecurity
- Feelings of being overwhelmed by events, powerlessness
- Self-verbalization that does not always reflect reality
- Negative vision of things or daily events
- Feelings of discouragement, insecurity, sadness, anger, etc.

Behavioural symptoms:

- Difficulty in concentrating
- Irritability, aggression
- Crying
- Withdrawal, insularity
- Difficulty in taking decisions
- Increased use of alcohol, drugs and/or medication
- Etc.

Mechanism of depression and anxiety in patients with covid 19

- Psychological mechanism
  - quarantine
  - stress

Central mechanism Covid 19 inflammation Hypocamp

disorderMalnutrition

Factors Associated with Sleep Disturbance in COVID-19 Patients

- Physiologic Factors
  - Neuronal System Injury
- Psychological Factors
- Environmental Factors

Sleep disorder

- The collective term sleep disorder refers to conditions that affect sleep quality, timing, or duration and impact a person's ability to properly function while they are awake. These disorders can contribute to other medical problems, and some may also be symptoms for underlying mental health issues

Coronasomnia

- Coronasomnia is characterized by an increase in sleep problems during the pandemic, as well as symptoms of anxiety, depression, and stress. While insomnia is often linked to anxiety and depression, coronasomnia differs from traditional insomnia because it's related to the COVID-19 pandemic.

Who's at Risk for Coronasomnia?

- Patients with COVID-19
- Frontline workers
- Unpaid caregivers
- Essential workers
- Women
- Young adults
- People of color

Causes Coronasomnia?

- Increased Stress
- Loss of Daily Routines
- Increased Media Consumption

Cause of sleep disorder

- Neuroinflamation
- Blood - Brain Barrier Disruption

Insomnia drug therapy in covid 19 patients

- Important factors :
  - interaction of hypnotic medication with common medication in the treatment of covid 19
  - respiratory depression by hypnotic medication
  - liver damage by covid 19 or drug therapy

Medication for improve sleep quality

- **Benzodiazepines**
- **Z drug**

Drug interactions

- Drug interactions are major challenge in comorbidity of psychiatric disorders and COVID-19 infection
- QTc prolongation is a major concern while using antiviral medications and/or Chloroquine/hydroxychloroquine in combination with many psychotropics. Cardiac monitoring especially in high risk patients is highly recommended.
- Concomitant use of SSRIs with antiviral medications and/or Chloroquine/hydroxychloroquine increase the risk of hypoglycemia.
- Concomitant use of pimozide or midazolam with antiviral medications is contraindicated.

Table 1. Summary of drug-drug interaction between psychotropics and pharmacological treatments used for COVID-19

Psychotropic Medication		Lopinavir/Ritonavir	Chloroquine/ hydroxychloroquine	Implication
SSRIs		↑ risk for serotonin syndrome and hypo-glycemia		Caution in patients with diabetes
	Fluoxetine	↑ Ritonavir via CYP2D6 and CYP3A4	Risk of hypoglycemia	
	Sertraline	↑ Sertraline via CYP3A4	Risk of hypoglycemia	
	Citalopram		↑QTc	Cardiac monitor-ing especially in high-risk patients
	Escitalopram		↑QTc	Cardiac monitor-ing especially in high-risk patients
	Paroxetine	↓ Paroxetine via CYP2D6 and protein binding displacement	Risk of hypoglycemia	
	Fluvoxamine	↑ Ritonavir via CYP3A4	Risk of hypoglycemia	

Antidepressants	SNRIs		↑QTc	Cardiac monitoring especially in high-risk patients
	TCAs	↑ TCAs via CYP2D6	↑QTc	dose reduction is not necessary, monitor TCA side effects
	MAOIs		Risk of hypoglycemia	Caution in patients with diabetes
	Bupropion	↓ Bupropion via CYP2B6		Monitor clinical effectiveness of bupropion
	Trazodone	↑ Trazodone via CYP3A4	↑QTc	Cardiac monitoring especially in high-risk patients Sedation may also occur
	Mirtazapine	↑ Mirtazapine via CYP3A4		Use the lowest efficient dose
	Vortioxetine	↑ Vortioxetine via CYP2D6		Not clinically significant
	Vilazodone	↑ Vilazodone via CYP3A4		Dose reduction by 50% or using and alternative is suggested
Mood stabilizers	Valproic acid	↓ Valproate ↑ Lopinavir		Monitor for lopinavir toxicity and virologic response
	Lamotrigine	↓ Lam via UGTs		A dose increase is recommended
	Carbamazepine	↓ Lopinavir	↑ Chloroquine	
	Lithium			

Psychotropic Medication			Lopinavir/Ritonavir	Chloroquine/ hydroxychloroquine	Implication
Antipsychotics	Second-generation antipsychotics	Risperidone	↑ Risperidone via CYP3A4 and 2D6		Dose reduction
		Aripiprazole	↑ Aripiprazole via CYP3A4 and 2D6		
		Olanzapine	↓ Olanzapine via CYP1A2	↑QTc	
		Quetiapine	↑ Quetiapine via CYP3A4	↑QTc	Cardiac monitoring
		Ziprasidone	↑ Que via CYP3A4		
		Clozapine	Additive metabolic toxicities	↑QTc	Consider alternative agents
	First-generation antipsychotics	Chlorpromazine		↑QTc	
		Pimozide	↑ Pimozide via CYP3A4	↑QTc	Contraindicated
Anxiolytics	Benzodiazepines	Midazolam	↑ Midazolam via CYP3A4		Contraindicated
		Diazepam	↑ Diazepam via 3A4		Dose reduction
		Alprazolam	↑ Alprazolam via 3A4		Monitor sedation and dose reduction
		Triazolam	↓ Triazolam via 3A4		
	Zolpidem		↑ Zolpidem via 3A4		Not clinically significant
	Buspirone		↑ Buspirone via 3A4		Dose adjustment is not usually necessary

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با تشکر از توجه شما