The Use of Cognitive Behavioral Intervention in Audiology

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What Is Counseling?
What Is Counseling?

• Conveying information
What Is Counseling?

• Conveying information
• Achieving personal adjustment
What Is Counseling?

• Conveying information
• Achieving personal adjustment

Both are within the purview of audiologists (AAA, ASHA)
What we think counseling is.....

– Explaining
– Persuading

• What counselors say counseling is......

– A facilitative process
– 2 way learning

– Kris English, 2005
Why is counseling important to our patient population?

- Anxiety
- Anger
- Avoidance
- Stress
- Hopelessness
- Isolation
- Guilt
- Fear
- Withdrawal
- Resentment
- Depression
- Grief
Therapeutic Listening

• It is possible to transform everyday relationships by replacing submissive listening with the art of therapeutic listening.

• In therapeutic listening, one listens not in order to obey, but to understand.

• Therapeutic listening is empowering because it is clarifying.

— The Third Ear ; Theodor Reik
Instructional and Adjustment Based Counseling

**Instructional counseling:**
- Audiologist asks questions
- Audiologist is in control
- Audiologist’s role is to diagnose, reach conclusions, report, and make recommendations
- Audiologist is responsible for all decisions

**Adjustment based Counseling:**
- Empathetic listening
- Unconditional positive regard
- Listening with concern
Instructional counseling

• Helps educate the patient about aspects of the disorder itself.

• For example, for tinnitus, instructional counseling addresses

  – the basic anatomy and physiology of the auditory (and central nervous) system,
  – *why* the tinnitus is present (particularly when it is a normal consequence of having a hearing loss),
  – *what* the logical course of the tinnitus might be,
  – *how* the limbic system affects the tinnitus perception and *how* the patient’s reaction impacts the ability to cope with or habituate to the tinnitus.
Adjustment based counseling

• Helps the patient recognize aspects about how the disorder is affecting him or her, and the cognitive and behavioral implications.

• For example, for tinnitus, adjustment based counseling is designed to..........
  – address the emotional sequelae of tinnitus, including fear, anxiety and depression;
  – identify and correct maladaptive thoughts and behaviors;
  – understand the relationship between tinnitus, stress, fear, behaviors, thoughts, and quality of life.
Cognitive-Behavior Therapy
(A. Beck; D. Meichenbaum)

• The therapeutic effort to modify maladaptive thoughts and behaviors by applying systematic, measurable implementation of strategies designed to alter unproductive actions
• CBT gives patients hypotheses that can be self-tested
• focuses on using a wide range of strategies to help clients overcome maladaptive thoughts and behaviors
  – cognitive restructuring, dissociation of negative emotional association, attention control, modification of avoidance behavior, journaling, role-playing, thought stopping, relaxation techniques, and mental distractions, coping strategies
The CBI model:
Event-Thought-Emotion

Common misunderstanding:
An event causes an emotion

Cognitive theory
Cognitive Theory

Common Misunderstanding

C: Emotion
A: Event
B: Thought
Events? Thoughts? Emotions?

Sad Emotion

Parties are fun Thought

The noise level is high Thought

Reading a book Event

Grateful Emotion

I can’t concentrate Thought

A party invitation Event

Annoyance Emotion

At a café with friends Event

Sad Emotion

Parties are fun Thought

The noise level is high Thought

Reading a book Event

Grateful Emotion

I can’t concentrate Thought

A party invitation Event

Annoyance Emotion

At a café with friends Event
Example of cognitive theory

Someone grabs your arm from behind

EVENT
Example of cognitive theory

Someone grabs your arm from behind

“it’s a thief!”

EVENT

THOUGHT
Example of cognitive theory

Someone grabs your arm from behind

EVENT

"it’s a thief!"

THOUGHT

FEAR!

EMOTION
A person grabs your arm from behind

EVENT

But what if ....
But what if ....

A person grabs your arm from behind

“it’s a friend”

EVENT

THOUGHT
A person grabs your arm from behind

“it’s a friend”

Happiness

EVENT

THOUGHT

EMOTION
Most reactions are learned processes

• Subject to behavioral and cognitive modifications
Audiologists are not trained to do CBT

But can we use portions of it??????
Cognitive behavioral intervention....

• is designed to identify the unwanted thoughts and behaviors hindering natural habituation, challenge their validity, and replace them with alternative and logical thoughts and behaviors.

• the objective is to remove inappropriate beliefs, anxieties and fears and to help the patient recognize that it is not the tinnitus itself that is producing these beliefs, it is the patient's reaction (and all reactions are subject to modification).
Most important part of this type of counseling

Be an inquisitive listener!!!
Most important part of this type of counseling

Be an inquisitive listener!!!

Be a collaborative partner
Most important part of this type of counseling

Be an inquisitive listener!!!

Be a collaborative partner

Remember, there are always options.

(Kirk, W.T.)
Provide the patient with an opportunity to really talk

• Feelings are not just some noisy byproduct of engaging in difficult talk, they are an integral part of the conflict (Stone et al, 1999)
• Accepting without judging – Luterman, 1996
• Self-assessment (subjective scaleing) is a “springboard” (Geier, 1997)
Active listening

• Indicating the patient was heard (and understood)
  – Minimal encouragers
  – Paraphrasing
  – Acknowledging feelings
  – Empathy (the opposite of egocentricity)
More suggestions

• Beware of “knee-jerk” response
• Use of clinical silence
  – Stop speaking when patient nods head affirmatively but says nothing
• Don’t rush
• Avoid “pep-talks” (Clark, 1994)
  – Denies patient concerns
  – Implies anxieties don’t exist
What can it be used for???

• breaking through some of the barriers impacting hearing and balance disorders including, but not limited to:
  – resistance to trying amplification
  – parental counseling
  – tinnitus and hyperacusis management (even auditory hallucinations [Mortan O. and Sutcu S. Current Approaches in Psychiatry. 2011; 3(4): 647-663]
  – aural rehabilitation
  – vestibular rehabilitation
  – vestibular migraines
Why balance disorders?

- Although vestibular rehabilitation developed independently of behavioral treatment for anxiety disorders, there are remarkable similarities in treatment conceptualization and implementation. For example, both use exposure procedures designed to produce habituation of dizziness and disorientation, as well as enhancing functional compensation. Furthermore, there appears to be a subset of individuals with panic disorder who also have vestibular pathology and thus, may benefit from both interventions.
Evidence: CBI with balance disorders

- A randomized controlled design was used with patients recruited via an advertisement. Nine patients completed treatment and 10 served as waiting-list controls. The intervention lasted 7 weeks with 5 weekly group sessions and consisted of vestibular exercises. Cognitive behavioral therapy components were added to promote relaxation, reduce anxiety, and avoidance of feared situations and movements.

- **RESULTS**: Statistically significant improvements on walking time, 2 dizziness provocative movements, and on the Dizziness Handicap Inventory, but no effects on the Romberg or anxiety and depression. Of the treated patients, 89% reached statistical significant improvement on the total inventory score.

  - Johannson M., et al. Randomized Controlled Trial of Vestibular Rehabilitation Combined with Cognitive-Behavioral Therapy for Dizziness in Older People; *Otolaryngol Head Neck Surg September 2001* vol. 125 no. 3 151-156
Why tinnitus?

- N = 12,166; N with tinnitus) = 2,024 (16%)

- Exposure to noise and stress were important for the probability and level of discomfort from tinnitus. However, for the transition from mild to severe tinnitus, stress turned out to be more important.

- Reduction of likelihood of tinnitus if noise is removed = 27%, if stress is removed = 19%, if both removed = 42%.

- Conclusions: Stress management strategies should be included in hearing conservation programs, especially for individuals with mild tinnitus who report a high stress load.

  – Baigi, et al; Ear and Hearing 2011. 32, 6:787-789
Evidence: CBI with tinnitus

- N= 492 in Netherlands
- Primary outcomes were health-related quality of life (assessed by the health utilities index core), tinnitus severity (tinnitus questionnaire score), and tinnitus impairment (tinnitus handicap inventory) at 3 months, 8 months, and 12 months
- Usual care group: Full audio work up and basic instructional counseling, Sound-generators when specifically asked for by the patient, adjusted to produce a small band noise around the pitch match frequency and slightly below the tinnitus masking level. Follow-up.
- Health-related quality of life increased with specialized care compared with usual care at 8 months and 12 months.
- Tinnitus severity and impairment related to tinnitus were reduced by specialized care compared with usual care at all three follow-ups
- Specialized care reduced negative affect at 8 months and 12 months, and tinnitus catastrophising and fear related to tinnitus at all three follow-ups.
- The difference between specialized care and usual care that occurred by 8 months seemed to persist to 12 months, and was larger than that noted at 3 months.
- Patients with mild or severe tinnitus seemed to benefit equally

Specialised treatment based on cognitive behaviour therapy versus usual care for tinnitus: a randomised controlled trial
Why amplification resistance?

- The average adult hearing impaired listener waits approximately 7 years before first trying amplification.
  - Stigma
  - Cost
  - Other considerations
Why parental counseling?

• Guilt
• Anxiety (fear of the future)
• Family conflict
Why aural rehabilitation?

• Denial of the problem
• Cost (money, time, risk of failure) of the treatment
• Difficulty of the regimen
• Unpleasant outcomes or side-effects of the treatment
• Apathy
4 Ds

• Distraction
  - Identify stimuli that create a sense of "relief" while maintaining immediate access and control of the stimulus

• Diversion
  - This as an "activity" component where we are shifting the focus away from the negative event. I usually recommend a non-auditory activity (i.e. A simple example; focusing attention strictly to the task and sensation of breathing).

• Deflection-
  - This is the “thought” component. Deflect and neutralize negative thoughts as they occur. Identify the maladaptive thought. i.e. with tinnitus: "Although it is loud, I can hear the radio. I am still walking/driving. My tinnitus is just a symptom and I can still function."

• Delight-
  - This is the “happy” thought. Make a list of 2 or 3 things that create delight in the patient’s life. Try one auditory example as well as a non-auditory one

(courtesy of Shawna Jackson, Texas)
Challenging your thoughts

- What is the evidence that my thinking is true?
- What facts am I forgetting or ignoring?
- What are some alternative ways of thinking about this situation?
- What is the worst thing that could happen?
- How likely is it that the worst thing will happen?
- What is probably or most likely to happen?

The “Columbo Technique”
Challenging Example

Video not available in MP4 version
Challenging Example

Video not available in MP4 version
The basic process of CBI

1. Address the emotions of tinnitus
2. Explain the relationship between tinnitus, thoughts and emotions
3. Identify maladaptive thoughts and behaviors
4. Provide strategies for alternative thoughts and behaviors

Disclaimer: The suggested CBI activities are not intended to replace the services of a mental health professional.

Flipchart & CBI Worksheets
<table>
<thead>
<tr>
<th>Event</th>
<th>Belief</th>
<th>Feelings</th>
<th>Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>“My husband said I look nice today because I had makeup on.”</td>
<td>“He thinks I look ugly without makeup. My husband only loves me when I look nice.”</td>
<td>Hurt, sad</td>
<td>I replied by saying “Yeah, right!” sarcastically, then slammed the door</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reality check</th>
<th>Desired Beliefs</th>
<th>Desired Feelings</th>
<th>Desired Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>“My husband smiled at me and said, ‘You look nice today honey.’ He never mentioned noticing that I was wearing makeup.”</td>
<td>“I am beautiful, inside and out. My husband thinks I’m beautiful. He loves me unconditionally.”</td>
<td>Happy, flattered, affirmed, loved</td>
<td>Accept the compliment and say “Thank you” instead of reacting out of insecurity.</td>
</tr>
</tbody>
</table>
Characteristics of Automatic Thoughts

• May have little awareness
• May be highly believable
• May seem out of direct control
  – need to push the “pause button” or “stop sign”
Examples of Thought Errors (cognitive distortion)

- Overgeneralization
- Mind reading
- Jumping to conclusions
- All or nothing thinking
- Should statements
- Emotional reasoning
- Disqualifying the positive
- Mental filter
- Catastrophizing
- Emotional reasoning
All or nothing thinking

• If a situation falls short of perfection, you see it as a total failure.
• When a young woman on a diet ate a spoonful of ice cream, she told herself, “I have just completely blown my diet”.
• Pattern of seeing only one “truth” as valid; no room for two sides of the story; no moderation or grey area; context is made irrelevant.
• “I don’t think about my tinnitus as much anymore, but I can still hear it, so this therapy obviously isn’t working”.”
Overgeneralization

• Drawing broad and general conclusions from a limited amount of information.

• You see a simple negative event as a never ending pattern of defeat by using words such as “always” or “never” when you think about it.

• “Because of my tinnitus I was awake all night. Every night is the same.”
Discounting the positive

• You reject positive experiences by insisting they don’t count.

• If you do a good job, you may tell yourself it wasn’t good enough or “anyone could do it”.

• “I was having a good time at the party, but my tinnitus ruined everything”.
Jumping to conclusions

• A pattern of making premature conclusions based on incomplete or ambiguous information; assuming negative expectations about future events as established facts

• The boss didn’t return your call. “My boss hates me, he doesn’t respect me at all.”

• “I will have a lousy day when my tinnitus is the first thing I hear in the morning”

• “My tinnitus is louder, I must be going deaf”
Mind Reading and Labeling

• Mind Reading: assuming other’s thoughts without evidence
• Labeling: attaching a global label to oneself rather than to specific events or actions
• “People think I’m dumb when I ask them to repeat”
Should statements, Personalization and Blame

• Should statements:
  • You tell yourself that things should be the way you expected them to be.
    – Should statements directed against yourself lead to guilt and frustration.
    – Should statements directed against other people lead to anger and frustration.

• Personalization: Causes of negative events are attributed to ourselves rather than to context or situations; using should and have to statements to provide motivation or control
  • “I should have never smoked that joint while I was trying to get pregnant”
  • “I should never have listened to rock music”
You hear a sound in your house at night

You think: is there anyone sneaking around in my house?

You think: In this old house you hear so many sounds when the wind blows

anxious

indifferent

EVENT

THOUGHT

EMOTION
<table>
<thead>
<tr>
<th><strong>Negative thoughts</strong></th>
<th><strong>Constructive thoughts</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>No body understands what the noise is like-no one at all.</td>
<td>There are lots of unpleasant things I don't experience, but I can still be sympathetic and provide comfort, so others can do that for me even if they don't have tinnitus.</td>
</tr>
<tr>
<td>My tinnitus stops me from enjoying everything.</td>
<td>My tinnitus is a nuisance, but lots of other things give me enjoyment.</td>
</tr>
<tr>
<td>Tinnitus will drive me crazy!</td>
<td>This noise is a nuisance and bother, but it will not drive me crazy!</td>
</tr>
<tr>
<td>Why can’t anyone help me?</td>
<td>Lots of people can help me if I let them- but I must learn to help myself.</td>
</tr>
<tr>
<td>Maladaptive Behavior</td>
<td>Alternative Strategy</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>When I hear my tinnitus in the morning I stay in bed all day, avoiding sound and</td>
<td>Being active makes me think less about my tinnitus. I should go to a mall, put on</td>
</tr>
<tr>
<td>feeling depressed</td>
<td>other sounds in my house so that the tinnitus isn’t so apparent, and do anything</td>
</tr>
<tr>
<td></td>
<td>except nothing!</td>
</tr>
</tbody>
</table>
Introducing the patient to CBI

• Explaining the rationale for CBI to the patient
  – Focus of attention and thoughts are subject to voluntary control, providing you are aware of current thoughts and focus
  – People can learn to control thoughts and focus of attention

• Cognitive theory

• How many visits

• How long should each session be

• What can be done at home versus face to face
  – Worksheets on maladaptive thoughts, alternative behaviors, relaxation exercises
Henry and Wilson, 2001; page 249) encourage audiologists to adopt CBT by “applying the approach in some circumstances or to consider referring patients who seem to be suitable for this approach” and have written a book for audiologists promoting this effort.

Recognizing clinical boundaries
(Stone and Olswang, 1989)

Within boundaries
- Rehabilitative counseling
- Dealing with feelings and attitudes related to communication
- Mutual respect
- Active patient participation and empowerment

Outside of boundaries
- Psychotherapy
- Changing basic ways of relating
- Overly dependent patient
- Unstable patient
- Emotional personal relationship
Thanks for listening!

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