



NEURO
INSTITUTE

Continuing Education for Rehabilitation Professionals



The Benefits of Cognitive Behavioral Therapy (CBT) to Assist Clients' with a Traumatic Brain Injury or a Neurological Diagnosis

Kelsi Gagne, Dr. OTR/L, QBISP

Audio Check

To ensure that you can hear the presentation, please take a moment to double check your audio settings.

Go to the Audio tab in your GoToWebinar dashboard.

- If you have selected phone call, make sure you're dialed into the conference number.
- If you are dialed in but cannot hear, try hanging up and calling back in.
- If you are using only computer audio, check that your device isn't muted.
- If you're using listening devices such as headsets, double check they are plugged in/turned on.

NeuroRestorative's COVID-19 Response

We are committed to protecting the health and safety of the individuals we serve, our staff, and the community. Our services are considered essential, and we are taking precautions to minimize disruption to services and keep those in our care and our team members safe. In some programs, that has meant innovating our service delivery model through Interactive Telehealth Services. We provide Interactive Telehealth Services throughout the country as an alternative to in-person services. Through Interactive Telehealth Services, we deliver the same high-quality supports as we would in-person, but in an interactive, virtual format that is HIPAA compliant and recognized by most healthcare plans and carriers.

You can learn more about our COVID-19 prevention and response plan at our Update Center by visiting neurorestorative.com.

Professional Experience



- Fourteen years clinical experience in the occupational therapy profession in a variety of settings.
- Doctorate degree from Nova Southeastern University. Specialization: Gerontology, Health policy and Visual Rehabilitation/Low vision.
- Adjunct faculty member at the University of Southern Maine.
- Certified Brain Injury Specialist.
- Life Coach- certified in September, 2021.
- Speaker: Envision Conference x2 years and will be speaking at the BIAA conference in Maine.
- Published article in *OT Practice Magazine* with co-author Catherine Pierce from Nova Southeastern.

Course Objectives



- Describe the background and benefits of Cognitive Behavioral Therapy (CBT).
- Delineate the spectrum of emotions and name strategies for emotional regulation and intelligence.
- Describe specific and easy to implement CBT and other mindfulness interventions.

Ice Breaker

- What are your thoughts regarding this presentation?
- What are your feelings on this presentation?
- How can you choose a thought that will best serve you and give you the highest results?

| Cognitive Behavioral Therapy (CBT)



- Cognitive Behavioral Therapy (CBT) was developed by Aaron Beck (psychiatrist) and Judith Beck (psychologist).
- CBT is a form of psychological treatment that has been demonstrated to be effective for a range of mental health diagnoses (American Psychological Association, 2017)
- The cognitive model hypothesizes that people's emotions and behaviors are influenced by their perceptions of events (Beck, 1964).

Cognitive Behavioral Therapy

In 1977, Dr. Beck and A. John Rush, MD completed a randomized control study of CBT with depressed clients.

- The results established that cognitive therapy was as effective as Imipramine, a common antidepressant.
- This was the first time talk therapy had been compared to medication.
- In 1979, the first cognitive therapy treatment manual was published.

Cognitive Behavioral Therapy



- David Burns, M.D. was one of the first practitioners along side of Beck to help develop and practice CBT.
- Burns would often collaborate with Aaron Beck about CBT and Burns went on to write a book called Feeling Good The New Mind Therapy a book for people to self-teach and practice CBT independently in their daily lives.

Cognitive Behavioral Therapy

CBT is based on the fact that psychological problems are due to:

- Unhelpful ways of thinking or learned patterns of unhelpful behavior
- How people feel is determined by the way in which they interpret situations rather than by the situations themselves.

Cognitive Behavioral Therapy



Individuals experience thoughts continuously, whether or not they are aware of them.

These cognitions have been labeled as automatic thoughts, since they to occur spontaneously and without conscious effort (Beck, 1976).

Cognitive Behavioral Therapy



Individuals experience thoughts continuously, whether or not they are aware of them.

These cognitions have been labeled as automatic thoughts, since they to occur spontaneously and without conscious effort (Beck, 1976).

Cognitive Behavioral Therapy



CBT believes people can learn and improve their thoughts and thought patterns, as well as, their emotional intelligence and coping skills, thereby, relieving their symptoms and become more effective in their lives.

(American Psychological Association, 2017)

Benefits of CBT Interventions

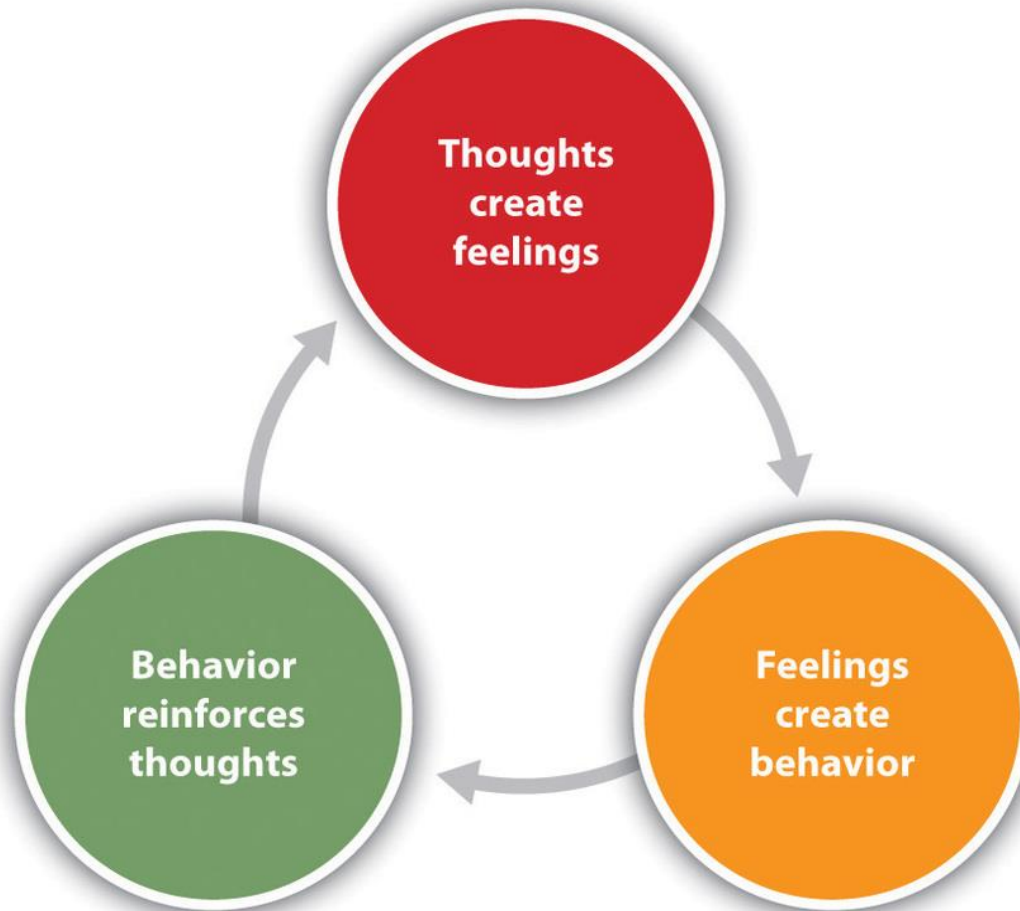
- Learn to recognize one's distortions in thinking that create issues in their daily lives.
- Evaluate and change thoughts to a neutral, clear and realistic thought.
- Work towards developing a sense of self-worth and a greater sense of confidence in one's own abilities.

| Benefits of CBT Interventions Cont.



- Increase over-all emotional regulation and emotional intelligence.
- Face one's problems and fears instead of avoiding them.
- Practice mindfulness by learning to calm one's mind and relax one's body. (American Psychological Association, 2017)

Think-Feel-Act Cycle



Beck's Assessments

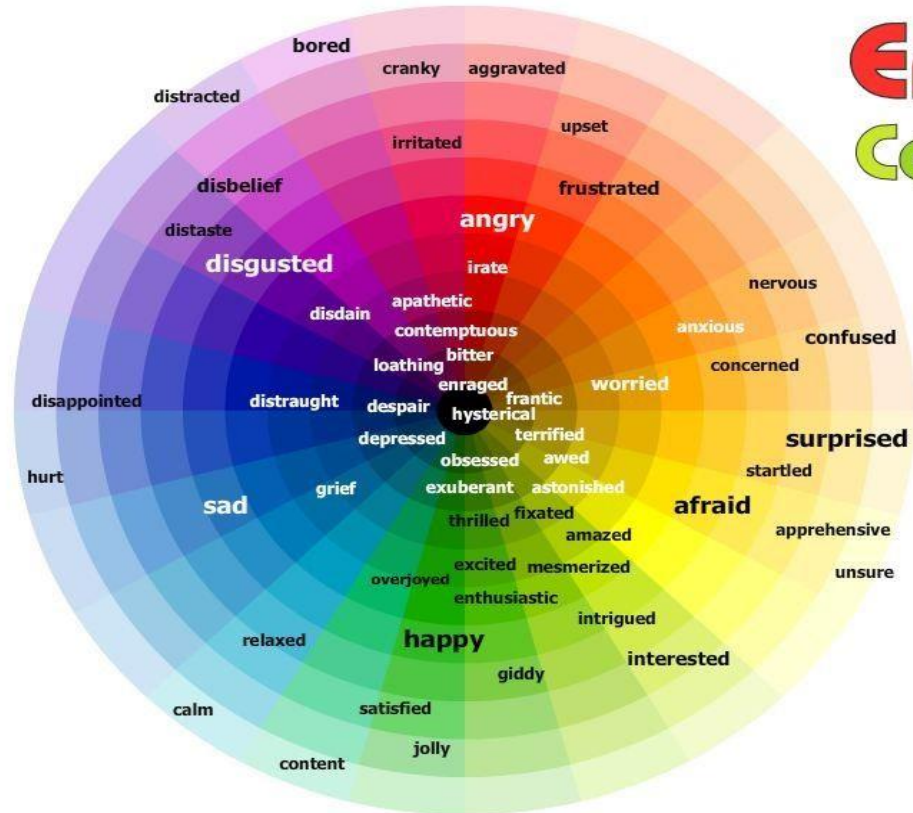


- Beck Youth Inventories of Emotional and Social Impairment[®] (BYI[®])– Second Edition (For children and adolescents ages 7-18)
- Beck Anxiety Inventory[®] (BAI[®])
- Beck Depression Inventory[®] (BDI[®])
- Beck Scale for Suicide Ideation[®] (BSS[®])
- Beck Hopelessness Scale[®] (BHS[®])
- Clark-Beck Obsessive-Compulsive Inventory[®] (CBOCI[®])
- BDI[®] – Fast Screen for Medical Patients

Emotional Regulation

- All emotions are needed and a part of the human experience (Beck, 2020).
- Negative emotions are a great sign that we need to be *curious* about our thoughts.
- Emotions are on a spectrum, therefore, none are Bad or Good.
 - We all process emotions differently.
 - Feelings are 50/50. We cannot just delete our emotions.
- Feelings are the emotional state of the mind which cannot be explained but only experienced. They are an effect of the mind- experienced in our bodies. An emotion is a vibration in your body (Castillo, 2009)

Emotions/Feelings



Emotions Color Wheel

The Emotions Color Wheel can help visually group feelings.

Click on a feeling in the color wheel to learn more about it.

Measuring Emotion

Questions to help understand someone's emotional state include:

- Where do you feel each emotion in your body?
- How long does the emotion last?
- Where are you on a Likert scale (0-10)?
- Notice any resistance to the feeling?
- What are easier emotions for you to feel?
- What are harder emotions for you to feel?

Emotional Buffering

- Emotional Buffering is simple numbing your emotions by consuming versus feeling the emotion.
 - Smoking
 - Drinking
 - Shopping
 - Watching television for hours
 - Playing or scrolling on your phone
 - Over working

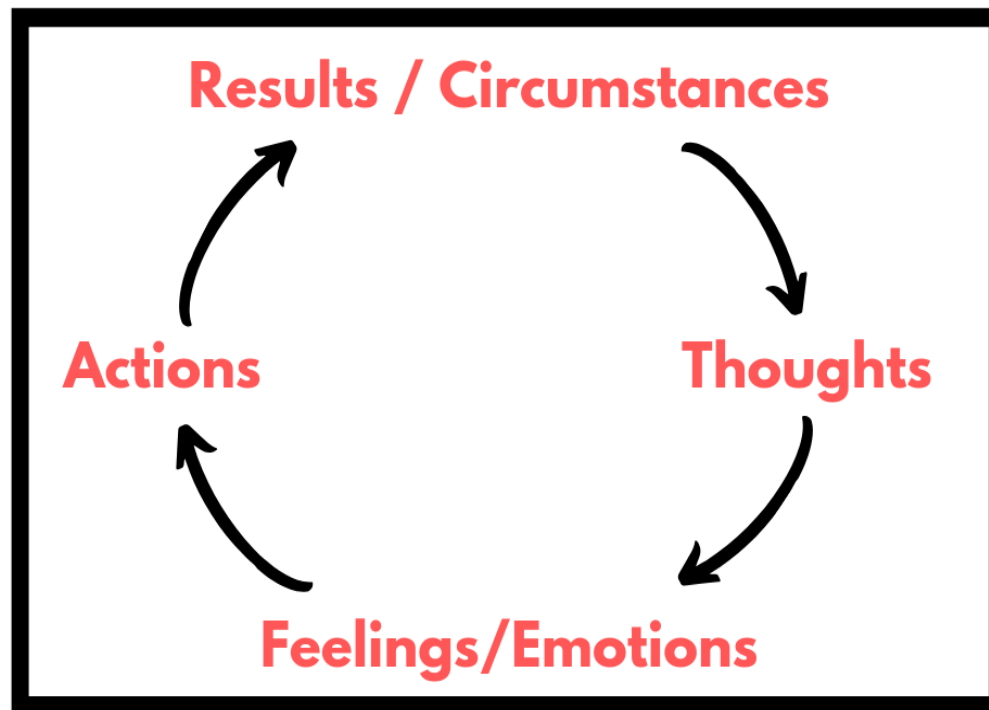
| Brain Break: Power of Our Thinking



- You can pretty much guarantee that you'll spill your coffee if you keep telling yourself, "Don't spill the coffee!"
- Nine times out of ten, you'll hit the telephone pole that you're so intent and focused on avoiding when your car skids out of control.

CBT Intervention

- “All beliefs carry with them consequences.” -Tony Robbins



Thought Work: The Model

The model states that circumstances can trigger thoughts that cause feelings that cause action that that in turn cause results.

1. Circumstance
2. Thought
3. Feeling
4. Action
5. Result

(Castillo, 2009) Master Life Coach

The Model Cont.

Why do thought work (CBT)?

1. To feel better,
 2. To create results,
 3. To becomes conscious,
 4. To think more deliberately,
 5. To remove negative thinking and emotions,
 6. To create positive thinking and emotions.
- “Empowering thoughts” (Castillo, 2009, pg. 28)

The Model Framework



C:

T:

F:

A:

R:

*Can be filled out in any order but you usually start with the circumstance.

Circumstances

- Circumstances: Things or events that happen in the world that we cannot control.
 - Needs to be judgment free
 - Neutral
 - Simple and clear fact
- **Example: Circumstance: Performing Exercises in OT**

Thought Download

- Take of a piece of paper and write everything that you are thinking in your mind right now.
 - C: My current thoughts
 - How do these thoughts make you feel?

Thoughts

Thoughts: Ideas that happen in your mind.

- Do a thought download, then choose 1 thought.
- Challenge a thought in the moment.
- Not positive thinking but inserting a thought that better serves you.
- **Example: T: “My Left arm is junk... completely useless.”**
- What do you think these thoughts create for a feeling?

Thoughts

- Feelings: Vibrations that happen in your body-caused by thoughts, not circumstances
 - Be sure the thought your examining actually causes the feeling.
 - Utilize a list of emotions if able.
 - Where do you feel this emotion in your body?

Feelings

- **Example: F: frustrated, disempowered, discouraged**
- Powerful Questions:
 - How do I want to feel instead?
 - Do I like this feeling?
 - Is this truly the emotion I am feeling?

Actions

Actions: Our behavior- what we do in the world.

- Actions are caused by feelings, determined by thought

Example: Actions

- Ruminates on what you are lacking. “Why is my Left arm junk?”
- Continue to judge your abilities.

Results

- Results: The end result. What did your thoughts create for you? What did you want for results?
- **Example: Possible results for client**
 - **Make zero changes or slow your capabilities to learn and grow.**
 - **Gain evidence that you are a failure or your thoughts are correct.**
 - **Therapist and Staff help you get curious about your thinking!**

Powerful Question

Before we go on... Do you truly discuss your client's thoughts, feelings, and results with them during sessions?

- No right or wrong answer.
- Would this change their results?

Intentional Model

C: Performing Exercises in OT

T: a.) These exercises are going to help me reach my goal of being able to complete my laundry independently.

b.) I am capable of doing these exercises to the best of my ability in order to get results.

- List all the functional things or strengths concerning the Left side
- Use active listening skills in order to let client create the new thought.

Intentional Model

- **F: Content, Empowered, Motivated.**
- **A: Perform the exercises with improved effort, focus and engagement in the sessions.**

Intentional Model

- Results:
 - Create evidence for your brain that the Left arm is useful and functional.
 - Increased confidence and belief in capabilities.
 - Client consistently participates in OT with more engagement and motivation to accomplish their goals.

Burn's Triple Colum Technique

BURNS TRIPLE COLUMN TECHNIQUE

1. Situation or Event: _____

2. Negative Thoughts	3. Cognitive Distortion(s)										4. Rational Response (Self-defense)
	1. All or Nothing Thinking	2. Overgeneralization	3. Mental Filter	4. Disqualifying the Positive	5. Jumping to Conclusions	6. Magnification (Catastrophizing) or Minimization	7. Emotional Reasoning	8. Should Statements	9. Labeling and Mislabeled	10. Blame	
1.											1.
2.											2.

Modifications Ideas for CBT

- Gallagher, McLeod, Mc Millan (2016) performed a systematic review of recommended modifications of CBT for people with cognitive impairments following brain injury
 - Provides a framework for clinicians to apply and adjust CBT procedures
 - Learned about the diverse nature of helping people recover from emotional dysregulation and adaptation following brain injury.
 - Progress in this field will be accelerated if the quality and clarity of specific therapy adaptations is improved.

Modifications Ideas for CBT

- Gallagher, McLeod, Mc Millan (2016) performed a systematic review of recommended modifications of CBT for people with cognitive impairments following brain injury
 - Provides a framework for clinicians to apply and adjust CBT procedures
 - Learned about the diverse nature of helping people recover from emotional dysregulation and adaptation following brain injury.
 - Progress in this field will be accelerated if the quality and clarity of specific therapy adaptations is improved.

Modifications Ideas for CBT Cont.

- Attention/Concentration:
 - Short Sessions
 - Add multiple rest breaks
 - Increase frequency of sessions
- Communication:
 - Use clear, structured, and simple statements and directions
 - Use visuals or other multisensory modalities

Modifications Ideas for CBT

- Memory:
 - Use written or auditory memory recall strategies
 - Involve family member or supports to ensure carry-over of strategies
- Therapeutic Education
 - Modify based on cognitive assessment
 - Connect CBT with TBI education

| Modifications Ideas for CBT Cont.

- Executive Functioning
 - Go slow and allow for processing time
 - Use frontloading and structure to organize sessions
 - Use concrete examples
 - Promote flexible thinking- client comes up with alternative solutions

Mindfulness Interventions

- Mindfulness is defined by the Oxford dictionary as a mental state achieved by focusing one's awareness on the present moment, while calmly acknowledging and accepting one's feelings, thoughts, and bodily sensations, used as a therapeutic technique.
- It's impossible to completely eliminate emotions because emotions are a normal part of life. Mindfulness is a strategy to help people develop a new relationship to experiences such as anxiety, not to eliminate these experiences (<https://beckinstitute.org/integrating-mindfulness-cbt/>, 2018).

Imagery

- Imagery can be defined as “Mental pictures and imagination” -Merriam-Webster Dictionary.
- Images in our head have the power to affect how we feel positively or negatively (just like thoughts).
- Imagery is a form of meditation.
 - Meditation allows us to engage in contemplation or reflection. Achieve a mentally clear and emotionally calm and stable state

Imagery

- Focus on empowering imagery in order to increase positive emotions and confidence.
 - Recall memories or practice upcoming situations the client have coped or problem-solved successfully before the circumstance.
 - Use all five senses.
 - Great way to start or end sessions OR your day as a practitioner.

Imagery Example

- Assess what your client sees in his or her mind-thoughts about the mental pictures and the emotions connected.
 - Do they want to change the pictures to achieve different emotions?
 - Can they see themselves achieving their goals?
- Imagery allows you to go to a private place where anything is possible.
- Relax your body and your muscles
 - Take 3-5 minutes to do this mentally at the start or end of each formal session. Lying on a mat or in a comfortable position.

| What Do Our Bodies Need To Survive?



- Water
 - Oxygen
 - Food
 - Maybe Shelter.
-
- Important to educate our client's on their basic needs and help them engage in self-care during the day.
 - Mindful: What does my mind and body need in this moment?

Deep Breathing

“Improper breathing is a common cause of ill health. If I had to limit my advice on healthier living to just one tip, it would be simply to learn how to breathe correctly. There is no single more powerful, daily practice to further your health and well being than breath work.”

-Andrew Weil, M.D. Author of Spontaneous Healing

Deep Breathing

- Oxygen fuels our cells and helps provide the basic building blocks that our bodies need to survive (Cancaster, 2021)
- Oxygen is necessary for constructing replacement cells for our bodies. Every day, about seven hundred billion cells in our bodies wear out and must be replaced. Without oxygen, new cells cannot be made.
- Oxygen is important part of our immune system. It is used to help kill bacteria, and it fuels the cells that make up our body's defenses against viruses. (Cancaster, 2021)

Deep Breathing

- Wim Hoff: <https://youtu.be/tybOi4hjZFQ>
 - Wim Hof Method: a combination of breathing, cold therapy and commitment that offers a range of benefits.
(See <https://www.wimhofmethod.com>)
- Pursed Lip Breathing:
 - In through your nose (short inhales) and out through your mouth (long exhales- 4-5 seconds)
- Diaphragmatic Breathing: by an OT
 - <https://www.wimhofmethod.com/>

Relaxation and Self-Soothing

- Massage
- Getting outdoors
- Join social or support groups
- Place your hand over your heart and repeat an affirmation
- Practice gratitude
 - Make daily list of 3 things in a.m. or p.m.

Relaxation and Self-Soothing

- Use self-soothing tools such as a weighted blanket
- Pet therapy
- Music and dancing
- Taking a hot bath or shower
- Aromatherapy and the use of essential oils
- Drink a hot glass of herbal tea

Questions?



References

- Aron, E. N. (1996). *The Highly Sensitive Person: How to Thrive When the World Overwhelms You*. New York: Broadway Book.
- Beck, J. S. (1964). *Cognitive Therapy: Basics and Beyond*. New York: Guildford Press
- Burns, D. (1981). *Feeling Good: The New Mood Therapy*. New York, N.Y: Penguin Books
- Cancaster, B. (2021). *Why Your Body Needs Oxygen*. Retrieved from <https://www.vitalitymedical.com/guides/respiratory-therapy/to-air-is-human-why-your-body-needs-oxygen>
- Castillo, Brooke (2008). *Self Coaching 101: Use Your Mind- Don't Let It Use You*. Futures Unlimited Coaching. ISBN 0977853993
- Dweck, C. (2007). *Mindset: The New Psychology of Success*. Ballantine Books. ISBN 0345472322
- Gallagher, M., **McLeod, H.J.**, & McMillan, T.M. (2016). A Systematic Review of Recommended Modifications of CBT for People with Cognitive Impairments Following Brain Injury. *Neuropsychological Rehabilitation*, DOI:10.1080/09602011.2016.1258367
- Margolies, L. (2016). *Are Your Decisions from your Evolved or Primitive Brain?* Retrieved from <https://psychcentral.com/lib/how-to-tell-if-your-decisions-are-from-your-evolved-or-primitive-brain-2#1>

References

- Lew, H.L., Oh-Park, M., Cifu, D.X. The war on COVID-19 pandemic: Role of rehabilitation professionals and hospitals. Amer J Phys Med and Rehab Articles Ahead of Print. DOI:10.1097/PHM0000000000001460
- Khan, F., Amatya, B. Medical rehabilitation in pandemics: towards a new perspective. J Rehabil Med (2020); 20:jrm00043
- Salawu, A., Green, A., Crooks, M.G., Brixey, N., Ross, D.H., Sivan, M.J. A proposal for multi-disciplinary tele-rehabilitation in the assessment and rehabilitation of covid-19 survivors. Int J of Env Res and Pub Health (2020) 17, 4890.
- Biehl, M., Sese, D. Post-intensive care syndrome and COVID-19-implications post pandemic. Cleveland Clinic Journal of Medicine (2020) August, DOI: <https://doi.org/10.3949/ccjm.87a.ccc055>
- Halpin, S.J., Mclvor, C., Whyatt, G., Adams, A., Harvey, O., McLean, L., Walshaw, C., Kemp, S., Corrado, J., Singh, R., Collins, T., O'Connor, R.J., Sivan, M. Postdischarge symptoms and rehabilitation needs in survivors of COVID-19 infection: A cross sectional evaluation. J Med Virol. 2021;93:1013-1022.
- Bowles, K., McDonald, M., et.al. Surviving COVID-19 after hospital discharge: symptom, functional, and adverse outcomes of home health recipients. Ann Int Med (2020) 24 November. <https://doi.org/10.7326/M20-5206>