Audiology: short courses (CPD Masters level module)

School of Psychological Sciences
Faculty of Medical & Human Sciences

Effective Amplification in Infants and Children

Module Information

*Please note that this is a sample guide to module content. The exact content may be subject to change without prior notice.
1. AIMS

The unit aims to:

extend knowledge and advance understanding of the management of amplification for infants and deaf children; and develop a systematic and holistic approach to amplification to ensure that the fitting of a hearing aid reflects the individual needs and circumstances of a child at any given time.

2. BRIEF DESCRIPTION OF THE UNIT

Description:
The unit provides knowledge and understanding the management of amplification for infants and deaf children

Content:
- Habilitation
- Neural plasticity
- Concept of effective amplification
- Fitting aids to infants
- Advanced technological features of digital hearing aids
- Non linear fitting strategy
- Verification measures
- Evaluation methods in the clinic and real world
- Acoustics of speech
- Effective communication
- FM systems
- Multi disciplinary and multi agency approaches to effective amplification
- Case studies: the challenges presented by some audiograms/circumstances
- Management of hearing aid reviews
- Evidence based practice

3. INTENDED LEARNING OUTCOMES

<table>
<thead>
<tr>
<th>Category of outcome</th>
<th>Students will have or be able to:</th>
</tr>
</thead>
</table>
| Knowledge and understanding | - Demonstrate critical awareness of the effect that a hearing loss has on the overall cognitive development of a child and the impact of subsequent intervention through amplification, with reference to neural plasticity and age of intervention.  
- Demonstrate a systematic knowledge of fitting a hearing aid with a nonlinear fitting strategy; verification of the fitting using real ear measurements and the various evaluation procedures used in clinic and real world situations in order to provide a child with effective amplification.  
- Demonstrate a critical knowledge of the most recent advanced technological features of digital hearing aids and a critical understanding of how and when these features may be beneficial for an individual child. |
- Demonstrate an awareness of the difficulties faced by deaf children in the classroom and the advantages that FM systems offer to such children.
- Demonstrate a critical understanding of the effect that a family centred approach to the management of a deaf child has on the outcomes for that child.
- Demonstrate a critical understanding of the importance of information exchange in the management and outcomes for a deaf child.

**Intellectual skills**

- Critically evaluate current research literature and recent developments in Audiology from both scientific and professional viewpoints and apply the evidence to clinical practice.
- Critically evaluate clinical data to exercise initiative and professional judgement to respond to various issues of amplification that may arise in complex clinical situations as determined by the child, the audiogram or circumstances.
- Critically appraise the term ‘effective amplification’.
- Critically evaluate local procedures and practices in line with national guidelines.

**Practical skills**

- Demonstrate skills in fitting and verification procedures; evaluation questionnaires; speech tests; AI analysis and FM advantage.
- Conduct hearing aid reviews in order to provide an individual child with ongoing effective amplification by considering evidence from all aspects of the child’s situation.
- Apply advanced knowledge of technology and features available on NHS digital hearing aids in a manner appropriate to the requirements and ability of a child to benefit from such features.
- Reflect on personal clinical practice

**Transferable skills and personal qualities**

- Manage independent learning.
- Make informed decisions in complex situations.
- Use library and computer facilities to access relevant information.
- Participate effectively in complex teams.
- Collaborate and network with colleagues, on and off line, to discuss challenging clinical situations and technological developments.

### 4. LEARNING AND TEACHING PROCESSES (INCLUDING THE USE OF E-LEARNING)

Independent reading, discussion board, reflective practice, recorded lectures, online videos, clinical based and independent learning activities and problem based learning.