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An interactionist way forward for improving the relevance of Speech –Language Therapy and Audiology research and practice.

I warmly welcome the opportunity to respond to the article by Kathard et al., which raises so many very important issues. I intend to build on what has been presented and lay out some options for consideration and discussion. These options involve a paradigm shift in the conceptualisation of our practice and related research and offer a way forward. This re-conceptualisation is just as pertinent to people in more and less developed areas of the world. It can apply to both the professions of Audiology and Speech and Language Pathology (SLP)¹ and relates to all professions involved in rehabilitation.²

My comments revolve around five main areas:

1. The global context.
2. The concepts underpinning our professional practice and research.
3. How we communicate these concepts.
4. What impact 2 and 3 have on our research and practice.
5. How these relate to emerging rehabilitation research and practice.

1. The global context

Research indicates that around 2-3 % of a population are likely to have problems with talking and communicating. This estimate appears to be similar in income rich and income poor countries of the world (cf. Enderby & Pickstone, 2005 and Hartley, 1998, 2001). SLP and Audiology are two of the major professions that offer support to this client group. However, Sell et al. (2001) estimate that SLP services, for instance, are only available in 20% of the world. This leaves 80% of the world without these essential services. To date SLP research has concentrated on evidence in Phase 1-3 of the MRC phases for developing evidence for the efficacy of complex health interventions, (MRC, 2000). This includes, theory exploration, intervention and outcome measurement tool development and piloting. So even in income rich areas of the world, the evidence for the efficacy of our professional interventions is still embryonic. For Audiology, evidence has a closer fit with the hierarchy of evidence relating to efficacy of interventions (OCEN 2001).

2. The concepts underpinning our practice and research

As the authors note, these two professions have evolved from the medical paradigm, generating a positivist/experimental approach to collecting evidence to underpin their practice. Consequently practice very often reflects a 'disorder/cure' based focus. This is most certainly appropriate for some aspects of our work. For example, in Audiology practice we are charged with detailed assessment of hearing levels (comparing individual levels of hearing with the 'normal' levels expected) and prescribing and fitting hearing aids (to bring the hearing levels

nearer to 'normal'). Or in the assessment of cleft palate functioning (comparing it to normal functioning) in relation to (normal/accepted) sound production. As the authors point out this approach has served us well in the development of some of our core skills and professional identities, and may still be seen as necessary for our survival. However, as speech and language therapy practice has developed, the strong link with a 'disorder' based approach is often problematic and limiting. This is particularly so when seeking to improve or maximise communication related to 'living with' these (disorder and contextually related) limitations. It is also problematic when diagnoses do not have a secure evidence base linking them with a pathology, such as stammering and delayed language development.

When linking the diagnosis to subsequent treatment, a conceptual incompatibility between 'disorder' and 'disability' emerges. In practice, for example, this may result in interventions (services) that focus on the 'disorder', leaving the other dimensions of disability receiving less priority and recognition. Using ICF (WHO, 2001) terminology, this might be expressed as concentrating therapy on, improving body function (e.g. swallowing,) with less attention to improving activity limitations (eating, talking), participation restrictions (socialising/communicating through alternative means of communication) and environmental factors (community and family understanding). When the therapy process addresses only one dimension of disability, the level of disablement may remain relatively unaffected and the intervention may be deemed ineffective. This dilemma remains the same when therapists tackle one of the 'non disorder' dimensions of disablement such as contextual factors (to use the ICF terms), by increasing family understanding and coping capacity. It is likely that all dimensions need attention if our interventions are to be effective. Tackling contextual factors also carries the additional problem of limited available evaluation tools. So the effectiveness or otherwise of the interventions often remains unproven.

Given that the aim of SLPs is to improve communication by whatever means are required, the 'disorder/cure' focus appears to limit and confuse their practice and associated research activity. A 'disability' approach incorporating all the dimensions highlighted in the ICF (WHO, 2001), could promote a BALANCED assessment of all contributing dimensions (including the disorder). Practitioners would be able to frame and defend their interventions in these terms. It's worth noting that the ICF has been adopted by 191 countries as a tool for promoting a more universal response to people who have activity limitations and participatory restrictions. It provides a common language and offers the opportunity for all groups involved to communicate more effectively.

Audiological practice, which possibly has a closer link with pathology, could also benefit from this broader approach if it is to be effective, for example, in supporting better utilisation of hearing aid equipment. The factors that affect such utilization are often 'non disorder based' and may relate to confidence, negative attitudes or vanity about appearances. These social determinants of the problem of underutilization also need to be assessed, addressed and evaluated as part of good Audiological practice.

1. For the purposes of this discussion paper no distinction is made between Speech and Language Pathology (SLP) and Speech and Language Therapy (SLT). The terms are considered to be mutually inclusive.
2. Defined as maximising functional status and promoting participation.

3. How we communicate these concepts

Although our practice may be beginning to change (e.g. conversation partners for people with aphasia (an environmental intervention) (Parr and Byng, 1998); research into hearing aid usage (Pothier & Bredenkamp, 2006)). Our existing professional language sends out conflicting and confusing messages. For example, 'The South African Journal of Communication 'disorders' and the 'International Journal of Language and Communication 'disorders', re-enforce a narrow focus which is not compatible with these new approaches. Also the continued use of 'Speech' and 'Pathology' in our titles e.g. Speech and Language Pathologist, (South Africa and the US). Such language only serves to re-enforce the perception that our practice is 'speech' and 'disorder' focussed. This does nothing to promote a public and professional understanding of our role in promoting communication and participation by the best possible method (which may not, and often is not, speech, e.g. AAC, Makaton etc.)

4. What impact 2 and 3 have on our research and practice

For SLPs we find ourselves trying to defend our practice in terms of 'curing' 'speech and language' problems and this is often how we are judged by our clients and by our professional colleagues... how well can we teach people to speak again? This may be irrelevant to many of our client groups such as stroke patients or children with learning difficulties. Nevertheless the cure aspect influences the thrust of our research activity, and it is these aspects which are rewarded and understood. The communication, interactive and therapeutic side of our practice remains less visible. Maximising functional status and promoting participation as positive outcomes are not well understood or defended.

5. Emerging rehabilitation practice and research

Like Kathard et al., the physiotherapy literature also reveals discussions about why much of the research that is conducted in physical therapy is not relevant to clinicians (Colins, 2005). Colins agrees that a reductionist approach cannot provide evidence to support all aspects of physical therapy, because it is complex and dynamic. He suggests that dynamic systems theories (Thelen et al., 1994) help to conceptualise the multiple factors that contribute to the complexities of clinical situations. He advocates making use of, rather than eliminating, sources of variation. A Canadian team, the Ontario Rehabilitation Research Network (ORRN) of multi-professionals have generated a useful position paper (Bartlett et al., 2006) utilising this approach and suggest an 'interactionist perspective' to guide research questions, design and subsequent good practice. They believe that client outcomes are generally influenced by interdependence (i.e. interaction) of factors, rather than by a single factor (Last, 2001) and that a comprehensive approach is needed for research to become meaningful (Bartlett & Lucy, 2004). They argue that these perceptions can provide a unifying direction for rehabilitation research. They too suggest that the ICF provides the starting point, which can guide the specification of the research question and subsequent design. This demands that the question takes precedence and research designs are then chosen from an extensive repertoire. These methods are used to examine the disability experience over the life time and address multifaceted interventions, low incidence conditions and the development of new interventions. This reflects the MRC phases for evaluating complex health interventions, (MRC, 2000) but additional emphasis is placed on the necessity

for inclusion of clients and families and all stakeholders in planning research and treatment. This is the mechanism for establishing the validity of research by linking it to practice and lived experiences, i.e. through an interactionist approach. This resonates well with Kathard et al. who ask us to 'engage with what is relevant' to 'enhance the effectiveness of practice'.

CONCLUSIONS AND SUGGESTIONS

Some ways of addressing the dilemmas outlined in the Kathard et al.'s paper would be to:

1. Work towards recognising all the dimensions of disablement in assessments and interventions and defend them through using a theoretical base such as the ICF.
2. Be clearer about the aims of our practice.
3. Consider changing the names of our professions and journals to reflect and communicate a more accurate picture of what we aim to do in our practice.
4. Reflect these aims in our research practice.
5. Join with other rehabilitation practitioners to develop and contribute to a research philosophy that can be defended in terms of validity and fit for purpose rather than accepting/adopting other approaches that are not always appropriate to our practice.

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