Music Therapy techniques for promoting function, participation, and expression in HD

Michael Jenkins – Music Therapist, The Royal Hospital for Neuro-disability
Outline of presentation

- Why music?
- What is music therapy?
- MT for **Social / Emotional well-being**
- MT for **Language, communication, and swallowing**
- MT for **Functional movement**
- MT for **Cognitive stimulation**
- Integration of domains
- Transferring skills in daily life
- Assessment and observation tools
- Accessing music therapy in Northern Ireland
How do we define music?

‘A creative medium, in which feelings can be expressed, contained and explored without the need of words.’

“Sound that is organized into structure that is intended to represent an emotional state or communicate a message.”
Why music?

When do you listen to music?

How do you use music in your life?
Music, humans, and development

Humans develop functionally through musical interactions from the very beginning of life
Music, humans, and development

Our emotional responses to music are contained deep within subcortical structures – the amygdala, thalamus, and hippocampus.
Why is music vital for people with neurological conditions?

“Music imprints itself deeper in the brain than any other human experience…”

“…Music brings back the feeling of life when nothing else can.”

Dr. Oliver Sacks
Why is music vital for people with neurological conditions?

Music is a “whole brain” activity which makes it an excellent tool for exercising function and promoting expression in people who have a focal brain injury or a neuro-degenerative condition.
Listening to music is one of the few activities that uses the entirety of the human brain...
What is music therapy?

- Music therapy
- Music therapists vs. musicians in health-care
What is music therapy?

“Music therapy is the planned and intentional use of music and its elements to help a patient/client achieve individual clinical goals based on their assessed needs.”

Goals may be in the areas of (1) physical function, (2) communication, (3) social interaction, (4) cognition, and (5) emotional expression.
What is music therapy?

- Music therapy can only be provided by a HCPC registered professional who has completed an accredited masters-level training programme in Music Therapy.
- There are 8 music therapy MA training courses throughout England, Wales, Scotland, and Republic of Ireland. Currently, no training course in NI.
- The British Association of Music Therapy
  [www.bamt.org](http://www.bamt.org)
Music therapy vs. musicians in health care

- Music therapists contribute to assessment and treatment planning and work towards specific goals that are agreed on by the multi-disciplinary team.

- Music therapists work within a clinical pathway of referral > assessment > treatment > evaluation > documentation

- Musicians in health-care are able to provide generalised benefits of music for leisure but cannot provide a clinical service.
Music Therapy input at RHN HD Service

- Patient’s of the HD service at the RHN are referred to music therapy to address specific goals in either individual or small group sessions.
- All patients of the HD service are seen weekly in a large group.
Music and social / emotional health in HD

“Music can evoke emotion and emotion can bring it’s memory.” – Dr. Oliver Sacks
Music and social / emotional health in HD

- Song-writing (Structured or free composition)
- Instrument playing (free improvisation)
- Choice-making – control, autonomy, personality expression
- Life review / reminiscence through song
- Shared listening / lyric discussion
- Attending to others / acknowledging others in a group
Demonstration of structured song writing

When I find myself in times of ______
______ comes to me
Speaking words of ______
Let it be

Let it be, let it be
Let it be, let it be
Speaking words of ______
Let it be
Example of free composition

I love my son
He’s a good builder
I love my wife
I love driving

He’s a good surfer
And a good swimmer
My wife won four goal medals
for swimming

I Love my wife
I love her cooking
I love my son
I love my grandchildren
Music therapy and expressive language

- Song-phrase completion / spoken-phrase (speech stimulation)
- Intonation exercises
- Articulation / fluency exercises
- Respiratory exercises / breath regulation
  - Recorder, phrasal lengths, breath to voice exercises
- Verbal choice-making
Example

- Demonstration (song-phrase completion)
- Video example
Communication strategies in Music Therapy

- Making a choice of song using visual aids
- Communicating feeling or emotion using visual chart
- Encouraging gestural communication when verbalising is difficult or not possible.
Examples

Billy Joel

Cilla Black
Examples

Piano

Guitar
Examples
Music therapy and swallowing

- Singing ascending pitches facilitates elevation of the larynx, which is a function necessary for swallowing. (Kim, S. J., 2010).
- Controlled and intentional use of this technique in music therapy may help a patient to maintain their swallow function.
Example

- Demonstration (laryngeal elevation through singing exercises)
- Video
Music and functional movement in HD

- Music provides a temporal framework which assists with organising motor patterns in HD, PD
- Instruments which stimulate gross motor function
- Instruments which stimulate fine motor function
- Techniques to improve or maintain gait (RAS), upper limb functional movements (PSE), and range of motion (TIMP)
- Transferrable skills (participation in care and daily activities).
Example

- Demonstration of TIMP
Music and cognition in HD

- Melodic identification
- Song phrase initiation
- Increasing attention (focused, divided, sustained, alternating)
- Increasing cognitive flexibility through choice
- Orientation through song (person, place, date, weather, etc.)
Example

- Video Example (orientation song)
The integration of domains in music activity

- Communication
- Cognition
- Emotion
- Physical activity
- Social interaction
Transferrable skills

- Upper limb functional movements and range of motion – participating in care, washing dressing, self-feeding, etc.
- Choice making – choice of what to wear, what to eat, etc.
- Cognitive communication and social skills – participating in conversation, engaging with multiple communication partners, etc.
Assessment and Observation

- The Music Therapy Assessment Tool for Advanced Huntington’s Disease (MATA-HD)
- Comparison with other tools (UHDRS, NPQ and BOSH)
- Reliable measure of emotion/mood, communication, cognition, social behaviour, aggression and agitation during music therapy
Music Therapy Assessment Tool for Advanced Huntington’s Disease (MATA HD) Pilot #3

MATA HD v3 #

Name: ___________________ MPI number: ___________________

Want: ___________________ Venue: ___________________ Time: _________________

Session duration (mins): ___________________
Session number: ___________________
Date (dd/mm/yyyy): ___________________
Changed mode? Y/N (Details in comments) ___________________

Arousal Attention

1. Vocal
   1. No musical vocalisation
   2. Vocalises occasionally to music
   3. Vocalises single words to music
   4. Vocalises whose phrases to music

2. Instrumental
   1. No instrumental play
   2. Plays with physical facilitation
   3. Plays with verbal assistance
   4. Independently plays contingent with music

Cognition

10. Choice
   1. Unable to make choices
   2. Makes choices with verbal/hand-held help
   3. Makes choices clearly

Psychological / Behavioural

11. Mood variation
   1. No mood disturbance
   2. Variation in mood but unrelated to music
   3. Variation in mood in relation to music

Physical Presentation

1. Involuntary movement
   1. Chorea movement increased during music
   2. Chorea movement unaffected during music
   3. Chorea movement decreased during music

2. Voluntary movement
   1. NA: still throughout
   2. None
   3. Always requires physical/verbal help
   4. Sometimes requires physical/verbal help
   5. Moves independently

Communication

1. Eye contact
   1. No eye contact / eye shut
   2. Memorises objects to therapist / object
   3. Eye contact in interaction with therapist and others
   4. Sustained eye contact with therapist and others

2. Communication level
   1. Unable to communicate
   2. Communicates non-verbally
   3. Communicates with whole words
   4. Communicates with sentences
   5. Communication effectiveness
      1. Unable to effectively use non-verbal communication
      2. Uses gestures but unclear communication
      3. Communicates clearly with gestures
      4. Communicates effectively with gestures and words

Comments: ___________________

Royal Hospital for Neuro-disability
A national medical charity
MATA-HD

- Assess and monitor the responses of patients within different domains including arousal, attention, physical, communication, psychological, social, musical, and cognitive areas.

- Information to feedback to the MDT
Accessing Music Therapy in Northern Ireland

- HCPC
  - Check your music therapist is registered with the HCPC. If they are not registered with the HCPC then their practise is unregulated and unlawful.

- BAMT [www.bamt.org](http://www.bamt.org)

- Music Therapy Connections NI (MTCNI) [www.mtcni.co.uk](http://www.mtcni.co.uk) – accepts private referrals

- North West Music Therapy - accepts private referrals
Literature and References


