Music Therapy May Benefit Autistic Children but need larger RCTs

ERF VAN DER Saskia1, LOW Yen Sia1, TAN Patsy Lee Peng2, LIM Jeremy Fung Yen1
1. SingHealth Centre for Health Services Research
2. Division of Allied Health, Singapore General Hospital

Fast Facts: Autistic Spectrum Disorder (ASD)
- Children with ASD, a recognized developmental disorder, have difficulties in all aspects of communication.
- They are unable to understand other people’s feelings and hence, cannot respond appropriately.
- Worldwide prevalence: 5-63 children per 10,000

Background
Music therapy involves the use of musical experiences (songs, listening to music, free and structured improvisation) as a non-verbal or pre-verbal language to promote health.

During music therapy, a therapist musically responds to the child’s sounds and movements, singing a running commentary to the child’s actions, using play routines or stories set to music, or songs involving imitation. Although therapy methods can vary, sessions range from a few minutes daily to longer weekly sessions, and may run for weeks or years.

Music therapy encourages and supports developments in communication. It is believed that the positive response to music can help one improve social, language and motor functioning goals. The sound dialogues between mothers and children are akin to music. Children are very sensitive to the rhythmic and melodic dimensions of maternal speech.

Aims
To assess the effectiveness of music therapy for children with ASD

Population: Children with ASD
Intervention: Music therapy
Comparators: “Placebo” activity – Therapeutic attention without the use of music
Outcome: Communication, behaviour

Methods
Search terms: music, autism, autistic
Databases: Ovid, Medline, Google Scholar
Search hits: 1 HTA, 1 meta-analysis, 1 systematic review, 1 review and 4 primary studies (2 RCTs, 1 comparative study, 1 case series)

Research & Evidence
• The single meta-analysis of pooling 9 small studies (n=75) concluded that music therapy is effective. Overall effect size was 0.77 (95% CI: 0.46-1.08)
• The systematic review acknowledged that music therapy may help to improve communication although the effects have yet to be proven enduring. On the contrary, the HTA concluded that music therapy has not been shown to better than other behavioral therapies. The discordance is despite 2 of 3 studies included were common between the systematic review and the HTA.
• Primary studies generally suggest that music therapy improves communication and behavior.

Conclusion
Music therapy potentially has benefits for communication and to a lesser extent, behaviour of children with ASD, although results were inconclusive. Larger RCTs are needed to demonstrate positive effects of music therapy.