Adapted Treatment Protocol for COVID19-Related Healthcare Professionals:
A Holistic Model and Clinical Health Application of Cognitive-Behavioral Therapy to Pandemics¹

Kevin D. Arnold, PhD, ABPP
President, The Center for Cognitive and Behavioral Therapy
Immediate Past-President, Division 42 of the American Psychological Association

Jared Skillings, PhD, ABPP
Chief of Professional Practice
American Psychological Association

Over-arching Rules: Be Genuine, Express Empathy, Frame as a Consultation

**Consultation 1: Assessment**
- Identification of Healthcare Profession and Role During COVID19 Pandemic
  - Profession (e.g., ED physician, respiratory therapist)
  - Role During Pandemic (e.g., direct patient care, hospital vs. primary care)
  - Likelihood of Exposure to COVID19 (ask for perceived exposure and actual frequency per day or week of known exposure)
- Assessment of General Anxiety, Depression, and Acute Traumatic Stress Symptoms
  - Give the GAD-7, PHQ-9 and the PTSD Checklist-Civilian Version (PCL-C)²
  - Follow-up with Open-ended Questions to Identify Unhealthy Cognitions and Behaviors Related to COVID19
    - Categorize Cognitions in Appended Categories based on Managing Healthcare Workers’ Stress Associated with the COVID-19 Virus Outbreak (2020)³
    - Categorize Behaviors and a) Avoidant or b) Over-Compensation
      - Identify how Over-Compensation Reduces Anxiety (Emotional Avoidance)
  - Identify Emotional Avoidance Cognitions and Behaviors
    - Categorize Avoidance or Over-Compensation Strategies as Producing Anxiety and/or Depression
- Assessment of Social Resources and Stressors

¹ Some of this protocol is based on the work of Skillings & Arnold’s (2016) Holistic Cognitive Behavioral Therapy model of Biopsychosocial CBT for Integrated Care.
³ [https://www(ptsd.va.gov/covid/COVID19ManagingStressHCW032020.pdf](https://www(ptsd.va.gov/covid/COVID19ManagingStressHCW032020.pdf)
- Collect information about work demands and over-extended efforts
  - Identify SUDS (0-10) of regarding work status
- Collect 0-10 ratings of happiness and satisfaction on current relations
  - Partner/Significant Other/Spouse
  - Children
  - Extended Family (e.g., Parents, Siblings)
  - Closest Friendships
  - Social Friendships
  - Other Work Relationships
- Collect stress-related relationships
  - Collect narrative of stress factors in relationship
  - Identify underlying function of stressful relationship(s) (e.g., loss of contact, fear of contaminating others, belief of never seeing others again)

- Assessment of Health Issues (based on CDC, http://dx.doi.org/10.15585/mmwr.mm6913e2) in addition to standard health history
- Interview for diagnoses of known health disorders related to increased risks of severity or morbidity from COVID19 and effectively (E)/not effectively managed (NE)
  - Diabetes E/NE
    - Assess if in/not in Diabetes Distress
  - Heart Diseases (including hyperlipidemia) E/NE
    - Type and Treatment (e.g., Myocardia/Pacemaker)
  - Lung Disorders
    - Type and Treatment (e.g. Asthma/Nebulizer)
  - Immunocompromised
    - Type and Treatment
  - Chronic Renal Disease
    - Type and Treatment
  - Pregnancy
    - Type and Treatment
  - Neurologic/Neurodevelopmental
    - Type and Treatment
  - Chronic Liver Disease
    - Type and Treatment
  - Current Smoker (Y/N)
  - Former Smoker
    - Sequelae and Length of Time since Cessation
  - Other Chronic Disorders (Highlight hypertension; thyroid disease; gastrointestinal disorder; hyperlipidemia; cancer or history of cancer; rheumatologic disorder; hematologic disorder; obesity; arthritis, nonrheumatoid, including not otherwise specified; musculoskeletal disorder other than arthritis; urologic disorder; cerebrovascular disease; obstructive
sleep apnea; fibromyalgia; gynecologic disorder; embolism, pulmonary or venous—based on CDC with prevalence at or above 5% of the sample

- Disorder/Course of Disease (repeat if necessary)

⇒ Risk Assessment for Hospitalization or ICU about 2.5X higher if 1 or more Chronic Health Condition

- Assessment of Self-care & COVID19 Protective Habits and Knowledge
  
  o Health Habits Include
    ⇒ Frequent Hand Washing (yes/no)
    ⇒ Availability and Use of PPE
    ⇒ Social Distancing when not Providing Patient Care (yes/no)
    ⇒ Current Living Arrangements including Availability of Privacy
  
  o Biosecurity Measures
    ⇒ Physical Strain of Protective Equipment (e.g., dehydration, exhaustion)
    ⇒ Physical Isolation (e.g., “no-touch” measures, post-shift isolation)
    ⇒ Vigilance for Infection Control
    ⇒ Strick Protocol Adherence (e.g., no flexibility with application of procedures)
  
  o Disease Transmission Risk
    ⇒ Mistaken Symptoms of Flu or Cold for COVID19
    ⇒ Asymptotic Patients Infected with COVID19
    ⇒ Impact of Higher Mortality Rate than Flu
    ⇒ Conflicts between Public Health Concerns and Patient/Family Demands

  o Role Conflicts and COVID19 (e.g., Healthcare Worker vs. Family Member)
    ⇒ Daily Demands Conflicting with COVID19 Measures
    ⇒ Role of Performing Protocols Routines Conflicting with Ongoing Changes in Protocols and Governmental/Public Health Directives
    ⇒ Physical Location of Healthcare Worker Role Conflicting with Location of Family Members
    ⇒ Role Strain: Subjective Experience of Stress from Conflicts between Role of Healthcare Worker and Other Roles (Rate 0-10 on SUDs Scale)

  o Stigma of Being a Healthcare Worker
    ⇒ Others Distancing out of Fear of Infection from Healthcare Worker
    ⇒ Self-stigmatization Fear if Needs or Fears are Given Voice and Expressed to Others

- Stressors Related to COVID19
  
  o Exposed to COVID19 Risk Factors (yes/no)—If yes:
    ⇒ Exposure to Individual with Confirmed COVID19 (yes/no)
    ⇒ Exposure to Individual with COVID19 Symptoms (Non-Confirmed COVID19) (yes/no)
    ⇒ Spent Time in Quarantine (yes/no)
    ⇒ Travel to Hot Spot Areas in US (yes/no)
    ⇒ Travel to Hot Spot Areas Abroad (yes/no)
    ⇒ Known Associate or Family Member with Confirmed Case (yes/no)
Known Associate or Family Member in Hospital for COVID19 (yes/no)

- ICU (yes/no)
- Respirator (yes/no)
- Deceased due to COVID19 (yes/no; if yes consider complicated bereavement or worsening of depression)
  - Reduced Workload due to Working from Home (yes/no)
  - Increased Workload due to Direct COVID19 Patient Care Role (yes/no)
  - Children Unavailable to be Seen (yes/no)
  - Children Disruptive to Work from Home Demands (yes/no)
  - Financial Problems (yes/no)
  - Relationship Problems (yes/no)
  - Parenting Problems (yes/no)

Behavioral Health Diagnoses (Ensure Consistent with Assessment Results)

Motivational Interviewing

- Asking Permission to Discuss Treatment Planning
- Open Ended Questions about What’s Most Important in Life
- Use Empathic Statements Whenever Appropriate
- Open Ended Questions about how Treating (Anxiety/Depression/Acute Traumatic Stress) Could Help Achieving What’s Most Important
- Open Ended Questions about how Treating (Anxiety/Depression/Acute Traumatic Stress) Could Have Costs (e.g., Initial Increase in Stress or Use of Healthcare Worker’s Time)
- Open Ended Questions to Express Willingness to Try Strategies for Anxiety/Depression/Acute Traumatic Stress Related to the Pandemic
  - ⇒ If Ready to Change, Do Treatment Plan
  - ⇒ If not Ready to Change, Ask Permission to Consult (If Yes, Consult and Use Tips Sheets)

Treatment Planning

- Review Protocols Below and Obtain Agreement and Decision to Adopt Strategies

Review Healthcare Worker’s Satisfaction with Session

Ask Healthcare Worker for Any Questions

Schedule Next Consult if Yes to Continue Working Together
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Consultation 2: Orientation to CBT of Anxiety, Depression or ASD during Active Healthcare Work during the Pandemic

- Motivational Interviewing Strategy
  - Open Ended Question about Status
  - Request Permission to Set Agenda
- Discussion of Emotions, Emotional Avoidance, and Behavioral Overcompensation or Avoidance of Triggers
  - Discussion of Anxiety and its Purpose
    - Physical Sensations of Anxiety
      - Muscles
      - Breathing
      - Heart Rate
      - Flushing
      - Digestive (Both Upper and Lower GI)
      - Hands/Feet Sensations
    - Subjective Feelings of Anxiety: Words for Processing
      - Scared
      - Terrified
      - Fearful
    - Purpose of Anxiety
      - Survival Function (Run or Fight)
      - Excitement Function (Roller Coaster)
      - Necessity of Anxiety as a Motivator of Action
  - Emotional Avoidance
    - Anxiety about Anxiety: Discomfort
    - Problems with Tolerating Uncomfortable Feelings
    - Triggers Sense of Unavoidable Doom (Catastrophizing)
    - Avoidance of Feeling of Anxiety Results
      - Cognitive Avoidance of Emotion
      - Behavioral Avoidance of Triggers to Discomfort and/or Anxiety
- Overcoming: Habituation of Anxiety
  - Acceptance of Anxiety as a Normal Reaction
  - COVID19 Anxiety-Trigger Hierarchy
    - Creation of a List of COVID19 Healthcare Worker Situations
    - Rank Ordering the List Based on SUDS Ratings
What is Use of Habituation for Promoting Self-Care and Realistic Ideas while Delivering Healthcare during the COVID19 Pandemic

⇒ Imagination-Based
⇒ Modified “In Vivo” in the Age of COVID19

How Habituation and Extinction Works

⇒ Flattening of the Anxiety and Discomfort “Curve” through “Boredom”
⇒ Extinction: Overcoming the Reward of Minor Reductions in Discomfort by Avoidance

Use of Habituation to Overcome Avoidance of Discomfort, Avoidance of Self-care Activities and Processing of Anxiety Cognitions about Healthcare and the COVID19 Pandemic

Thoughts about Delivering Healthcare during the COVID19 Pandemic: Realistic and Unhealthy

What are Unhealthy COVID19 Thoughts in General

⇒ Review Appendix

Knowing about Expecting Bad Things to Happen or Disregarding Risk Ideas

⇒ Value of Understanding Thought-Feeling Connection
⇒ Monitoring Ideas to Learn to Talk Back to Them

Learning Alternative Ideas and Actions Based on Evidence

⇒ Talking Back to Cognitions Using Alternative Ideas Based on Evidence
⇒ Regularly Seeking Accurate Information
⇒ Seeking Mentoring to Make Decisions (Second Set of Mind’s Eyes)
⇒ Acceptance of Anxiety to Real Threats
⇒ Identifying Exaggerated Risk Inferences about Perceived (Rather than Real) Threats
⇒ Identification of What is vs. is not within Healthcare Worker’s Power
⇒ Recollection of Earlier Successes in Similar Situations to Create Ideas of Fortitude, Hope, Tolerance, and Patience

⇒ Alternative Actions to Avoidance or Over-Reactions
⇒ Self-care Actions to Manage Delivering Healthcare during the COVID19 Pandemic

⇒ Social Activities:
  ▪ Regular Check-ins with Co-workers, Family, and Friends.
  ▪ Working in Partnership with Teams

⇒ Personal Activities:
  ▪ Brief Relaxation and Stress Management Breaks
  ▪ Time-outs for Basic Bodily Care and Refreshments
  ▪ Employing Actions within Healthcare Worker’s Power

⇒ Self-Informative Activities:
  ▪ Routinized Times to Seek Out Accurate Information
  ▪ Self-limiting Consumption of News Media

⇒ Noticing Results
⇒ Continued Negative Results or Symptoms Related to COVID19
⇒ Acceptance of Peers and Family when Engaging in Social Contact and Mentoring
⇒ Improved Physical Sensations when Using Self-Care Strategies
⇒ Improved Mood from Use of Healthier Thinking and Coping Strategies

The Model We Will Use: COVID19 Coping (Based on Coping Cat) using **FEAR Model***

- **Feelings:** Identifying COVID19-Related Discomfort and Fear Feelings Related to Healthcare Worker Role
- **Expecting Bad Things Ideas:** Noticing COVID19-related Healthcare Worker Unhealthy Ideas
- **Alternative Ideas and Steps:** Coming up with Alternative Realistic Ideas and Steps that
  - Maintain Healthy Delivery of Healthcare and Personal Self-care within Context of Health-Risk Factors and Demands of Healthcare System/Patient Care
  - Cope with Triggers to Discomfort and Anxiety and Avoidance of Emotions and/or Negative Emotion Triggers
- **Results and Self-Rewards:** Noticing Effects of Healthy Behaviors and Rewarding Yourself for Adapting During the COVID19 Pandemic
  - Noticing How Coping leads to More of what Healthcare Worker Values for Self, Family, Patients and the Public

- Ask for Healthcare Worker Teach-Back and Review Areas of Misunderstanding
- Ask Healthcare Worker for Feedback about Usefulness of Consultation and Feeling Understood
- Ask Healthcare Worker to Make Next Appointment

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Consultations 3-5: Application of FEAR Model of Coping with COVID19 Healthcare Worker Stress

- Motivational Interviewing Strategy
  - Open Ended Question about Status
  - Request Permission to Set Agenda
- Create Hierarchy of 3 to 5 Stress Provoking COVID19 Factors from Hierarchy
- Categorize Healthcare Worker COVID19 Pandemic Factors as Producing 1) Avoidance or 2) Over-reactions
- Tailor FEAR Protocol to Avoidance (Coping Through Healthy Habituation) or Moderated Behaviors (Coping Through Stress Tolerance when Using Moderate Behaviors)
- Select Lowest Item in Hierarchy for First FEAR Practice
- Review FEAR Components (Repeat Until Memorized, Reward for Each Success)
  - F Stands for ____________________________
  - E Stands for ____________________________
  - A Stands for ____________________________
  - R Stands for ____________________________
- Creation of Plan for Three (3) Experiments for Lowest Item on Hierarchy
  - COVID19 Healthcare Worker Stress from Hierarchy: ____________________________
    - F ____________________________
    - E ____________________________
    - A ____________________________
    - R ____________________________
- Assign Three “Prove You Can Cope” COVID19 Experiments Using FEAR Forms
Trigger of Stress from Hierarchy for Healthcare Work Related to the COVID19 Pandemic:

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Repeat Stress from Hierarchy for Healthcare Work Related to the COVID19 Pandemic:

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Repeat Stress from Hierarchy for Healthcare Work Related to the COVID19 Pandemic:

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Consultations 4-5: Application of FEAR Model of Coping with COVID19 Healthcare Worker Stress

REPEAT F E A R CONSULTATIONS 4 AND 5 USING SAME STRATEGIES AS ABOVE, BUT NEXT HIGHEST ITEM FROM HIERARCHY COLLABORATIVELY SELECTED BY HEALTHCARE WORKER AND BEHAVIORAL HEALTH CONSULTANT
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**Final Session: Termination and Maintaining Gains**

- Review of Progress Using Open-ended Questions
- Review of FEAR Model
- Identification of Areas FEAR can be Useful in the Future
- Ways to Counter New Healthcare Worker COVID19 Habits and Thinking Patterns Down the Road
- Grounding FEAR Coping Strategies in a “What’s Important Approach” to Life
- Healthcare Worker Generated Self-Rewards for “Graduating”
- How to Follow-up with Consultant
- Ask for Feedback about Treatment and Final Session
- Provide Contact Methods if Consultations Needed in Future
Appendix

Checklist of Cognitive Distortions for Healthcare Worker Stress Associated with the COVID19 Pandemic\textsuperscript{5,6}

1. Mind Reading: Thinking you know what others are thinking without any reason to do that. For example: “If I take a break, others will think I’m shirking my responsibilities and criticize me.”

2. Exaggerated Concern for Others’ Thoughts: Giving elevated status to what others think. For example: “If people think I’m not doing enough, I’ll lose my job when this is over.”

3. Catastrophizing: Believing that the future will be horrific, and you won’t be able to manage it. For example: “Everyone will get sick, overwhelm my work, most will die; and I won’t be able to bear the burden.”

4. Discounting: Deciding what you’ve done is unimportant compared to others. For example: “I only worked 18 hours but look at everyone else working more than that. I never do enough.”

5. Overgeneralizing: Thinking that everything is like what currently is being experienced. For example: “I know I’ll get sick even though I am using all the safety precautions; I just saw that a healthcare worker got sick on the news.”

6. “Shoulds”: Using a framework of moral imperatives to think about the current situation. For example: “Others work around the clock, so should I.”

7. Personalizing: Taking an excessive amount of responsibility or even blame. For example: “I would be selfish and put others at-risk if I take a minute to rest.”

8. Blaming: Identifying yourself as the sole reason for negative outcomes. For example: “A patient was placed on a ventilator because I didn’t do enough during triage. It’s my fault if the patient dies.”

9. Unfair Comparisons: Comparing yourself to others in a way that minimized you and exaggerates others’ importance or success. For example: “My needs shouldn’t count compared to the patients. The needs of survivors are much more important than my own.”

10. Super Person: Exaggerating your capacities to the point of making yourself indispensable. For example: “Only I can do ....”

11. All or None Thinking: Concluding that things are only one way or the other, that there are no shades of gray. For example, “I can contribute only if I work all the time.”

\textsuperscript{5} Developed from the list in https://www.ptsd.va.gov/covid/COVID19ManagingStressHCW032020.pdf