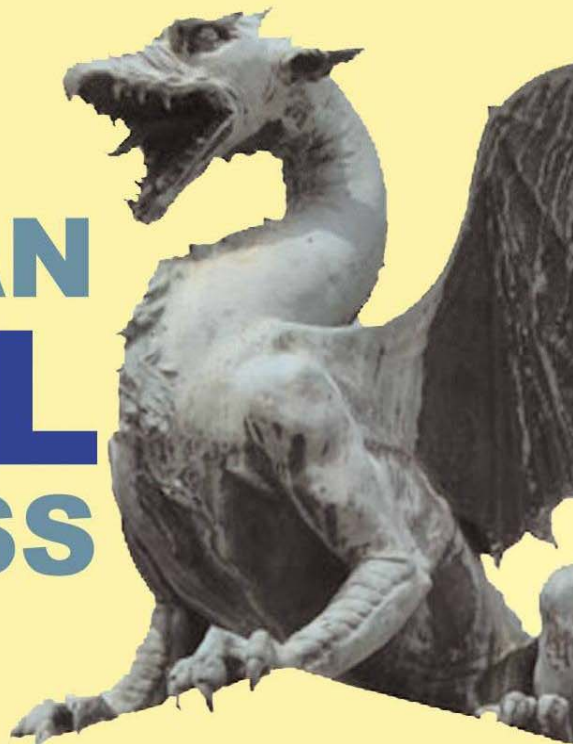




**EUROPEAN
CPLoL
CONGRESS**

14-16 May 2009

LJUBLJANA - SLOVENIA



A
B
S
T
R
A
C
T
S

Oral presentations

01.01 The Bilingual Patient's Profile as an approach to logopedic intervention

Wiebke Scharff Rethfeldt
Carl von Ossietzky Universität Oldenburg, Germany

Background

Although bilingualism in the world today is a frequent phenomenon, specific procedures for logopedic intervention are still lacking. The majority of published studies focus on children acquiring two languages simultaneously from birth on, and not concerning migration background.

Methods

Findings from own research referring to different aspects of gradual second language acquisition will be presented. 25 children with different linguistic backgrounds for whom German is a second language, gradually being acquired before six years of age in natural contexts, were tested during their first and second year of elementary school with a standardised test evaluating language related skills including language processing strategies in German. Supplementary data on their socio-cultural background including language use within their families were assessed by questionnaires.

Results

The results have both theoretical and clinical implications. Next to usual case history information, the Bilingual Patient's Profile will be introduced as a guiding tool, similar to a checklist, for gathering additional specific information in order to approach a tenable language assessment of bilingual language competencies and logopedic intervention.

Conclusion

As long as separate measures for bilingual children are lacking, certain existing monolingual measures may instead be useable when they incorporate the Bilingual Patient's Profile which takes into account the child's knowledge and structure of his or her languages next to his or her socio-cultural background.

01.02 Diagnosis of Speech Disorder in Maltese Monolingual and Bilingual Children

Helen Grech, Barbara Dodd
City University, London, United Kingdom

Background

Assessment tools that lead to identification of language specific monolingual and bilingual children with speech disorder are scarce. Consequently, differential diagnosis of speech disorder in children has been based on clinicians' intuition or erroneously on translations of standardised English assessments. The need for valid assessment of the speech of Maltese monolingual and bilingual children has led to the development of the Maltese-English Speech Assessment (MESA).

Methods

The speech profile of approximately 200 children receiving speech therapy in Malta was explored using the MESA. This tool is based on the Diagnostic Evaluation of Articulation and Phonology: DEAP (Dodd, Zhu, Crosbie, Holm & Ozanne, 2002) and consists of four subtests that assess articulation, phonology and consistency of production as well as oro-motor skills. The MESA was standardised on a normative representative population.

Results

Administration of the complete battery enabled differential diagnosis between disorders of articulation (organic and functional), delayed phonological development, consistent and inconsistent phonological disorder and childhood apraxia of speech.

Conclusion

The tool was validated by the large clinical sample and the Maltese findings compared well to the epidemiological data on the same sub-groups of speech disorder reported by Broomfield and Dodd (2004).

01.03 The nonverbal communication of preschool children in a bilingual environment

Marko Strle, Lara Gobbi
Center za Korekcijo Sluha in Govora Portorož, Portorož, Slovenia

Background

The research examines the differences between children who speak Italian with at least one parent and those who speak Slovene with both parents in their nonverbal communication, interpersonal distance, interpersonal relations, and play.

Methods

In the research were included forty preschool children that attended the Slovenian pre-school with the Italian teaching language. Sixteen children are Italian speakers, twenty one are Slovenian speakers and three of them speak another language at home. The children were divided by age into two groups (from three to four years and from four to six years). The empirical data was collected by using observation checklists, adapted by Ekman and Friesen classification (1981).

Results

The results show that there are no statistically relevant correlations between using gestures and age or nationality. There's an important statistical correlation between children's interpersonal contacts and age, but not between contacts and nationality. There's an important statistical correlation between interpersonal relations toward objects and age and nationality, and an important statistical correlation between interpersonal relations toward mates and age. On the other hand there are no statistically relevant correlations between interpersonal relations toward mates and nationality. Also there are no statistically relevant correlations between (types of) play and age or nationality, neither between the number of children in a play group and age or nationality.

01.04 Stimulation of speech and language development at a pre-school age

Jadwiga lorenc
Polish Union of Logopedists - Provincial Unit in Kielce, Poland

Background

Over 25% of children in grades 0 to 3 in Poland have a speech, language or communication impairment. It results from insufficient logopedical intervention and lack of parents and carers proper awareness of this problem. Do not let your child be destined to fail at the start of its school career. The school should be a wonderful adventure; not an unpleasant duty.

The Alternative Educational Centre in the country setting is to stimulate speech and language development of children aged between 3 and 5.

Methods

The presenter would like to share her experience in helping the preschoolers overcome their speech problems and guiding their parents how to stimulate the proper development of speech. She pays special attention to prevention work and is involved in early screening for language disorders in young children. She uses: Logopedical Screening Test(PTL), Child's Vocabulary Test(TSD), Language Efficiency Test(TSJ),

Both diagnosis and prognosis is made and on such a basis of quantitative and qualitative assessment she provides treatment where necessary or stimulates further speech development. Using individual and group therapy, cooperating with parents and a child's teacher she tries to be helpful both as a logopedist and as a pedagogue.

Results

Equal opportunities for children starting their school career are achieved by early specialist diagnosis, intervention and cooperation with parents and teachers.

Conclusion

With the right help, adequate timing and society's commitment the child will succeed in school.

02.01 Functional Communication Approach to Aphasia Therapy in Flanders: a survey

Catherine De Vos
Hogeschool Gent, Ghent, Belgium

Background

Functional approach to aphasia therapy has challenged speech-language pathologists to take a broader view of the client. Underlying this approach is a set of values, such as the right of shared-decision making and individualization. The aim of this study was to find out to what extent Flemish speech-language pathologists are familiar with the values of functional communication therapy and by how far these values are applied in actual practice.

Methods

An electronic survey was conducted of 53 speech-language pathologists working in 3 different settings (private practice, hospital, rehabilitation center). The majority had at least 1 year experience working with clients with aphasia.

Results

Most Flemish SLP's are aware of the principles of functional communication therapy in aphasia. The vast majority applies shared decision making, involves family and friends in therapy, and addresses verbal as well as non-verbal communication in therapy. One in two speech-language pathologists trains everyday communication activities.

One of the findings is that the respondents aren't entirely convinced of the efficacy of this approach.

Conclusion

Flemish speech-language pathologists are familiar with functional communication therapy in aphasia, but do not apply it in a systematic manner. Analysis of the data points to the SLP's need for more information concerning the efficacy of this approach.

02.02 Towards best practices in speech and language therapy in stroke patients

Anu Klippi, Jaana Sellman, Paula Heikkinen, Tiina Suomela-Markkanen
University of Helsinki, Helsinki, Finland

Background

The objective of this research is to gather information for developing best practices for speech and language therapy (SLT) of stroke patients paid by the Social Insurance Institution of Finland (KELA). The first step of the research was to find out the state of clinical practices of SLTs paid by KELA. The study includes also a systematic literature analysis on research evidence.

This study is a part of a broader KELA research project developing rehabilitation services for severely disabled persons. The aim of the project is the integration of evidence-based knowledge with clinical expertise and rehabilitation resources. The SLT part study started in 2008.

Methods

We developed a questionnaire designed to determine the state of SLT practices for stroke patients. We sent questionnaires to 65 private SLTs registered by KELA.

Results

We got 43 returned questionnaires from SLTs of about 110 stroke patients with speech and communication disorders. The preliminary results revealed that time post stroke varied mainly from 1 to 5 years. Therapy was based on a written rehabilitation plan, and it was usually delivered individually. A typical rehabilitation decision of KELA contained 25-49 SLT sessions per year. The assessment methods used were regarded insufficient for the purposes of measuring the outcome of the therapy.

Conclusion

Discrepancy can be found in the current SLT practices and research findings that suggest the intensive therapy programs.

02.03 Transcranial magnetic stimulation as an intervention for aphasia post-stroke

Bruce Murdoch

The University of Queensland, Brisbane, Australia

Background

Transcranial magnetic stimulation (TMS) is a technique that provides a non-invasive means of modulating cortical excitability. Current evidence suggests that TMS has the capacity to influence neurolinguistic systems with the potential to be used as a rehabilitation tool to modulate language-related neural activity. For example, improvements in language function after TMS have been documented across some pathological populations, including primary progressive aphasia, Alzheimer's disease and non-fluent and global aphasia.

Methods

The proposed presentation will review the evidence that TMS may have a role as an adjunct to traditional, behavioural techniques in the rehabilitation of language disorders post-stroke. As a necessary precursor, the technique of TMS will be described and the possible neurophysiological effects of TMS on neural function discussed. Relevant literature relating to the use of TMS in the modulation of language post-stroke will be reviewed.

Results

The findings of a contemporary research project aimed at further elucidating the neurophysiological outcomes of TMS on the neural language network will be outlined and discussed. Implications for the use of TMS in aphasia rehabilitation will be highlighted by reference to specific case examples.

Conclusion

Based on these studies, it is evident that TMS has the capacity to enhance the functional output of language networks, which may have valuable clinical application to brain injured populations with acquired language disorders, more commonly known as aphasia.

02.04 'Being there': an investigation into social participation in people with aphasia

Ruth Dalemans, Luc de Witte, Petra Franssen, Derick Wade, Wim van den Heuvel
Zuyd University, Heerlen, the Netherlands

Background

Little is known about how people with aphasia perceive their social participation in life and which factors influence this (Dalemans et al., 2007). The purpose of this study was to explore how people with aphasia and their central caregivers perceive participation in society and to gain insight into the perceived influential factors

Methods

A qualitative study was conducted. Thirteen people with aphasia and twelve central caregivers kept a pre-structured diary over two weeks and took part in a semi-structured interview. The diaries and the interviews were transcribed verbatim. They were analysed by two researchers independently using codes, categories and themes inductively. The plausibility of the analysis was discussed several times with a third independent senior-researcher. In a focus group interview the results of the semi-structured interviews and the diaries were discussed with the subjects.

Results

The people with aphasia showed considerable variation in the amount of social activities undertaken, with some rarely leaving the house but others being more active. They wanted to feel engaged, to have a voice, to function in an ordinary way, to be respected, to know what was going on, to do things with others without being a burden, to take part in the community. Personal, social and environmental factors influenced the feeling of 'being there'.

Conclusion

It is important to look beyond communicative abilities into factors influencing the interaction between the person with aphasia and the immediate environment.

04.01 Evaluation of language therapy in post-hoc built groups

Julia Siegmüller

Logopedic Research Institute, Rostock, Germany

Background

Evidence-based practice offers a framework for evaluating language therapy and maintains the claim of individually based therapy concepts. This study is a new approach in which single case studies follow a major therapy outline that allows bringing together the therapies in post-hoc built groups.

Methods

In the empirical part the therapies of 45 children are presented. All children were at least 2;0 and produced less than 50 different words when therapy started. The therapies were solely aimed at improving the comprehension abilities of the children. It stopped when children show a major increase in the word-learning rate.

Results

The results showed that the children needed about 12 sessions to reach the therapy goal. Within group-effects found no age-effect, i.e. children older than 3 years needed the same number of sessions as children between 2 and 3. There was a density effect, i.e. children who received therapy twice per week were quicker than children with one session per week. The overall learning rate was very high; the children learned around 85% of all presented words.

Conclusion

The conclusion is that orienting the therapy on the normal lexical diversity accounts for the high learning rate. Methodologically this study shows how single-case-studies can provide for robust evaluation data when post-hoc brought together to groups. It further gives evidence on how to design therapy research, in order to keep the necessary comparability between the children and nevertheless derive a therapy, which comes close to practical therapy work.

04.02 Digital story telling for social inclusion of severely disabled

Anne-Marie Hufty, Francesco Toninelli, Paola Albanese, Tiziana Acquaro, Gabriella Baggio
Sinapsy: Centro di Neuropsicologia e Riabilitazione Cognitiva e del Linguaggio, Rome, Italie

Background

“Augmentative and Alternative Communication” is an area of clinical practice dedicated to develop compensating processes for the individuals with severe communication difficulties. Besides enhancing the residual natural communication capacities, AAC attempts to develop new and enabling communication devices so to fulfill expression needs.

Technology should allow expressing primary needs, but also storing of information about the person’s real life and interests. The purpose of AAC intervention is not to provide sophisticated instruments but to enable real people to efficiently engage in social situations.

Methods

Luca is an eighteen years old boy with severe cognitive disability, motor difficulties and total absence of speech. We started an AAC program when he was 4 and he slowly developed a simple gesture code and then learned to use pictograms on communication boards to talk to others. Sometimes ago, we realized that these communication tools were not longer suitable and Luca needed to become a full partner of social exchanges so to be included in a group.

Results

We provided him with an interactive story of his real life build with videos, photos and activities and “virtually” recreated his environment. Luca is using “my world” since 6 months and it has been introduced in the classroom so to enable him to “tell about himself”. We video documented his classmates reactions.

Conclusion

Through Luca’s story, we want to demonstrate how to use AAC and story telling to achieve communication and social inclusion for severely disabled children.

04.03

The abstract lexicology of children with visual - motor deficits

Rositsa Iossifova

Logopedic Center Romel, Sofia, Bulgaria

Background

The basic purpose of the investigation is to show, that the learning of the abstract ideas to a great extent depends and on the quality of the visual representation and the ability of the child to use analogies.

Methods

20 children without SLI and visual – motor deficits are investigated, 20 children with SLI and visual – motor deficits and 20 blind children with SLI at the age of 7 are investigated. From the children it's required to show the localization of 1) prepositions and adverbs for space and 2) prepositions and adverbs according to their own body. However there is no deictic gesture for the abstract category time; that's why in the localization of the category for time the deictic gesture for space is used.

Results

The results show, that the children with visual – motor deficits have unstable and fragmental visual representations of the space. They need significantly more time in order to fulfill all the instructions and experience great difficulties in the localization of the time. The blind children from the very beginning do not possess visual ideas and are in an extremely difficult situation in all kinds of problems.

Conclusion

The conclusions from the investigation are significant for the logopedic practice, prevention, early diagnosis and specialized intervention of children with strabismus, nistagmus and dyspraxia of the look by a group of specialists, development of plays with included in them gestures; putting an accent on the ability for reaction according to an analogy.

04.04

Social cognition and language in children with pre/perinatal brain lesions

Jasmina Ivšac Pavliša, Draženka Blažić, Sanja Šimleša, Marta Ljubešić

Faculty of Education and Rehabilitation Sciences, Zagreb, Croatia

Background

Children with pre/perinatal brain lesions are considered a good example of brain plasticity, due to their better cognitive and language outcomes when compared to children with SLI. However, plenty of research shows that children with pre/perinatal brain lesions have lower performance than children with no neurodevelopmental risk factors in the early development and on more complex language tasks (preschool and school period).

Methods

The major aim of our study is to compare a group of children with pre/perinatal brain lesions (N = 12) with a group of typically developing children at the age of 12 months. Cognitive functioning , socio-cognitive skills and language development were assessed. When children with perinatal lesions were five years old, a telephone survey was conducted. The aim of the survey was to find out about features of language development based on parents answers.

Results

Statistical data analysis shows that children with pre/perinatal brain damage significantly differ in cognitive abilities, joint attention skills and early language features in the age of 12 months from their peers. Parents reported about different language problems in the age of five in most of the children with perinatal brain lesions.

Conclusion

Children with early brain lesions are a heterogeneous group-some show a typical pattern of language development but some do not. The research is a part of a project „Cognitive and language development in children at neurodevelopmental risk“ supported by The Ministry of Science, Education and Sports.

05.01 Guidelines for speech-language therapy in Parkinson's disease

Hanneke Kalf, Bert de Swart, Bastiaan Bloem, Marten Munneke
Radboud University Nijmegen Medical Center, Nijmegen, the Netherlands

Background

Speech-language therapy (SLT) is prescribed regularly in PD. However, many speech therapists working with PD-patients judge their own competency inadequate, because of lack of knowledge and consensus.

Methods

A guideline was constructed on request by the Dutch Association of Logopedics and Phoniatics (NVLF) between December 2006 and August 2008, according to international standards for guideline development (AGREE). We carried out systematic searches in three domains: speech impairments, dysphagia and drooling. The evidence was supplemented with clinical expertise of five highly experienced SLT's from different settings and translated into practice recommendations. The concept recommendations were field-tested by another 117 SLT's.

Results

A total of 60 recommendations are described for diagnostic and therapeutic interventions in the three domains, including recommendations for referral indication.

Evidence for the effectiveness of SLT in PD is limited to a few small randomized trials and several uncontrolled studies. Expertise of the primary working group members and a theoretical model regarding rehabilitation of PD-patients were essential to complete the guidelines for best practice in assessment and treatment.

Conclusion

This evidence-based guideline provides a basis for best practice by SLT's treating PD-patients and is now published in Dutch. Translation into English is the next goal in order to make it available to colleagues all over Europe.

05.02 Crowd aLOUD: 'LOUD is all you need'

Fiona Hill
Adelaide & Meath Hospital, Dublin, Ireland

Background

Whilst Lee Silverman Voice Treatment (LSVT) reports improvements up to 2 yrs post therapy (Ramig et al. 2001), maintaining gains is a challenge for the client, carer and professional alike

A speech maintenance & support group (Crowd aLOUD) was formed in 2007 to address this issue

Aims/Objectives

Encourage maintenance of loud voice post LSVT

Enhance ability to be as easy to understand as possible in everyday communication

Allow clients & carers to share common experiences

Promote participation in home & social environment

Enhance OOL

05.03 AAF as a Therapeutic Tool for Speakers with Parkinson's Disease

Anja Lowit, Peter Howell, Corinne Dobinson, Claire Timmins, Bettina Brendel
Strathclyde University, Glasgow, UK

Background

PD can have a significant impact on communicative ability, reducing the person's quality of life. Most treatments appear to have little long term impact on speech with the exception of LSVT. However,

LSVT has limited success in more severe speakers, and few resources are currently available to help improve the communication of this client group.

One treatment that has received little attention is altered auditory feedback (AAF). This technique has received mixed reviews, but no large scale study has ever been conducted to identify the clinical and personal benefits of this technique.

The current study aimed to investigate

1, what effects different types of AAF have on PD speech

2, which factors can affect a speaker's response to AAF

3, how useful clients find AAF as a therapeutic tool.

Methods

The study included 44 PD speakers and matched control participants. Their performance was evaluated perceptually and acoustically under no feedback, delayed auditory feedback and frequency shifted feedback conditions. Ten of the PD speakers also participated in a treatment study comparing AAF with traditional treatment techniques.

Results

Results indicate that AAF can improve intelligibility and naturalness in about 25% of speakers and that it requires less intense treatment than other techniques. Responses are highly individual and are not determined by any other performance factors.

Conclusion

In conclusion, AAF is a viable and successful treatment tool that can be applied at relatively low cost if the individual responds to it favourably.

05.04 Frequency and treatment of oral motor impairments in Parkinson's disease

Hanneke Kalf, Bert de Swart, Bas Bloem, Marten Munneke
Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands

Background

Oral motor impairments have an important impact on the quality of life of patients with Parkinson's disease (PD). However the consequences for referrals to speech therapy have hardly been investigated.

Methods

Between May 2007 and May 2008, we included 141 consecutive PD patients who had been referred to the Parkinson Centre Nijmegen (ParC, The Netherlands), a tertiary referral center for PD. Patients were included and assessed according to the centre's protocol. Experienced speech-language pathologists systematically assessed the quality of speech, swallowing and saliva control, and provided specific instructions when needed.

Results

Mean age was 65 years (SD 9.6), mean disease duration 7 years (SD 4.9), mean UPDRS score 29 (SD 12) and median Hoehn & Yahr 2.5 (1 to 5).

In total, 93% of the patients had minimal to moderate severe signs of dysarthria, 59% demonstrated minimal to moderate signs of dysphagia and 52% experienced problems with saliva control.

The outcomes for referral were classified in 'no help needed', 'one-time instructions' and 'further SLT treatment'. Referral for SLT-treatment was indicated for 44% of patients with dysarthria, but only in 4% and 8% of the cases for dysphagia and drooling respectively. One-time instructions were enough for 29%, 34% and 37% respectively.

Conclusion

Dysarthria is the most common impairment, with almost half of community-dwelling PD-patients being referred to speech therapy. The majority of patients with symptoms of dysphagia or drooling can be helped with onetime instructions.

06.01 Education for speech and language therapists in Slovenia

Da mjana Kogovsek, Martina Ozbic, Stane Kosir
University of Ljubljana, Faculty of Education, Ljubljana, Slovenia

Background

Speech and language therapy education in Slovenia has been changed recently with the Bologna process.

It is important to understand that there is a specific situation about education for speech and language therapists, because the academic study programme is implemented within the area of Special education and rehabilitation at the Faculty of Education and it is the only academic study programme for speech and language therapy in Slovenia. The markedly complex and contextual background and various conceptual elements deepen and expand the problem of reforming the study programme and have to be understood from the general educational system in Slovenia.

Methods

The present article analyses certain and very important conceptual starting points of reforming the academic study programme of speech and language therapy education. Specific conceptual elements enable the understanding of the development of new and independent and autonomous speech and language therapy study programme.

Results

New study courses and curricula are being developed (according to the international guidelines and standards for the education of speech and language therapists), the existing ones are being altered and modified, ECTS has been introduced,...

Conclusion

International and inter-institutional cooperation is being encouraged and increased.

Speech and language therapy education in Europe differ from country to country according to the political, educational and socio-economic circumstances in the country.

06.02 SASSO, A System to Assess and Score a Trainee's Achievement

LUC A SIMOENS
University College Ghent, Ghent, Belgium

Background

Student coaches and speech-language therapists working with students deal with a dual task: coaching the student and determining the mark the student gets during or after accomplishing his training period.

The conversion of the assessment into a mark is frequently based on professional and didactical knowledge, views and background of both professionals and coaches. They observe, read portfolios, discuss findings and express their findings in a mark, often affected by personal perceptions and view on the training period. Students however want to know what aspects of their training period affect their mark and to what extent whilst coaches and professionals feel better when they may rely upon a consistent system to convert their findings.

Methods

The SASSO procedure computes a mark, taking into account the observed and the expected professional behaviour, the profile of the profession and frequently given remarks and advises. The observations are translated into a competence profile, indicating what competences the student has to improve.

Results

During an experimental period the system proved adequate. Students are assessed without a direct link to a score and as the assessor does not have to consider the conversion of his findings the emphasis is shifted to his main educational tasks.

Conclusion

The SASSO procedure provides coaches and speech-language therapists dealing with trainees a system converting their findings into a mark, proving it is possible to objectify a trainee's complicated and extensive job consistently.

06.03 PBL as a methodological strategy in Initial Education of speech therapists

Lidia Rodriguez

University of Castilla la Mancha, Toledo, Spain

Background

In this paper we present the methodological experience we develop in the Speech-Language Degree in the University of Castilla-La Mancha, Spain. Speech and Language Degree in Spain is recently been adapted to European models according to Bologna structure. Although Problem-based learning (PBL) is one of the most relevant teaching methods in Higher Education mainly in Health Sciences, in Spain is still not widespread enough.

Methods

In PBL methodology the traditional learning process is been reversed. Problem is presented in the first moment so that students start to identify learning essentials, research about it and finally they return to the problem in order to suggest solutions to find some academic solutions, closing in that way the circle of shared knowledge in the classroom.

Along the path that students cover from original problem approach to its solution, they work in a cooperative way in small groups, sharing through this learning experience the possibility of practising and developing professional skills, observing and reflecting about attitudes and values.

Results

In the presentation we analyse the periodical classrooms meetings took place among our research students group working together with the teachers and professionals presenting real problems to be used in PBL.

Conclusion

Throughout this analysis, we will see how important is to acquire self-regulation learning profiles in order to develop a new conception in speech-language therapeutic skills.

06.04 Logical reasoning in the education of evidence-based speech-language therapy

Karin Neijenhuis

Rotterdam University, Rotterdam, The Netherlands

Background

Three important elements in EBP are the best research evidence, clinical experience and patient values (Sackett et al. 2000). The integration of these three elements leads the professional to the answer to a clinical question. In speech-language therapy, there is often a lack of evidence. This implicates a higher demand on the logical (or clinical) reasoning process. Therefore, students are not only trained in searching and appraising the best available evidence, but also in framing their own clinical questions and using their own logical reasoning capacities in answering them.

Methods

In the education of speech-language therapists in Rotterdam, evidence-based practice (EBP) is not just a separate course, but it is integrated in the curriculum, following different stages of the student competence profile (COMPASS, 2005). This reflects the way the practising speech-language therapist works; evidence-based practice is integrated in the process of clinical decision-making.

Results

This presentation will demonstrate how Evidence-based Practice (EBP) can be integrated in the competency-based curriculum of speech-language pathology education, because attitudes, skills as well as knowledge play a great role in working as a speech-language therapist.

Conclusion

Because students are now more exposed to EBP as a clinical competence and have more time and opportunity to practice during education, the future speech-language therapist will have less barriers in the attitudes and utilization.

07.01 Neural correlates of language development: The development of Broca's region

Maja Cepanec, Miloš Judaš
Faculty of Education and Rehabilitation Sciences, Zagreb, Croatia

Background

To study morphological development of inferior frontal gyrus and its cytoarchitectonic areas BA 44 and 45 (Broca's region) and to correlate qualitative and quantitative findings with major in early language development, as well as with possible functions of that area in prelinguistic/linguistic period.

Methods

We analyzed 35 human brains (Zagreb Neuroembryological Collection, Croatian Institute for Brain Research) ranging in age from 8. postconceptional weeks to 15 postnatal years. In the quantitative part of study, the total of 27.142 neurons were measured on digitalized Nissl-stained sections by ImageJ software (N.I.H.).

Results

Morphological development of perisylvian cortex (including Broca's and Wernicke's regions) is quiet advanced at birth, but continues long afterwards. Major changes in the cytoarchitectonics (development of characteristic size ratios of pyramidal cells in different layers of the cortex; magnopyramidality) arise between 7,5 and 14 months postnatally, which coincides greatly with major milestones in early language development – the beginning of language-specific perception and production, language comprehension, babbling and the appearance of first words.

Conclusion

Dramatic changes in architecture and neural connections of Broca's region occur in parallel with intensive language development.

07.02 Language in autistic spectrum disorders

Fernanda Fernandes
Universidade de Sao Paulo, Sao Paulo, Brazil

Background

Communication disorders are proposed as one of the three fundamental criteria for the description or diagnosis of PDD. The purpose of this study includes the verification of the hypothesis that it is possible to identify differences in the communicative profile and in the social cognitive performance of children and adolescents with psychiatric disorders if the autistic spectrum that can be related to different results on the ABC.

Methods

Subjects were 117 children and adolescents with ages between 2 and 16 years attending language therapy. They were assessed during spontaneous communication regarding their Functional Communicative Profile (communication interactiveness, means and initiative) and their Social Cognitive Performance (in the areas of vocal and gestural communicative intent, vocal and gestural imitation, tool use and combinatory and symbolic play).

Their parents and therapists provided information to the ABC assessment.

Results

Results indicated that there are more correlations between social-cognitive performance and the ABC scores and that there are negative correlations between these scores and communicative interaction and complexity. The small amount of correlations between language sub-scale and the other data and the absence of significant clusters determined by all the data suggest that there is a dissociation of the description provided by the ABC and the criteria proposed by the DSM-IV and the ICD-10.

Conclusion

The search for objective criteria to determine subgroups of the autistic spectrum remains a challenge.

07.03

Measuring speech intelligibility in young children

Romain Buekers, Janine Bindels, Tineke Ramakers
Speech & Hearing Centre, Maastricht, Netherlands

Background

There is a serious need of a standardized and objective criterion for measuring what adults/parents comprehend of speech of young children. In this research we postulate a method of intelligibility testing based on the measurement of 197 children.

The provisional results are obtained by the report of the parents of 99 girls and 98 boys, between 4 age cohorts of 2,6y - 4;6 years.

Methods

The Speech Intelligibility Instrument comprises three parts of utterances of the children:

- naming 25 pictures
- repeating 7 sentences
- retelling a simple story

We checked the reliability and validity and these showed appropriate values.

The child's utterances are recorded and afterwards the parents write down what they think their child meant to say. Also we become the percentage of speech intelligibility.

Results

Speech intelligibility increases as children grow older (eg. from 87% to 97% for words, from 63% to 91% in sentences and from 83% to 100% in the story. Girls are a little bit more intelligible than boys, but not significant. Mothers understand their children at least 15% better than strangers, but the number of strangers is insufficient for now.

Currently we are completing this research by using larger target groups

Conclusion

Subsequently the results of speech intelligibility in language disordered children make it possible to objectivate communicative functioning and /or disability. We also hope to gain insight in the capability of the instrument to measure longitudinal progression and outcome effects after watch and see and after intervention.

07.04

Working memory and language-speaking disorders

Katarina Pavicic Dokoza, Sofija Nadvinski
Policlinic SUVAG, Zagreb, Croatia

Background

Results of various investigations confirmed that the unavailability of some aspects of memory may be related to the difficulties that children with language-voice difficulties have in planning the reception and production of languages. Poor short-term memory can cause a range of problems such as memorizing , messages, instructions, reading the text, difficulties in maintaining the flow of thought, memorizing names, learning new words, etc.

Methods

Researching covered children with developmental language voice-activated difficulties in therapy in Polyclinic SUVAG and children with an orderly language-speaking status chosen by method of random choice from one elementary school. Each group consisted of ten boys of average chronological age 9.5 years. The scope of visual memory was tested on series of image templates while working visual memory was tested by memorizing the last pictures from six groups offered. The scope of auditive memory is tested through a list of words and nonwords, while the working auditive memory is tested by memorizing the last words from a series of read six sentences. The scope of spatial memory examined the repetition of default position in space.

Results

Children with developmental language voice-activated difficulties in therapy in Polyclinic SUVAG showed lower results on all subtests.

Conclusion

Research results indicate the limitations of scope and capacity of working memory in children with language-communicative difficulties. In this work therapeutic implications of the results are especially prominent.

08.01 Clinical Assessment of Dysphagia in Transdisciplinary Settings

Tarja Kukkonen
University of Tampere, Tampere, Finland

Background

Mild and moderate aspects of dysphagia are often neglected in the acute phase (Ramsey et al 2003; Rothstein 1997). Untreated dysphagia is the main risk factor of aspiration pneumonia and may result in social isolation. In this study, swallowing and eating are examined with clinical tools. The study focused in evaluation of oral functions, oxygen saturation while eating, increased risk of aspiration, subjective view about one's swallowing and eating and speech therapist's and nurses' approximations of swallowing disorders.

Methods

The protocol consisted of clinical oral-motor assessments, patients' interviews and screening of easiness of eating and swallowing in natural settings (lunch).

Results

Dysphagia manifested in widely disordered oral motor skills, in remarkable desaturation of oxygen while eating, in prolonged eating time, in altered food consistency, in coughing while eating and in serial swallowing difficulties. Dysphagia affected broadly on persons' conceptions about themselves in social situations and on persons' psychological conceptions of themselves. Speech therapist and nurses made quite different judgments about features above regarding dysphagia.

Conclusion

Dysphagia can be diagnosed by clinical assessments. We created a transdisciplinary protocol for clinical use. Even mild dysphagia has a large impact on persons' participation and general conceptions of themselves. We do need a lot of multidisciplinary education to make sure that the transdisciplinary diagnostic path of dysphagia is appropriate in clinical settings.

08.02 Patient reported swallowing and speech outcome after chemoradiation

*Irma Verdonck-de Leeuw,
Rico Rinkel, Jan Buter, Hans Langendijk, Remco de Bree, René Leemans*
VUmc University Medical Center, Dept Otolaryngology-Head&Neck Surgery, Amsterdam,
the Netherlands

Background

The goal of the present study is to assess the prevalence of patient reported swallowing and speech outcome after chemoradiation therapy for head and neck cancer

Methods

Sixty patients 6 months to 5 years after chemoradiation for HNC were asked to fill out the Swallowing Quality of Life Questionnaire (SWAL-QoL) and the Speech Handicap Index (SHI), both validated in Dutch and provided with norm values (total score SHI ≥ 6 and total score SWAL-QoL ≥ 14).

Results

Fifty-two patients returned the SWAL-QoL and 47 the SHI (response rate 87% and 78%, respectively). Swallowing and speech problems were present in 79% and 58% of the patients, respectively. Normal food intake was reported by 45 % of the patients, 35 % had a soft diet, and 20% had tube feeding. The scores on the SWAL-QoL and SHI were not influenced by gender, age, comorbidity, or tumor stage. A significant impact of tumor site (more swallowing problems after treatment for oral/oropharynx cancer compared to larynx/hypopharynx cancer), food intake (soft diet and tube feeding more swallowing problems compared to normal oral intake), and time since treatment (more problems on the long term) was found.

Conclusion

Swallowing and (to a lesser extent) speech problems in daily life are frequently present after chemoradiation therapy for head and neck cancer.

08.03 Computerized prospective screening for speech and swallowing problems

*Irma Verdonck-de Leeuw,
Remco de Bree, Ilse Keizer, Ton Houffelaar, Rico Rinkel, René Leemans*
VU University Medical Center, Dpt of Otolaryngology-Head&Neck Surgery, Amsterdam,
the Netherlands

Background

The goal of this study is to investigate prospectively the prevalence of speech and swallowing outcome in head and neck cancer patients.

Methods

The EORTC QLQ-C30 and HN35 health related quality of life questionnaires (including a 3-item Speech and a 5-item Swallowing Subscale) and the Hospital Anxiety and Depression Scale were completed by 55 patients via a touch screen computer-assisted data collection system (OncoQuest) on their first visit at time of diagnosis and at follow-up visit.

Results

No swallowing (or speech) problems at baseline or follow-up was noted in 22% (18%); 47% (22%) had normal scores at baseline and developed swallowing (or speech) problems at follow-up; 4% (13%) had high levels at baseline and returned to normal scores at follow-up, and 27% (47%) had persistent swallowing (or speech) problems from baseline to follow-up. Speech and swallowing problems were related to tumor stage (more swallowing problems in higher stage) and site (more speech problems in laryngeal cancer), and (among other quality of life aspects) global quality of life and emotional distress.

Conclusion

Speech and swallowing problems in head and neck cancer patients is common and clearly related to quality of life and emotional well-being. Recently, adaptive testing is build into OncoQuest: in patients who screen positive on the HN35 subscales, the SWAL-QoL and VHI/SHI questionnaires are introduced to assess speech and swallowing in more detail. More research is needed on efficacy of speech and swallowing intervention.

08.04 Feasibility and reliability of Dutch Swal-Qol, interview version

*Jessie Lemmens,
Gerrie Bours, Tineke van Lumig, Nina Kardaun, Sandra Beurskens, Rianne de Wit*
Zuyd University, Heerlen, the Netherlands

Background

McHorney et al(2002)developed and validated de Swallowing Quality of Life questionnaire SWAL-QOL for neurologic patients with dysphagia. This self report questionnaire exist of 44 items regarding the topics: Food, Burden, Symptoms, Fear, Social Functioning, Eating desire, Mental health and Fatigue. The Swal-Qol was translated into Dutch by Bogaard et al(2008).

Stroke is most common in neurological diseases and up to 67% of the stroke patients show signs of dysphagia (Perry et al, 2001). Unfortunately there is little data on dysphagia related quality of life in stroke patients. Due to other stroke related symptoms like cognitive impairment, many stroke patients are unable to fill out the SWAL-QOL themselves. Therefore an interview version of the SWAL-QOL was adapted for stroke patients.

Methods

To report the feasibility and reliability of the SWAL-QOL for stroke patients with dysphagia, approximately 50 nursing home residents participated in this study. All patients suffered from stroke and dysphagia and were able to(at least partially) interact with others and gave their consent.

Results

The final results will be present in april 2009. Data on internal consistency, test-retestreliability and feasibility of the SWAL-Qol interview version will be reported and compared with data from previous studies.

Conclusion

Many studies often exclude patients with cognitive or communication difficulties. Because of the flexibility of the interview version, it seems possible to get reliable answers from these patients for research and clinical purposes.

09.01 A competence-based programme for SLT's: How to create a competence gap?

Willy Voor in 't holt

Hanze University Groningen, University of Applied, Groningen, The Netherlands

Background

May 2007 the revision of "The minimum Standards for Education" was adopted by CPLOL. In this document three competence areas and eight professional competences for Speech and Language Therapists (SLT's) are described. This lecture tells how Competence-based learning in the Professional practice placement was developed and implemented in the 2nd, 3rd and 4th year of the educational programme of Groningen.

Methods

A competence oriented educational programme needs a strongly profession-oriented learning environment with many live-experiences and opportunities for students to work largely self directive. Only in this environment students can really be aware of a competence-gap and will be motivated to learn. Real life assignments and real life criteria or standards, just like those SLT's would meet in their daily professional practice, are appropriate. Lecturers and supervisors in the work field must be well trained to coach the students through the educational process.

Results

The department SLT, Groningen succeeded in building a good competence based programme. Accreditation bij Netherlands Quality Agency (NQA) of May 2008 rated our programme with an excellent score on exit qualifications.

Conclusion

The way to implement competence-oriented learning in educational programmes for SLT's is letting students apperceive a competence-gap in every level of education and letting lecturers and supervisors coach them to step by step fill this gap with professional behaviour.

09.02 Peer meetings in a competence-oriented curriculum: analysis of reflective essays

Mirabelle Schaub - de Jong

Hanzehogeschool, Groningen, Netherlands

Background

Nowadays, most of the curricula for professional health sciences include the acquisition of competencies to develop professional behaviour. The development of reflective skills is a basic condition for this development. Literature describes a variety of methods giving students opportunities and encouragement for reflection. Although the literature states that learning and working together in peer meetings fosters reflection, these findings are based on experienced professionals. We do not know whether participation in peer meetings also makes a positive contribution to the learning experiences of undergraduate students in terms of reflection.

The aim of this study is to gain an understanding of the role of peer meetings in students' learning experiences regarding reflection.

Methods

a phenomenographic qualitative study was undertaken. Students' learning experiences in peer meetings were analyzed by investigating the learning reports in students' portfolios. Data were coded using open coding.

Results

the results indicate that peer meetings created an interactive learning environment in which students learned about themselves, their skills and their abilities as novice professionals. Students also mentioned conditions for a well-functioning group.

Conclusion

the findings indicate that peer meetings foster the development of reflection skills as part of professional behaviour.

09.03 Competence based learning during Clinical Placement SLT: How to Coach the Coach?

Gerdien Kikstra

Hanze University, University of Applied Science, Groningen, The Netherlands

Background

The department of SLT at the Hanze University and the practitioners in the field work together to deliver a new, competent, generation of Speech Language Therapists.

In our competence based curriculum SLT we ask supervisors during the clinical placements to be coach to our students. One of eight professional competences described in the minimal standards for Education (CPLOL, 2007) is competency 6: Coaching and guiding colleagues, team members and trainees. The Groningen curriculum SLT used to be more knowledge based. As a consequence the current generation of supervisors sometimes is lacking coaching skills.

Methods

We offer our supervisors a coach to coach program for competency development. This exists of a combination of a course, a visit at the SLT's practice, and expert meetings. In the course the competency coaching is addressed from different angles: a theoretical base, role-play and reflection are subject. During a clinical placement a lecturer visits student and supervisor. Besides student evaluation, the lecturer addresses questions and /or difficulties with coaching. At expert meetings several aspects of clinical placement are discussed. In all activities the SLT's give input and feedback towards the curriculum.

Results

Evaluations indicate that coaching is a valued competency although it is sometimes challenging and some support is desired.

Conclusion

The competence based education of our future colleagues is depending on a close cooperation between the SLT's working in the field and the initial education.

09.04 Le référentiel de compétences appliqué au master en logopédie à l'ULg

Pascale Grevesse, Christelle Maillart, Agnès Sadzot

Université de Liège / Département des sciences cognitives, Liège, Belgique

Background

En 2007, le département de logopédie de l'ULg a été retenu dans le cadre d'un projet pilote en vue de proposer une démarche de formation des étudiants orientée vers le développement de compétences. Nos objectifs sont, d'une part, d'améliorer l'adéquation entre les exigences professionnelles et la formation universitaire et, d'autre part, d'améliorer la formation clinique universitaire. Pour ce faire, une équipe de trois personnes a élaboré un référentiel de compétences sous la supervision de Jacques Tardif (Université de Sherbrooke).

Methods

Les étapes suivantes ont été respectées :

1. Formation de l'équipe à l'enseignement par compétences
2. Identification des besoins
3. Création du projet de référentiel : identification des compétences, des ressources et des situations
4. Supervision externe par Jacques Tardif, et ajustements
5. Validation par la profession
6. Soumission au conseil des études et application à la formation.

Results

La première trame du référentiel de compétences a été accueillie favorablement par le conseil des études. Plusieurs professeurs semblent prêts à revoir leurs cours à la lumière de ce nouvel outil.

Conclusion

L'application d'un référentiel de compétences est une expérience novatrice en master en logopédie. Au côté de dispositifs de pédagogie active comme le cours d'apprentissage de la démarche logopédique, le référentiel de compétences devrait permettre une meilleure adéquation entre cours théoriques et pratique clinique, tout en responsabilisant les apprenants dans leur cursus universitaire.

10.01 Addition of contingency management to increase home practice in young children

Thomas Günther, Sarah Hautvast

Zuyd University; School of Speech and Language Pathology, Heerlen, Netherlands

Background

The aim of this study was to determine whether the efficacy of traditional articulation therapy for children with speech-sound disorders can be improved by adding a behavioral treatment concept (contingency management; CM) to treatment in order to increase the time patients spend on homework. Speech sound disorders can be treated effectively, although the variance of the efficacy is high. Only a few studies have examined the influence of homework on treatment efficacy, but there is consensus that parental cooperation and homework frequency are essential for the success of the therapy.

Methods

In this efficacy study, a total of 91 children (4-6 years of age) with an articulation impairment participated in the study. They were divided into three groups: 32 children were treated with traditional articulation therapy (8 sessions of 45 minutes each), 33 children received a combination of CM and traditional therapy, and 26 children received no therapy at all. A picture-labeling test measuring the treated target sound at different levels was used before and after therapy to quantify therapy-induced improvement.

Results

The results confirm that the traditional articulation therapy approach is effective for children with an articulation impairment. However, adding CM significantly increased the frequency of homework sessions and improved the efficacy of treatment by decreasing the variance in therapeutic success.

Conclusion

CM has a positive impact on therapeutic success and leads to an increase in the number of homework sessions.

10.02 Batterie EVALO 2-6 : de l'évaluation à la prise en charge

Jacques Roustit, Françoise Coquet

Albi, France

Background

La Batterie EVALO 2-6 ans, étalonnée auprès de 740 sujets tout-venants et de 150 sujets pathologiques, met en évidence, outre les niveaux défectueux dans 13 domaines, les mécanismes sous jacents mis en oeuvre. Les indicateurs de difficultés relevés contribuent à l'élaboration d'un diagnostic différentiel. Ainsi, un programme thérapeutique adapté et structuré peut être mis en place.

Methods

Des synthèses graphiques rendent compte des résultats pour les différents sous-systèmes langagiers (conception modulaire du langage). Les habiletés spécifiques hiérarchisées (conception neuropsycholinguistique), la dimension de communication (conception socio interactionniste et pragmatique), sans négliger l'aspect psychoaffectif, sont examinés et pris en compte. L'analyse diagnostique puis les objectifs thérapeutiques s'appuient autant sur l'évaluation quantitative (étalonnage en Moyenne / Ecart type) que sur l'observation qualitative formalisée dans des tableaux de synthèse (en modes dominants).

Results

Nous illustrerons les résultats par une étude de cas pour le domaine « Lexique » (évaluation initiale – objectifs thérapeutiques / méthodes et techniques de rééducation – réévaluation après 1 an de prise en charge : mesure de résultats).

Conclusion

L'amélioration des outils de diagnostic et de prise en charge des troubles du langage est un enjeu de santé publique. La Batterie EVALO 2-6 est un guide permanent pour planifier, évaluer, orienter ou réorienter le programme de rééducation.

10.03 Kindergarten teachers' practices, knowledge and attitudes on language disorders

Panagiota Kafetzi-Serioti, Maria Vlassopoulos, Ioannis Papadatos
University of Athens, Athens, Greece

Background

The central role of the kindergarten teacher for the detection and referral of children with speech and language disorders is well-documented, though this is often difficult in practice. This study investigates Greek teachers' ability to carry out this task, comparing experienced kindergarten teachers with student kindergarten teachers.

Methods

Knowledge, attitudes and practices regarding preschool children's speech and language problems were explored using a questionnaire which was completed by 123 respondents (60 kindergarten teachers and 63 student kindergarten teachers).

Results

Results show no significant differences between the two groups in levels of education and participation in courses about speech and language problems. Both groups considered it their responsibility to detect children with potential difficulties, yet results on knowledge in both groups demonstrated the need for further education and collaboration with other professionals such as SLTs. Kindergarten teachers identify more children with potential difficulties than students but have difficulty knowing how, when and where to refer children. Moreover, both groups did not feel equipped to teach children with special needs, but affirmed that with further training they would have a more positive attitude towards inclusion.

Conclusion

Recommendations are made which could further empower kindergarten teachers. This would result in early diagnosis and intervention of children with speech and language problems.

10.04 Communication in Europe: The role of the SLTs in primary education

Andreja Trtnik Herlec
ZGNL, Ljubljana, Slovenia

Background

An important aspect of the policy of inclusive education is the role of the speech and language therapist in the educators' team within primary schools. Based on Slovene experience of the inclusive nature of general primary education, the author explores some new possibilities to ensure access to speech and language therapy and education on the spot, where and when it is most needed: within the elementary classroom, and in the first years of the public or special primary school.

Methods

The study of policy documents and trend analysis show that the needs of diverse learners in EU public classrooms are increasing in both qualitative and quantitative terms, following the trends of inclusion, mobility across EU boundaries, and immigration from non-member and new member states.

Results

Slovene and international trends show an increase in the population with speech and language disorders diagnosed as children with Autistic Spectrum Disorder and Asperger Syndrome.

Conclusion

Therefore the policy of inclusion has to be explored and revised in EU countries, especially where public primary schools do not employ an SLT and other special educators and thus cannot guarantee access to quality education to all pupils. Public special schools or units for severe speech and language disorders or for ASD pupils are a possible answer.

The quality of education lies also within the professional responsibility and responsiveness of the EU association of speech and language therapists.

11.01 Évaluation de la rééducation de la mémoire de travail dans l'aphasie post AVC

Nathaly Joyeux

UNADREO, SABLE sur Sarthe, France

Background

Deux études de cas de patients aphasiques permettent de montrer, qu'au-delà du trouble linguistique, il est nécessaire d'analyser également l'incidence du trouble des fonctions exécutives, de la mémoire ou de l'attention sur le trouble du langage et de proposer une rééducation adaptée.

Ainsi les théories neuropsychologiques actuelles, en particulier les approches cognitives en matière de mémoire de travail ou d'attention, fournissent de nouvelles pistes à la rééducation des aphasiques et apportent de nouveaux protocoles de rééducation.

Methods

Après une évaluation détaillée, on utilise un protocole de rééducation de la mémoire de travail proposé par C. Vallat-Azouvi (2008) et un protocole de rééducation de l'attention détaillé par J. Couillet (2002). Une nouvelle évaluation est proposée à la fin du traitement.

Results

Les résultats sont issus du recueil de données lors de chaque séance ainsi que de la comparaison entre l'évaluation initiale et finale et du recueil de transfert dans la vie quotidienne.

Conclusion

L'étude de ces deux cas permet de montrer grâce à un recueil de données rigoureux que la prise en charge de l'aphasie ne doit pas seulement s'intéresser aux aspects linguistiques classiques. Elle doit également, en tenant compte des nouveaux apports théoriques de la neuropsychologie, intégrer l'incidence des aspects mnésiques, attentionnels et exécutifs sur le trouble du langage.

11.02 Use of oro-motor exercises in acquired dysarthria intervention

Catherine Mackenzie, Margaret Muir, Carolyn Allen

University of Strathclyde, Glasgow, Scotland

Background

Dysarthria is a common sequel of many neurological disorders and diseases, including stroke, Parkinson's disease and multiple sclerosis. Exercises for the articulatory organs are commonly described in dysarthria therapy guidebooks and are reported to be in wide clinical use, but there is a lack of evidence that the practice of these non-speech oral tasks leads to any improvement in speech. Furthermore while a variety of exercises are described, the regime of their use is left to the individual therapist's discretion in respect of for example number of exercise repetitions, progression through a series of exercises, and frequency of exercise, both in clinical sessions and as additional practice.

Methods

A comprehensive questionnaire survey of speech and language therapists' (SLT) practice, throughout Scotland, Northern Ireland and Wales, regarding views and use of oro-motor exercises in acquired dysarthria treatment.

Results

Results presented include the proportion of respondents who use exercises, therapists' rationale for using exercises, the dysarthria aetiological groups and severities with whom exercises are used, and the exercise regimes employed. The results of the survey will guide later stages of our research, namely the assessment of outcomes for those who receive oro-motor exercises as part of their SLT intervention and those who do not.

Conclusion

Conference participants will be enabled to evaluate their own practice critically, and in relation to that of a large group of SLTs.

11.03 Evidence based stroke guidelines; how well do SLT's adhere to them?

Jessie Lemmens, Jolanda Friesen-Storms, Gerrie Bours
Zuyd University, Heerlen, the Netherlands

Background

In 2001, the Dutch Heart Foundation developed an evidence based interdisciplinary guideline: Rehabilitation after stroke. This guideline exists of 185 practical recommendations, relevant for stroke teams (neurologists, physicians, nurses, SLT's and other therapists). It was unknown if the stroke guideline was successfully implemented in hospitals, rehabilitation centres and nursing homes.

Methods

463 questionnaires about adherence to 29 of the 185 practical recommendations were sent to 69 health care institutions (response rate: 50%).

A second questionnaire regarding the quality of stroke guidelines and perceived barriers was sent to 233 respondents and 76% (n = 177) were returned.

Results

Adherence to practical recommendations was considered sufficient if the score exceeded 70%, which only 10 of the 29 recommendations did. Three of the four SLT relevant recommendations were carried out successfully. Familiarity with the guideline (71%), content and practical relevance (> 90%) were satisfactory. The main restricting factors were conditions within the workplace (51%).

Conclusion

Although the stroke guideline received a positive evaluation by the health care professionals and is widely disseminated, only 10 out of the 29 selected recommendations were carried out successfully. Adherence to the stroke guideline is more difficult than perceived by the participants. Due to the extensiveness of the guideline, the provision of a short checklist seems to be an effective strategy to enhance adherence and improve quality in stroke care.

11.04 Evaluation de la prise en charge écosystémique dans la maladie d'Alzheimer

Thierry Rousseau
Unadréo, Sablé Sur Sarthe, France

Background

Cette communication a pour objet de présenter les résultats préliminaires d'une étude évaluant l'efficacité de la prise en charge écosystémique des troubles de la communication dans la maladie d'Alzheimer.

Methods

Au cours de années 2006 et 2007, 1016 orthophonistes ont été formés dans 22 régions de France à la prise en charge écosystémique des troubles de la communication dans la maladie d'Alzheimer. Afin d'en mesurer l'efficacité, ces professionnels se sont engagés, après avoir mis en place cette approche thérapeutique auprès de leurs patients, à adresser à l'Union Nationale pour le développement de la recherche et de l'Évaluation (UNADREO), les résultats à des outils d'évaluation de la communication et des fonctions cognitives selon un protocole qui leur a été fourni. Un questionnaire à l'entourage a également été proposé. Ces évaluations ont lieu tous les 6 mois pendant 18 mois.

Results

Un certain nombre de résultats intermédiaires ont déjà été analysés, montrant, notamment à 6 mois, l'efficacité de cette prise en charge auprès des patients suivis par rapport à un groupe témoin.

Conclusion

Ces résultats préliminaires confirment l'intérêt d'une prise en charge orthophonique de type écosystémique qui, en préservant le lien de la communication entre le malade et son entourage, réduit à la fois les troubles du comportement du malade et la souffrance de ses proches.

12.01

The resonance tube method in voice therapy

Susanna Simberg

Åbo Akademi University, Turku, Finland

Background

The intent of the workshop is to demonstrate a voice therapy method and to present some examples on how it can be used in various ways depending on the voice disorder and the aims of the therapy.

Methods

Phonation into glass tubes, keeping the free end of the tube in water, has been a frequently used voice therapy method in Finland. These so called resonance tubes are used in different ways depending on the patient's diagnosis and the goal of the voice therapy. The main principle in the tube exercise is that the patient phonates a vowel-like sound into the tube. This will change the magnitude of the input impedance of the vocal tract, and the amount of impedance change is controlled by the depth of the submersion of the tube.

Results

The resonance tube method is suitable for the therapy of most voice disorders. The focus is on phonation, breathing and posture. When performing the exercise correctly, the muscles involved in voice production are in balance and enhance economical voice production.

Conclusion

The tube can be used in different ways in different phases of the therapy depending on the specific problems and short-time goals. Finnish speech therapists have found the resonance tube to be a functional tool in the treatment of various voice disorders.

Reference: Simberg & Laine(2007). The resonance tube method in voice therapy: Description and practical implementations. *Logopedics, Phoniatics Vocology*, 32, 165-170.

Depending on the length of the workshop 6 to 10 participants can take active part using the tubes and 20 persons can be passive participants.

13.01 Evidence based medicine (EBM) in speech-language therapy

Maria Valeria Di Martino, Tiziana Rossetto, Salvatore Panico
FLI / Officina Napoli Cochrane, Naples, Italy

Background

This workshop aims at illustrating the opportunities offered by Evidence Based Medicine (EBM) to speech–language therapists.

The EBM is the conscientious, explicit and judicious use of the best available evidences when taking a decision about the care of the patient.

Therefore the main issue is the relationship between research and clinical practice, that is the study of the interdependence that these two dimensions of professional practice, each of them specifically characterized but highly interrelated, have been steadily building over time. The risk, in speech–language therapy, as well as in any medical science, is that of a partition between experts in research on one side and clinical experts on another.

This critical factor clearly reveals the difficulties that still exist in communication between researchers and clinical practitioners.

Methods

The authors will illustrate the experience gained by the group of the “Officina Napoli Cochrane” (connected with the Cochrane Collaboration) and by other working groups of the Italian Federation of Speech Therapists (FLI), with regard to research outcomes derived from scientific literature in the speech–language therapy field, enlightening specificities and criticalities in implementing EBM methodology in the speech–language therapy practices

Results

A number of projects will be presented such as the creation of a “school of research”, the drawing up of guidelines for speech–language therapy, the establishment of training programs in the initial education as well as for professionals.

13.02 Competency-based Assessment by Professional based products

Peek Peek, Yvonne Zaalen
Fontys University of Applied Sciences, Eindhoven, The Netherlands

Background

Since 1985 the department Speech Language Therapy of Fontys University of Applied Sciences Eindhoven offers a curriculum by problem based learning. In 2004 the Fontys University decided to introduce competency-based learning for all their students to develop more student-orientated curriculae.

Methods

Fontys uses a description of eight competencies SLT, build upon three levels. (Compass, 2005, Minimum Revised Standards (CPLOL, 2007). The outline of our SLT-curriculum is based on the integration between knowledge, skills and the daily profession. Different types of assessment are important to collect evidence on each level of competency of the student SLT.

To acquire competencies to a certain level, students get a mix of lectures, group meetings, skillslab and practice placements outside the university. In each module the students have to develop “a professional based product”, in which the integration of both knowledge, skills and attitudes is gathered. This product is demonstrated to the other students and lecturers and afterwards evaluated, both by students and assessors. Beside these products other types of assessment are used to collect evidence on the level of competency of the student SLT as well.

Results

We will demonstrate different examples of efficient use of professionally based products and assessments in the curriculum. In subgroups we want to discuss and develop ideas for products, criteria and evaluation in the main competencies Providing care (assessment, diagnostics and treatment) and Innovation.

14.01 The speech-associated attitudes of children who do and do not stutter

Mateja Gačnik

Center for the Correction of Hearing and Speech, Portorož, Slovenia

Background

The aim of the present study was to adapt the Communication Attitude Test for Slovene population and to investigate the differences in attitudes toward speech and speaking communication of stuttering children compared with their fluent peers. Specialists agree that stuttering is a multidimensional disorder and it is inappropriate to determine its severity only by counting the dysfluencies. Some instruments were developed to gain information about other dimensions of the stuttering problem, like Brutten's CAT (1985) for investigation of the communication attitudes in children.

Methods

We used two instruments in this research: the CAT-SLO test, an adapted opinion scale and Riley test, a standardized questionnaire for the diagnosis of stuttering intensity.

Results

The results show that there is a significant difference between both groups about their opinion on speaking communication. The negative attitudes of stuttering children toward speech and speaking communication increase with age. There was no connection between age and negative attitudes in the group of fluent peers. There was a statistically significant correlation between the intensity of the disorder of stuttering and the opinions about the speaking communication.

Conclusion

The results also show that CAT-SLO test has a high level of discrimination between the two tested groups. It is the first standardized instrument for the evaluation of the opinions regarding speaking communication for the Slovenian population.

14.02 Model of onset of stuttering and related variables

Ronny BOEY

Centre of Stuttering Therapie, University of Antwerp, Wijnegem (Antwerp), Belgium

Background

Typically, the onset of stuttering occurs in young children. Although it has been suggested, related variables have not been clarified yet. The objective is to present a model of onset of stuttering and related variables based on an epidemiological and phenomenological study.

Methods

Based on an epidemiological study with 1549 participants, a model for the onset of stuttering is constructed with the use of structural equation modelling (AMOS).

Results

First, descriptive data will be presented concerning the onset of stuttering and related variables e.g. age at onset, time since onset, kinship, gender etc. Second, the model of onset will be presented and discussed. Specific indices indicate a parsimonious and well-fitted model. Findings reveal how gender, stuttering severity, temperament and tempo of speech/language development are related to the onset of stuttering.

Conclusion

The characteristics of the onset of stuttering and related variables will be helpful in clinical practice for evaluation and recognition of stuttering onset-related phenomena, and in order to comprehend and counsel parents of stuttering children.

14.03 Group therapy provision for school-aged children who stammer: a survey

Hilary Liddle, Sarah James
Leeds Metropolitan University, Leeds, UK

Background

In the UK, there are an estimated 109,000 school-aged children who stammer (CWS). The use of group therapy with this client group is widely recommended. However, little is known about the amount or nature of this provision for these children. The present study therefore aims to investigate practices of Speech & Language Therapists (SLTs) in the UK.

Methods

A survey by postal questionnaire was administered to SLTs in UK NHS Trusts. Questions addressed a range of issues including: caseloads, level of group therapy provision; therapy aims; and SLT attitudes to the evidence based practice for group intervention. Quantitative and qualitative data was yielded. Quantitative data was analysed using a combination of descriptive and inferential statistics. Qualitative data was thematically analysed.

Results

Preliminary results show that most SLTs believe that group therapy is affective, particularly for older CWS. Many SLTs feel that they do not provide as much group therapy as necessary. Insufficient numbers of children within travelling distance of the therapy venue was frequently identified as a barrier to group therapy provision.

Conclusion

This study enhances the profession's understanding of the provision of group therapy for school-aged CWS by identifying patterns of delivery and highlighting areas of need. Results of the current study are being used to inform further qualitative research investigating the experience of group therapy from the perspective of children, parents and SLTs.

14.04

CAT, Gender & Familial Stuttering

David Rowley, Suzana Jelčić Jakšić, Mirjana Lasan
De Montfort University, Leicester, UK

Background

There are several studies reporting Communication Attitude Test (Brutten, 1997) scores in different countries. This study presents results from Croatia as well as the relationship between CAT scores, gender and the impact of having a parent who stutters on CAT and age of assessment.

Methods

The records of 66 children/adolescents who stutter (CWS) from the Zagreb Children's Hospital were examined to investigate the relationship between gender and attitude. None of the CWS had co-occurring problems. A subset of 12 CWS with a parent who stutters were further examined.

Results

Mean CAT score is 21.38 (Females 23.68, Males 19.98). Significantly different ($p=0.009$). Mean age at testing is 122.86 months (F 127.60, M 119.98). No SD. Of the CWS, 12 had a parent (all Fathers) who stutters. Mean CAT score of PWS where Father stutters is 18.08, where not 22.11. SD ($p=0.03$). Mean age where Father stutters is 105.21, where not 126.78. SD ($p=0.004$).

Conclusion

Mean CAT scores for Croatia appear to be higher than for other countries, e.g. Italy 15.31. Gender breakdown reveals that females have higher CAT scores. Although the difference in age at the time of assessment is not significantly difference, the finding that females are on average nearly 8 months older may partially account for this. Where a CWS has a Father stutters, CAT score are significantly lower than where the Father does not and children are identified earlier Mean age of assessment for a CWS whose Father stutters is also significantly lower, which may account for the difference in CAT scores.

15.01 Objective assessment of speech quality in head and neck cancer patients

*Irma Verdonck-de leeuw,
Marieke de Bruijn, Louis ten Bosch, Joop Kuik, Hans Langendijk, René Leemans*
VUmc University Medical Center, Dept Otolaryngology - Head&Neck Surgery,
Amsterdam, the Netherlands

Background

Subjective speech evaluation is often used to assess speech quality of head and neck cancer patients. This study investigates to what extent acoustic-phonetic analysis contribute to objective assessment of speech quality.

Methods

Speech recordings of 51 patients 6 months after microvascular reconstructive surgery and radiotherapy for oral or oropharyngeal cancer and of 18 control speakers were subjectively evaluated regarding intelligibility, nasal resonance and articulation. The EORTC QLQ-H&N35 speech subscale was used to assess patient-reported speech outcome. Acoustic-phonetic analyses were performed to calculate formant values of the cardinal vowels /a,i,u/, the vowel space, pressure release of /k/ and spectral slope of /x/.

Results

Results revealed that size of the vowel triangle and pressure release of /k/ predicted best intelligibility, articulation and nasal resonance and differentiated best between patients and controls. Within patients, objective analyses of /k/ and /x/ differentiated between tumour site and tumour classification.

Conclusion

Objective acoustic-phonetic analyses of speech of patients after treatment for oral or oropharyngeal cancer is valid. Results contribute to further development of a multidimensional speech evaluation protocol.

15.02 Adults with clefts and speech disorders

Ana Jarc, Vesna Koželj, Irena Hočevar
Univ. Dept. of ORL & HNS Ljubljana, Ljubljana, Slovenia

Background

In Slovenia, a multidisciplinary cleft team starts treatment of children with clefts at birth. The patient is monitored until adulthood. Before the establishment of cleft team, the speech treatment was not systematically organized. Therefore, some patients still had speech problems in adulthood. The purpose of the paper is to present some such adult patients and to assess the results of speech therapy.

Methods

There were 4 adults with speech pathology treated by SLP at the Univ. Dept. of ORL & HNS Ljubljana. The available data on their previous treatment were obtained. When needed, the patients were examined by other members of the cleft team. Their speech was perceptively assessed by SLP before and after the treatment. In two patients nasality was measured by a Nasometer (Kay Pentax, USA).

Results

Before the treatment, excessive nasal resonance in production of vowels, weak consonants and even compensatory articulation of some consonants were perceptively detected in all four patients. In one patient, marked nasal emission was also noticed. After the treatment, the compensatory articulation of typical consonants and nasal emission disappeared. The nasal resonance in speech in general also improved what was registered by Nasometer in two patients.

Conclusion

The results of the treatment were so surprisingly good that we can recommend speech therapy even in adult patients with clefts in order to improve communication and self-esteem. It is also important that the SLP discusses the realistic goals of the speech therapy with the patient before the treatment.

15.03

Immediate effects of two semi-occluded vocal tract exercises

Mara Behlau, Marília Sampaio, Gisele Oiiiveira
Center of Voice Studies – CEV, São Paulo, Brazil

Background

The purpose of the present study is to check immediate effects of 2 different semi-occluded vocal tract exercises, the finger kazoo-FK and phonation into a reduced diameter straw–PhS.

Methods

46 individuals without vocal complaints (23 male and female) produced the exercises twice with a five-minute interval between them, after training to reassure proper execution. All subjects self-assessed their voices after the completion of each exercise. Voice samples collected before and after exercises were used for perceptual and acoustic analyses (VOX METRIA Program, CTS): vowel /ae/ as in “cat” and number counting (1 to 10). The perceptual analysis was performed by 3 SLP voice specialists, in random order, considering the following possibilities: “a” better, “b” better, “a” and “b” equivalent.

Results

The voice self-assessment showed positive effects (FK 78%, PhS 75%); regarding clearer voice (FK 21%, PhS 18%), stronger voice (FK 15%, PhS 16%) and easier voice (FK 18%, PhS 19%). Perceptual analysis showed better voices after PhS, both for the vowel (48%) and number counting (52%); FK exercise did not produce a clear result since a greater number of voice samples were evaluated as better before the exercise, both for vowel (39%) and number counting (46%). Acoustic analysis showed a fundamental frequency decrease after both exercises (FK 6.5Hz, $p=0.0002$ and PhS 5.5Hz, $p=0.0001$).

Conclusion

Both exercises produced positive self-reported effects and a reduction on fundamental frequency; only the phonation into straw yielded better perceptual results.

15.04 Auditory-perceptual rating of overall voice quality in combined voice samples

Youri Maryn, Gwen Van Nuffelen, Bernadette Timmermans, Fons Mertens, Marc De Bodt
Sint-Jan General Hospital, Brugge, Belgium

Background

It is important to include both continuous speech and sustained vowel samples in the perceptual assessment of voice quality. However, how reliable are auditory-perceptual ratings of combined samples (C) compared to ratings of sustained vowels (V) and continuous speech (S)? What determines the final perception of the concatenated samples?

Methods

Two sentences of a commonly used Dutch text and 3 seconds of /a./ were provided by 39 voice disordered subjects. Both samples were concatenated to one sound file. Five experienced clinicians rated all samples on the 4-point EAI Grade (G) scale. Mean G-scores were calculated. The inter- and intrarater reliability were investigated with kappa (K) statistic and Spearman (R) coefficient. The coefficient of determination (R^2) was calculated between C and S, C and V, C and mean of S and V, and C and worst of S and V.

Results

K-based intrarater agreement was good for C and S and moderate for V. R-based intrarater agreement was high for all samples. Interrater agreement was moderate for all samples.

G in C was mainly determined by the average of G in S and V, and least by the worst of S and V.

Conclusion

Agreement was best for S, followed by C. Least agreement was found for V. These findings grossly agree with existing literature (De Bodt, 1997; Bele, 2006). It is interesting to see that the rating of C relates best to the average of ratings of S and V. This empowers the inclusion of both sample types in the clinical perceptual evaluation of voice quality.

16.01 An investigation into the communication skills of long-term unemployed young men

Natalie Elliott, Rachel Iredale, David Rowe, Alison Stroud
University of Glamorgan, Pontypridd, Wales

Background

Recent years have seen an increasing interest in the long-term outcomes for individuals with communication impairments. The relationship between communication impairment and employability has received limited research attention.

Methods

The aim of this study was to estimate the prevalence of specific language impairment (SLI) in a population of long-term unemployed young men aged 18-24 years in Wales. SLI was measured using the listening vocabulary, listening grammar, speaking vocabulary, and speaking grammar subtests of the TOAL-3 and Raven's standardised progressive matrices. The debate surrounding the difficulties of defining SLI are discussed; data (n = 76) are described using two commonly used cut-points (1 SD and 2 SD below the mean), as well as using both cognitive and chronological age referencing.

Results

The prevalence of SLI in a cohort of unemployed young men in Wales was found to be considerably above the 1% prevalence found in the United Kingdom general population. This was true regardless of the standard used to define SLI.

Conclusion

The results of this study suggest a role for speech and language therapy in the area of unemployment. Further research is needed to investigate the efficacy of this role within a variety of service delivery frameworks.

16.02 Literacy skills in adults with early language or other disorders

Margarita Seni, Maria Vlassapoulou, Rosalia Yannakis, Vasiliki Rotsika, Aikaterini Sakellariou
University of Athens Medical School, Athens, Greece

Background

The long-term development of literacy skills in children with specific developmental language disorder (SDLD) is of particular interest, especially if this is compared to other childhood psychopathologies. It is hypothesized that the frequency and type of errors in literacy skills and numeracy will be greater in this former group as young adults than in their peers, with diagnosed internalizing / externalizing psychopathologies.

Methods

The sample consists of fifteen young adults (Mean Age 29), divided into two groups, according to childhood disorder. They were tested on reading ability and comprehension, writing skills and numeracy, using a test for adults. Outcome criteria were errors made, type of errors, time of reading, reading comprehension, problem solving, type of errors in writing skills.

Results

The SDLD group had lower scores in all literacy and numeracy tasks. The most frequent errors are word replacement and absence of intonation. Interestingly, these error types are common for both groups.

Conclusion

This study indicates learning difficulties in both groups examined, with a higher frequency of errors in participants with SDLD. The implications of these findings are discussed and recommendations for intervention are made.

16.03 Evaluation of Speech Fluency with the Modified Time-Interval-Analysis

Anke Alpermann, Ulrich Natke, Walter Huber
Hogeschool Zuyd, Heerlen, Netherlands

Background

The two main approaches of stuttering therapy differ with regard to their fluency goals: Stuttering Modification seeks to modify singular stuttering events while Fluency Shaping changes the whole manner of speaking. Until now a comparison of the different effects on speech fluency does not make sense as the acquired speech patterns are not considered in outcome studies.

A modified version of the time-interval-analysis seems to be a suitable measuring instrument. For this analysis a speech sample is divided into intervals of the same length, which are consequently presented in a randomized order. Per interval it has to be judged whether an interval contained at least one stuttering event or was spoken fluent. In the modified version the use of a speech pattern can be counted in a separated category.

Methods

45 stuttering adults were followed for one year. 15 subjects underwent a Stuttering Modification therapy, 15 subjects attended a Fluency Shaping therapy, while 15 adults did not attend any therapy. Each client was contacted two times per telephone for a spontaneous speech sample. These samples were analyzed with the modified time-interval-analysis.

Results

Results show different changes in speech fluency for the three groups which are mainly caused by the variable use of speech patterns.

Conclusion

Based on these results the appropriateness of the modified time-interval-analysis for outcome studies is discussed. Furthermore the data allow a discussion to what extent speech patterns are used in the long-term.

16.04 On-line self report: Developing a tool for clinical practice

Sarah James, Shelagh Brumfitt, Patricia Cowell
Leeds Metropolitan University, Leeds, United Kingdom

Background

Self-report facilitates holistic treatment planning & evaluation of multiple outcomes of intervention. However, the accuracy of global, retrospective self-report measures may be compromised by the influence of cognitive processes involved in completing them. They are also poorly suited to measuring changes in phenomena over time & across contexts. This paper discusses the role of self-report in clinical intervention and reports on the development of an instrument that enables clients who stutter to self-report their responses immediately following speaking situations.

Methods

A preliminary version of a Speaking Task Response Questionnaire (STQR) was developed and piloted with groups of people who do ($n=7$) & do not ($n=7$) stutter in face-to-face and telephone speaking situations. Content validity of this preliminary scale will be analysed using item and scale content validity indices from ratings judged by content experts who are 3 people who stammer & 3 experienced clinicians. Items with low content validity will be revised, substituted or eliminated from the scale.

Results

The STRQ differentiated between groups of people who do & not stutter and, for the group who stutter only, between the telephone and face-to-face speaking situations. Content validity analysis results will be reported.

Conclusion

The STRQ distinguished between groups of people who & do not stutter and between different types of speaking situation. The STRQ is discussed in the context of both its future development & its contribution to the field of real-time data capture.

17.01 Myofunctional Influence on the Facial Growth in the First and Mixed Dentition

Niels Hulsink, John Flutter

Kings College Hospital Dental School University of London, London, England (UK)

Background

The course focuses on the etiology of malocclusions and how to correct the cause.

It is appropriate for speech therapists, orthodontist and general dentists who have an interest in (early) treatment.

Methods

Before treating a malocclusion we need to look at the etiology of the disorder and correct the cause as well as the result of the problem.

Tooth position; jaw shape and size; jaw relationship and facial appearance are under the influence of muscle and postural patterns.

To consider the etiology of the malocclusion we need to look at:

Form: The shape of the mandible, maxillae and palatine bones

Function: The effect of breathing patterns, swallowing, chewing, talking on the dentition

Posture: The balance of the entire skeletal system: there is no distortion in one part of the body that is not reflected throughout the body.

Results

When we do change muscle patterns in growing children we can record improvements in arch form, arch size, jaw relationship and facial appearance.

In the permanent dentition we can also make improvements in the muscle patterns. Improvement in muscle patterns alone is often not enough to get the teeth into full alignment.

Conclusion

What you will learn:

How to diagnose and treat Myofunctional Dysfunction in all your patients.

How to treat Myofunctional patterns in the first and mixed dentitions using prefabricated removable appliances.

How to diagnose the treatment.

How to incorporate Myofunctional Treatment into your existing speech therapists, orthodontic or general practice.

17.02 Swallowing problems in Spinal Muscular Atrophy type II

Lenie van den Engel-Hoek,

Corrie Erasmus, Bert de Swart, Lilian Sie, Michel Steenks, Imelda de Groot

Department of Rehabilitation, Radboud University Nijmegen Medical Centre,
Nijmegen, The Netherlands

Background

In patients with spinal muscular atrophy type II (SMA type II) feeding and swallowing difficulties are common. This study was designed to investigate the underlying components of the swallowing problems in SMA type II.

Methods

Six children with SMA type II and six healthy matched controls between 6;05 and 13;04 were investigated. Submental electromyography (sEMG) during swallowing of 5 ml thin liquid and 5 g solid food in two different postures was used in each participant. Mouth opening and range of mandibular motion were investigated. In the patient group a videofluoroscopic swallow study was performed.

Results

Results revealed significant differences between swallowing solid food in the patient and control group as well as in duration as in mean amplitude of the sEMG signal. There were no differences in mean amplitude of the sEMG signal in the patient group between thin liquid and semi solid. The videofluoroscopic swallow study showed obvious problems with the swallow of 5 ml semi solid food.

Residue in the vallecula after the swallow was striking. 5 of the six patients had a reduced mouth opening and range of mandibular dysfunction.

Conclusion

The swallowing problems are due to a neurological part (innervations from cranial nerves in the brainstem) in combination with biomechanical component (compensatory posture with limited jaw opening). The results suggest an integrated treatment with the advice of drinking water after meals and an adapted posture during meals to prevent aspiration pneumonias.

17.03 Intervention and follow-up in children with auditory processing disorders

Karin Neijenhuis, Jessica de Frel

Royal Auris Group, audiological centre, Rotterdam, The Netherlands

Background

In The Netherlands, standardized test batteries for auditory processing disorders (APD) are available since 5 years. APD are diagnosed in a multidisciplinary setting (Audiological Centre). Analysis of a clinical group of 91 clients with auditory complaints showed that only 40 of these clients were diagnosed with APD. When a diagnosis of APD applies, clients usually receive recommendations following a 3-component model of remediation, which is a common model in the APD- literature (Bellis, 2003; Bamiau et al, 2006): a mixture of environmental modification, auditory training and compensatory strategies. After a period of 6-12 months, APD children are seen for a follow-up.

Methods

In order to determine what recommendations and follow-up procedures are most effective, we gathered (pre- and post-) data in a subgroup of 15-20 children. These data consist of auditory processing test scores, questionnaires, reports from speech-language therapists and interviews with parents.

Results

Results are displayed in a descriptive manner because of the heterogeneity of the population and the intervention methods.

Conclusion

Although there is a lack of evidence concerning the effectiveness of intervention of APD, a 3-component approach seems acceptable because of the broad perspective which contains both bottom-up and top-down procedures. The present results help us to standardize intervention methods and follow-up procedures. In the future, this could be the basis for a more systematic study in order to reach higher levels of evidence.

17.04 Evaluation de la pratique professionnelle du bilan orthophonique

Philippe Bétrancourt

Fédération nationale des orthophonistes, Paris, France

Background

Cette communication expose la manière dont la Fédération Nationale des Orthophonistes (FNO) a élaboré un protocole d'évaluation de la pratique professionnelle des orthophonistes lors de la réalisation du bilan orthophonique. Il a été réalisé en collaboration avec la Haute Autorité de Santé, (HAS) organisme administratif indépendant qui a apporté un soutien méthodologique et technique. Dans un premier temps à partir d'un référentiel de contenu du bilan orthophonique incluant toutes ses dimensions, un questionnaire a été élaboré pour servir de base de travail.

Ce questionnaire aborde tous les aspects de la réalisation du bilan orthophonique, de la prise de rendez-vous à l'accueil du patient, de la conduite de l'entretien à la mise en œuvre des épreuves d'évaluation, des conditions d'hygiène à celle de sécurité. Il interroge l'orthophoniste sur sa pratique. Ensuite, nous avons choisi un mode d'évaluation sous la forme de « groupe de pairs. » Dans cette expérimentation, sous l'animation d'un « facilitateur » chacun s'approprie le questionnaire, le remplit puis, lors de réunion peut confronter sa propre pratique à celle de ses pairs. Il dispose ensuite d'un profil personnel de sa pratique par référence au questionnaire et peut s'interroger sur la nécessité d'en modifier certains aspects. La finalité de cette évaluation est formative. Elle n'est pas normative et ne donne lieu ni à gratification ni à sanction. Il s'agit d'une autoévaluation et chaque professionnel reste assuré de l'anonymat de ses résultats.

18.01 Importance of encouragement in automatic voice range profiles

Yuri Maryn

Sint-Jan General Hospital, Brugge, Belgium

Background

Voice range profiles (VRP) are affected by many methodological factors. One of these factors is probably the degree of encouragement or extrinsic motivation applied by the clinician to expand the borders of the VRP. Therefore, the following research question was studied: is there a statistically significant difference between VRP's with and without encouragement?

Methods

Thirty-six student participants were randomly assigned in two groups of a counterbalanced cross-over study design. There were 2 settings – a neutral setting (N) with a minimum of encouragement and a stimulus setting (S) with a maximum of verbal as well as non-verbal encouragement - and the 2 groups differed in the order in which the 2 settings were completed. A standardized VRP-protocol was applied for all participants and 7 VRP-parameters were measured: F0-low, F0-high, F0-range, I-low, I-high, I-range and VRP-surface.

Results

This study shows that encouragement results in a statistically significant improvement of the VRP-parameters: F0-high, F0-range, I-high, I-range and VRP-surface. This result cannot be attributed to sex or experimental order. There was no statistically significant impact of encouragement on F0-low and I-low.

Conclusion

Encouragement is a clinically important factor in VRP-measurement. Clinicians should be aware of its' methodological impact. For increase of standardization and reliability, a high but steady degree of encouragement is advised.

18.02 V-RQOL questionnaire: influence of gender, age and level of voice usage

Mara Behlau, Daniela Putnoki, Gisele Oliveira, Fabiana Hara

Center for Voice Studies – CEV, São Paulo, Brazil

Background

The purpose of the study is to analyse the self-reported impact of a voice disorder on the quality of life of individuals with vocal complaints, according to gender, age and level of voice usage.

Methods

1034 V-RQOL questionnaires (Hogikyan, Sethuraman, 1999) answered by Brazilian subjects (996 female, 308 male) were analyzed. Comparisons were carried out according to gender, age and level of voice usage (Koufmann, Isaacson, 1991: level I. elite vocal performer; level II. professional voice user; level III. non-vocal professional; and level IV. non-vocal non-professional).

Results

The produced scores were similar for male and female (total $p=0.708$; physical $p=0.717$; social-emotional $p=0.904$) with the following mean values: total 75.2; physical 71; social-emotional 82.2. Findings showed better scores for younger people between 20-29 years (total 82.2; physical 77.8; social-emotional 89.2; $p=0.0001$) and worse scores for subjects older than 60 (total 62.7; physical 59.3; social-emotional 68.5). According to the level of voice usage, level II, users that might have an impact on their job performance with a moderate voice problem, had the lowest total (73.2; $p=0.025$) and physical (69.0; $p=0.010$) scores. Socio-emotional scores were the least reduced for all conditions.

Conclusion

Self-reported impact on quality of life caused by a voice problem does not suffer from gender influences. The impact of a dysphonia increases with age. Vocal disorders cause greater impact on the quality of life of professional voice users, such as teachers.

18.03

Acoustic Voice Quality Index: external cross-validation

Youri Maryn, Mertens Mertens, Bernadette Timmermans, Gwen Van Nuffelen, Marc De Bodt
Sint-Jan General Hospital, Brugge, Belgium

Background

The Acoustic Voice Quality Index (AVQI) is a multivariate model of overall voice quality consisting of six acoustic parameters derived from combined samples consisting of continuous speech and a sustained vowel (Maryn et al., submitted). Investigation of the concurrent validity resulted in $r=0.780$ and analysis of the diagnostic precision yielded $AROC=0.895$. These statistics reveal respectable estimates of concurrent and diagnostic validity. The present study, however, evaluates the external cross-validity of AVQI in a new set of data.

Methods

Three seconds of a sustained vowel and the first two sentences of a standardized Dutch text were recorded from 39 subjects. Both sample types were concatenated to one sound file for auditory-perceptual rating of G by five experienced voice clinicians. Mean G was calculated for every sample. Sound files consisting of only the voiced segments of the two sentences and the sustained vowel were analyzed with acoustic measures in order to yield AVQI-scores. The methodology was identical to the original study. The concurrent validity and diagnostic precision were investigated with r and AROC, respectively.

Results

There was $r=0.796$ between mean G and AVQI. An $AROC=0.920$ was found for AVQI.

Conclusion

These results are very comparable with the results from the original study, indicating a respectable external cross-validity. They also highlight the feasibility of including both sample types in the perceptual as well as acoustic measurement of overall voice quality and dysphonia severity.

18.04 Can students with voice disorders be detected by a short voice screening test?

Susanna Simberg, Eeva Sala
Åbo Akademi University, Turku, Finland

Background

Voice disorders are common among those who work in vocally demanding occupations. The results of some studies show that voice problems are common also among students studying for such occupations. This initiated the development of a voice screening test at the Student Health Center in Turku, Finland.

Methods

The screening test consists of a questionnaire concerning vocal symptoms and a perceptual assessment of voice quality performed by nurses who have been trained in administering the test. The students who report two or more vocal symptoms occurring weekly or more frequently and/or have deviant voice quality have been referred to a medical examination performed by a phoniatician.

Results

The results from six years of screening show that the most common symptoms reported by the students are throat clearing or coughing, the voice becomes strained or tires, and sensation of pain or lump in the throat. About 9% of the students who have participated in the test have a functional voice disorder. Additionally, about 9% have chronic laryngitis and 2% have vocal nodules or minor findings on their vocal folds. The experiences from voice screening seem to implicate that first-year students have less severe voice disorders than those who have studied for several years.

Conclusion

Based on our experience, we recommend that regular voice screening tests should be offered to students who study for vocally demanding occupations in order to prevent more serious voice disorders.

19.01

Speech motor control on word level

Yvonne van Zaalén

Fontys University of Applied Sciences, Eindhoven, Netherlands

Background

An instrument to assess speech motor control skills on word level can contribute important information to the differential diagnostics in cluttering and stuttering.

Methods

Participants were 47 disfluent persons including 33 males and 14 females and 327 controls including 271 males and 56 females. Controls were included in order to obtain normative values on speech motor control at the word level on the SPA test.

In order to examine the speech motor control on word level, an assessment instrument was developed. The SPA (Dutch: Screening Pittige Articulatie), designed by the first author, is a specially created speech task that provides information on speech motor control and word structure productions at the word level when speaking at fast rates. In an elicitation procedure, three repetitions of ten multi-syllabic words at a fast speech rate were obtained. In this study, errors were defined within three different categories: (a) Accuracy, (b) Smooth Flow, and (c) Rate.

Results

The SPA test on speech motor control on word level productions differentiated persons with cluttered speech from persons who stutter.

Conclusion

A validation of the SPA (Dutch: Screening Pittige Articulatie) instrument is presented. Aim of the expert workshop is to start translation and validation processes in other European countries.

19.02 Epidemiology and phenomenology of stuttering: a model of development

Ronny BOEY

Centre of Stuttering Therapie, University of Antwerp, Wijnegem (Antwerp), Belgium

Background

Thus far, epidemiological studies (e.g., of Johnson (1959), Andrews and Harris (1964), Yairi and Ambrose (1999, 2005) focussed on the onset of stuttering. However, it seems important and interesting to study the stuttering characteristics post onset.

Methods

Descriptive data related to the onset of stuttering have been obtained for a group of 1549 participants. Reported and observed variables have been obtained in order to test several hypotheses concerning the stuttering characteristics post onset and the relate and interrelated phenomena (e.g., age, gender, speech attitude, listener reactions amongst others)

Results

First, the age-related stuttering characteristics have been revealed such as stuttering-like disfluencies, stuttering associated behaviour, stuttering severity. Second, the relationship between stuttering severity and other variables have been clarified such as awareness, speech attitude and personality measures, precipitating factors, listener reactions, onset-characteristics.

Conclusion

stuttering characteristics seem to be different related to age groups and depend on other related phenomena. The findings of this study can be taken to justify the choice of a social cognitive behaviour therapy for stuttering.

19.03 Long term effects of a social-cognitive behaviour therapy for stuttering

Ronny Boey

Centre of Stuttering Therapie, University of Antwerp, Wijnegem (Antwerp), Belgium

Background

The effects of therapy have been studied on long term when comparing groups of patients with and without therapy. The predictive effect on the outcome of treatment of initially stratified variables has been studied.

Methods

Three at random selected groups of persons who stutter participated (N = 122): a therapy group, an only-diagnosis and a drop-out group. Observed and reported data have been obtained at the first intake and at the moment of follow-up on the average 10 years later, concerning: (a) self-report and diagnosis of stuttering, (b) stuttering-like disfluencies, (c) precipitating factors, (d) stuttering-associated behaviour, (e) speech-related cognition and emotion, (f) speech attitude, (g) personality characteristics, (h) listener reactions. In addition, a quality-of-life study has been completed.

Results

(a) The diagnosis of stuttering persists twice as much for the drop-out group compared with the therapy group. (b) The present findings contribute to clarify the reported rate of unassisted recovery for stuttering. (c) All for-mentioned speech-related phenomena improved significantly for the therapy-group, compared with the drop-out group. (d) The outcome seems to be age and gender-related. Initial stuttering severity and temperament are less predictive.

Conclusion

A social-cognitive behaviour therapy for stuttering significantly improves the speech quality, speech attitude, personality characteristics and quality of life of persons who stutter.

CPLOL is the **Standing Liaison Committee of Speech and Language Therapists / Logopedists in the European Union.**

Members of CPLOL are the national professional organizations of SLTs / logopedists.

As of 2007 CPLOL is composed of **31 professional organizations of speech and language therapists / logopedists in 28 European countries.**

The member organizations represent more than **60,000 professionals.**

© CPLOL 2009

145, Bd Magenta, F-75010 Paris

info@cplol.eu - www.cplol.eu