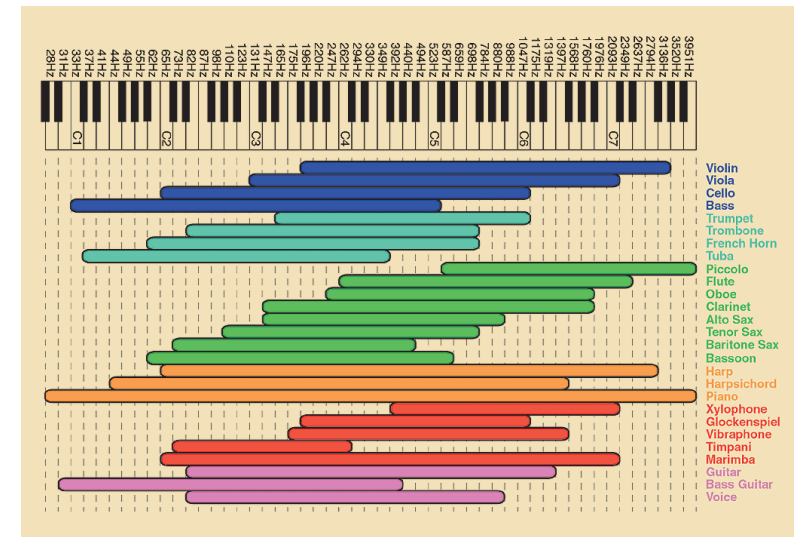


Providing Support for Music Listening in Adult Rehabilitation Clinics

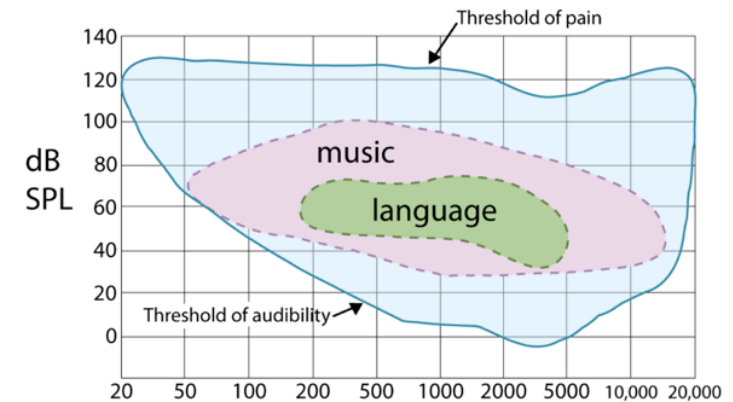
History and initial Counselling

- Ensure you have a history of what, when and where hearing aid user listens and or plays/sings.
- Do they currently use any equipment and do they use different programs and Volume control?
- Try to find out what problems are in what settings and what type of music. We have found differences between listening success for live and recorded music as have other studies. There may need to be different solutions for different listening settings.
- How does their hearing loss fit with frequency range of their instrument/voice for singing or preferred instruments for listening. (See charts below).
- Does the hearing aid wearer understand their degree of loss and frequencies affected?
- Do they understand all controls and programs on their aid?
- Have a music chart: see example below. This can help show what is missing without aids, what sounds might be competing in trying to hear music with multiple instruments and for audiologists not familiar with different instruments frequency ranges can be a good basic guide.
- This basic idea is used by mixing artists so that different tracks being edited are not competing. There are online versions for many different types of music. We will be adding copyright free resources to our website and including this in our leaflet for practitioners in development.

Example Instrument to frequency chart for counselling:



A basic music /speech chart to explain hearing levels in relation to music and the extended range of musical sounds (below) a version of this this will be in our patient leaflet.



Basics to Cover with Hearing Aids

- Aids Fitted to REM prescription target as accurately as possible
- No feedback when playing /listening.
- Ensure patient has Volume control and knows how to use it (and if it is synched with 2nd aid).
- MPO increased where possible/relevant
- Advice: turn down source – turn aid up
- Advice: can try scotch tape on mic (beware pulling out mic covers!)
- Occlusion check: easy to do a live one in clinic, this is useful to demonstrate to patients as well. With the aid(s) in their ear(s) get your patient to say ‘a’ as in father and ‘i’ as in beet if the ‘i’ is louder there is a significant occlusion effect. Don’t do this with REM tube in situ as this can create a slit leak which reduces actual occlusion. Also don’t do monaurally if patient wears binaural aids check binaurally, occlusion is more noticeable with binaural fittings. Can also obviously measure occlusion with REM to see what extent of problem is and what effect changes make.
- Try monaural aid use where occlusion can’t be resolved by earmould adaptation or more open fitting. Don’t forget shortening vents and deep canal fittings – these are sometimes simply forgotten and are very effective.
- Ensure HA user is aware of ALDs they could use/loop for venues/streaming and loop/mic mixing is ok.
- Where mild-moderate loss: have they tried removing aids? There is no set answer as to when this is appropriate as intensity level of music and hearing loss can vary significantly. As music is often much louder than speech for mild –moderate losses some hearing aid users prefer to listen without aids.

Counselling after fitting

- Don’t forget hearing protection: be prepared to answer or provide information on hearing protection. Noise exposure calculations can be complex but some rules of thumb can help. Typically sound levels over 85dB with repeated exposure can cause permanent hearing loss although it depends on the sound and degree of exposure. At this level often 40 hours a week is cited and many people will simply not be listening for that long. However, for every increase of 3dB the exposure time is halved so 5 hours a week at 94dB can lead to a permanent hearing loss. Listening in the car we often have the level higher to combat road noise and some types of music are performed at a high intensity level so caution is needed. Use HSE’s ‘Soundadvice

website’ for information and ensure listeners are aware of TTS and tinnitus after noise exposure.

- Anyone with regular exposure as a performer or sound engineer should have appropriate ear plugs e.g. ER-15 or ER-25. These require a custom mould. Remember you can refer to help musicians ‘hearing health scheme’ for professional musicians.
- Our research found that persistence really pays off –encourage listeners to keep trying.

What else can you do?

- If music listening is an occupational problem can you refer to access to work? This can help provide equipment that may be useful e.g. for teachers.
- Will your hearing aid users use online rehab tools if you give them a weblink? Can you show them in clinic or have a relative/volunteer who could? Other research projects have shown people were more interested and likely to take up these options when demonstrated to them and this can be done in a supportive group setting.
- What if I don’t know much about music? The following online courses can be a good start and have references that could be useful.

Free course: Open University introduction to music theory (8 hours)

Free course: Sound for Music technology (20 hours) This is highly rated and will no doubt go over ground already known to Audiologists but is a useful introduction and links ‘hearing terminology to musical terms e.g. getting thinking in terms of octaves and pitch can help talk to musicians.

<http://www.open.edu/openlearn/history-the-arts/culture/music/introduction-music-theory/content-section-0>

- Keep up to date via the HAFM website