

ASSOCIATION OF
PAEDIATRIC
CHARTERED
PHYSIOTHERAPISTS

JOURNAL



SEPTEMBER 2002

ISSUE
NO. 104

OFFICERS OF THE ASSOCIATION

CHAIRMAN	Mrs Adare Brady	8 Ballyloughan Ave Ballymena N Ireland BT43 25 HN
VICE -CHAIRMAN	Mrs Lesley Smith	Physiotherapy Dept Royal Hospital for Sick Children Yorkhill NHS Trust, Dalnair St Glasgow G3 8SJ
SECRETARY	Mrs Christine Shaw	42 Cammo Grove Edinburgh EH4 8EX
TREASURER	Ms Fiona Down	5 Home Farm Close Hilton HUNTINGDON Cambs PE28 9EW
PUBLIC RELATIONS OFFICER	Ms Gill Holmes	Child Development Centre Alder Hey Children's Hospital Eaton Rd Liverpool L12 2AP
POST REG. ED. SPOKESMAN	Ms Adele Moore Snr Lecturer in Physiotherapy	School of Health & Social Care Collegiate Crescent Campus Sheffield Hallam University SHEFFIELD S10 2BT
PUBLICATIONS OFFICER	Mrs Lorna Stybelska	Paediatric Physiotherapy Dept Cumberland Infirmary CARLISLE Cumbria CA2 7HY
MEMBERSHIP SECRETARY	Ms Sian Howells	Physiotherapy Dept Llandough Hospital Penlan Rd Vale of Glamorgan CF64 2XX
EDITOR	Mrs Sally Braithwaite	531 Church Rd Yardley Birmingham B33 8PG
RESEARCH OFFICER	Mrs Sarah Crombie	10a Record Road Emsworth Hants PO10 7NS
C.I.G. LIAISON	Mrs Linda Fisher	Special Educational Needs & Psychology Service S.E.Essex Area Education Office The Knares BASILDON SS16 5RX

EDITORIAL BOARD

Core group	Mrs Sally Braithwaite – Editor	Mrs Sue Whitby	Ms Gill Smith
Board Members	Mrs Barbara Bowen Ms Gill Holmes	Mrs Judith McArthur Mrs Adare Brady	Mrs Lesley Smith Mrs Terry Pountney

Editorial	2
-----------------	---

Letters to the Editor	3
-----------------------------	---

ARTICLES

Hypermobility Among Children, Prevalence and Assessment Criteria – A Critical Literature Review	4
Birté Tornøe	

Ethical Considerations In Paediatric Research	12
Dr Terry Pountney PhD MA MCSP	

Case Study	17
Alison Alexander MCSP	

Regular Features

APCP Matters	29
--------------------	----

Research	34
----------------	----

Regional Representatives	36
--------------------------------	----

Regional Reports	37
------------------------	----

APCP Publications	41
-------------------------	----

Here and There	42
----------------------	----

Courses	46
---------------	----

The Editorial Board does not necessarily agree with opinions expressed in articles and correspondence,
and does not necessarily endorse courses advertised

EDITORIAL

Already this year members of APCP have had the chance to meet, discuss and share ideas at the research study day in Cambridge. However, there is a second opportunity in the offing with our main conference being held as part of the CSP Congress in October at the International Convention Centre in Birmingham. There has been much discussion at more than one National Committee Meeting as to the advantages and disadvantages of holding our own APCP conferences wherever we may choose to do so in the country and those associated in a partnership with the CSP and other special interest groups.

Although as a group APCP enjoys meeting alone and addressing matters very much orientated towards paediatric practice; value was also seen in opportunities to network with colleagues who work with other client groups to see if they might have some ideas which will help us tackle some of our own difficulties. These will not necessarily be in the clinical field but perhaps revolve around such thorny issues as waiting list management or the best practice to ensure that non-attenders who cannot be responsible for getting themselves to therapy sessions are not disadvantaged by being lost to a hard pressed system with a sigh of relief. So don't miss your chance. There is still plenty of time to book your place at conference. Come and share this opportunity to network with colleagues from a wide range of professional interests and geographical locations. I look forward to meeting many of you there.

On a slightly different note. I notice our letters section in this journal is getting very thin again. Don't forget that this section of the journal is also an opportunity for you. Use it to exchange ideas, share information and seek help from your colleagues. I know that many of you receive replies from the letters you submit, it would be nice to share these with us all so we could all follow the debates and exchanges that have been set up. It would be excellent therefore, if you not only sent your initial letters to the journal but also if they were appropriate to share your replies as well. These are your pages, make them work for you.

Sally Braithwaite

Copy for the
DECEMBER 2002 JOURNAL
must be with the editor by
1st NOVEMBER 2002

The editorial board reserve the right to edit all material submitted

LETTERS

Sue Walmsley
Clinical Specialist Paediatric
Physiotherapist
Jeannine Howard
Clinical Specialist O.T.
Salford NHS
Primary Care Trust
Paediatric Physiotherapy
Walkden Clinic
Bridgewater Road
Walkden
Manchester M28 3JE
Tel: 0161 212 5200
Minicom 18001 0161 212 5219
Fax: 0161 212 5201

Dear Editor

As a group of Paediatric Occupational Therapists and Physiotherapists we work together to provide a pre-school service to children with Neuro-developmental problems.

We are keen to use a standardised assessment tool for this group of children. Is anyone using an existing tool or have you developed one and would you be willing to share it with us?

Please contact us c/o:
sue.walmsley@salford-pct.nhs.uk or annyong@salford.gov.uk

Thanks.

Yours sincerely

Sue Walmsley
Clinical Specialist Paediatric Physiotherapist
Jeannine Howard
Clinical Specialist O.T.

Pat Straker, MCSP, SRP
Senior I Paediatric Community
Physiotherapist
Children's Physiotherapy
Services
Children's Centre
Canolfan i Blant
University Hospital of Wales
Heath Park
Cardiff
CF14 4XW
Phone: 029 2074 2107
Fax: 029 2074 3599

Dear Sally,

Please could you include this letter in the next APCP Journal.

Is anyone using FES (Functional Electrical Stimulation):

- (a) with children with cerebral palsy and,
- (b) post Botulinum toxin.

Please contact me if you can help.

Yours sincerely

Pat Straker, MCSP, SRP
Senior I Paediatric Community Physiotherapist

HYPERMOBILITY AMONG CHILDREN

Prevalence and Assessment Criteria

A critical Literature Review

BIRTE TORNOE

Pt student MSc Physiotherapy
Kongensgade 102. 1, tv
DK-6700 Esbjerg

Summary

The aim of this paper is to review articles with a focus on epidemiology of hypermobility among children and the diagnosis scale used for evaluating the degree of severity of the condition.

Method

A literature review was undertaken, based on four key articles and supplementary literature.

The choice of articles is based on both aspects of quality and contents. Articles that focus on prevalence and assessment criteria have been selected. One is chosen as a comprehensive review of these issues. Literature has been selected between the years of 1992 – 2000 inclusive.

The article written by Antoni Bulbena et al is selected because of its central position as a primary source in the discussion of differences and validity of diagnostic criteria

Searches were made on Medline, Cinahl, Cochrane and WebQMUC along with hand searching of relevant literature.

Results

In the selected papers for this review the manifestation of hypermobility is described with a prevalence of 13.4 – 16.1 % in primary and secondary school aged children in Holland and Egypt. This rate tends to decrease with age and is significantly lower in males. Hypermobility is statistically more frequent in females and in the non-dominant side of the body. There is a significant correlation between arthralgia and musculoskeletal complaints and hypermobility.

The prevalence of hypermobility relates to the criteria with which the condition is diagnosed. The different scoring systems differing in terms, points and cut off criteria are discussed.

Conclusion

The literature reveals variations in defining hypermobility and benign hypermobility syndrome (BHS). The lack of consensus is due to diagnostic problems. The diagnosis of BHS is that of exclusion. Diagnosis is complicated because of different scale criteria and in particular different cut off criteria. Studies of prevalence become incompatible because the population and criteria vary. The selected papers emphasise the full Beighton scale ≥ 5 cut-off criteria for diagnostic testing but suggest a component alternative in the criteria of Hospital Del Mar, Barcelona (Bulbena, 1998)

Key words

Paediatric / paediatric, musculoskeletal, child, hypermobility, physical therapy, assessment and joint laxity

HYPERMOBILITY AMONG CHILDREN

Prevalence and Assessment Criteria

A critical Literature Review

Introduction

Development of postural control is essential for the acquisition of skilled functional movement (Jonsdottir et al 1997). Stability of joints and body segments is part of postural control. Input from skin, muscle and joint receptors affect postural responses in several ways. Somatosensory information from the lower extremities is used to maintain postural stability (Chrchfield & Barnes, 1993). Stability of a joint is determined by the efficiency of musculoskeletal (muscle, tendon, capsule, ligament and articular surfaces) and neural (motor and sensory) control systems (Kerr et al, 2000). Deficiencies in these systems may compromise stability.

The hypermobility syndrome has been widely recognized in the rheumatology literature but has only recently been described in physical therapy literature (Russek, 2000). Even thorough interest in this syndrome should occur as much in the field of paediatrics as that of the specialist rheumatology and orthopaedic consultants. Research has led to the specific recognition of BHS of a possible cause of various musculoskeletal symptoms such as recurrent dislocation of the patellar (Cherpel & Marks, 1999). Other injuries such as ligamentous sprains, carpal or tarsal tunnel syndrome, and symptoms of sciatica (Cherpel & Marks, 1999) are suggested in the literature as being related to hypermobility. There are important arguments for a preventative effort in relation to hypermobility but there are still important assumptions to be challenged in research. There is a discrepancy between diagnostic tools and the involvement of specific joints in injuries and there is also disagreement in the research about the prevalence of hypermobility related to joint problems and that of specific musculoskeletal complaints and pain.

The understanding of hypermobility and the prevalence of this condition is essential to physiotherapists in the area of clinical reasoning. The testing for hypermobility is a relevant issue to physiotherapy assessment of postural control and joint mobility and the question of validity of the testing criteria is important.

The assessment of children is related to several clinical areas, including neurology, rheumatology and orthopaedics. The understanding of hypermobility is relevant in all these areas. In the assessment of children it is essential to use a minimum set of test items with a high validity, predictive validity and reliability. The purpose of this review is to focus on the hypermobility condition or syndrome in children, the epidemiology of this condition in two different parts of the world and the testing criteria used for diagnosis.

Defining hypermobility

Hypermobility is defined by Kirk et al (1967) as quoted in Bulbena (1992), Dsiree (1997), Ayman (1998 and Cherpel & Marks (1999) as joints which are unduly lax and the range of motion is in excess of the accepted normal in most of the joints examined. The hypermobility syndrome is also defined by Kirk et al as joint laxity associated with musculoskeletal complaints or rheumatic symptoms. The term Benign Joint Hypermobility Syndrome (B(J)HS) refers to a generalized joint laxity which occurs as an isolated condition in the absence of any other abnormality (Grahame 1999, quoted Cherpel & Marks 1999).

Cherpel & Marks (1999) pointed out different definitions and problems associated with the diagnosis of B(J)HS because generalized joint laxity is often also found in rheumatological, neurological and congenital conditions and as hypermobility related to other syndromes. As we see there is a need to make differential diagnoses and to distinguish between benign hypermobility as a condition and as a syndrome associated with musculoskeletal complaints.

HYPERMOBILITY AMONG CHILDREN

Prevalence and Assessment Criteria

A critical Literature Review

Prevalence of hypermobility among children

The prevalence of hypermobility among children is related to sex, age, race and genetic variations. Hypermobility is reported as being prevalent in up to fifty percent of certain populations (Cherpel & Marks 1999). The literature shows a wide span of prevalence and thereby reveals the problems associated with diagnosis and diagnostic tools. Earlier studies mention that hypermobility is statistically significant, that it is more frequent in females and in the African and Asian populations (Russek 1999) and with a significant negative correlation between age and hypermobility on the non-dominant body side (Cherpel & Marks). A significant correlation between hypermobility and flat feet, Raynaud Disease and arthralgia is reported by Ayman (1998).

There is no agreement about which joints are most hypermobile or which are likely to produce most pain and discomfort. Ayman (1998) reports that using the Beighton hypermobility score the fingers were significantly more frequently affected and more so on the non-dominant side of the body. The fingers were followed in frequency by the thumbs and elbows. Knees were rarely affected and those that were showed no significant trend towards either dominant or non-dominant side. Conversely Cherpel & Marks (1999) report the frequent involvement of the knee and ankle joints together with persistent pain. More comparable studies are needed in this area.

To determine the prevalence of hypermobility among primary and secondary aged school children studies were made by Désirée et al (1997) in Holland and Ayman et al (1998) in Egypt. The population and frequencies are listed in table 1a and table 1b below

Table 1a: The studies of Désirée et al (1997) and Ayman (1998)

Study	Nationality	Popul. 1	Popul. 2	Age 1/11	Freq. average	Scale/cut off	N
Desiree	Dutch	252	658	4.13/12.17	15.5%/ 13.4%	Beighton/4/9	N=910
Ayman	Egyptian	997		6.15(av11)	16.1%	Beighton/4/9	N=997

Table 1b: Frequency of hypermobility in females and males

Study	Nationality	Female 1	Male 1	Female 11	Male 11
Desiree	Dutch	18.3%	12.95	19.1%	7.6%
Ayman	Egyptian	18.0%		14.4%	

Both studies were based on a population of primary aged school children. Date of birth, sex, height, bodyweight and right and left handedness were noted. In the study of Ayman et al (1998) the children are thoroughly assessed and any child with evidence of inflammatory joint disease was excluded, as were dancers and athletes. The children gave a detailed history and had a general and musculoskeletal examination. In both studies hypermobility was diagnosed using a goniometer and Beighton hypermobility scores with a cut off point of $\geq 4/9$.

The results correspond to significantly higher frequencies in females and in affected joints on the non-dominant side of the body. That hypermobility decreases with age was found to be significant in the study by Ayman et al (1998) but was not significant in the study carried out by Désirée et al (1997). Validity in Désirée et al

HYPERMOBILITY AMONG CHILDREN

Prevalence and Assessment Criteria

A critical Literature Review

(1997) study of age variable is low because of an overlap in age groups, which resulted in the age range of 12–13 year olds being measured twice. Désirée et al (1997) compared scores on the left side of the body with those on the right side using the Biro mobility score.

Assessment criteria

The first scoring system was introduced by Carter and Wilkinson in 1964 and modified by Beighton first in 1969 and then again in 1973 (Bulbena 1992) (Cherpel & Marks 1999) (Désirée et al 1997) (Ayman et al 1998) (Russek 1999). The Beighton scoring system is used in several studies. The advantage of the criteria used in this system is that the Beighton score counts points given for both sides of the body.

There are limitations with regard to validity obtained from the section dealing with *forward trunk flexion* (Cherpel & Marks 1999) and the absence of a test for important joints such as the shoulders and ankles.

Some studies use a modified Beighton score such as Biro with a cut-off point of $\geq 3/5$. Some researchers use a full Beighton score with a cut-off point of $\geq 5/9$ and others $\geq 6/9$ (Russek 1999). A research study of Finnish school children aged between 9.8 and 11.8 years tested by the Beighton criteria showed 33% of girls and 28.8% of boys scored at $\geq 4/9$ and 16% of girls and 11.7% of boys had a score of $\geq 5/9$. However, when using a cut-off score of $\geq 6/9$ only 7.8% of the children were classified as hypermobile (Cherpel & Marks 1996)

Sets of criteria and cut-off points are listed in table 2

Table 2: Hypermobility criteria with cut-off points: Carter & Wilkinson et al, Rotes, Bulbena et al and Biro criteria.

Criteria	Carter & Wilkinson et al	Beighton et al +	Routes	Bulbena	Biro
passive extension of 5th finger $\geq 90^\circ$	1	1*	1	1	1
passive abduction of the thumb to flexor of forearm	1	1*	1	1	1
passive elbow hyperextension $\geq 10^\circ$	1	1*	1	1	1
passive knee hyperextension $\geq 10^\circ$	1	1*	1		1
forward trunk flexion with knees fully extended and palms flat on the floor		1	1		1
forward trunk flexion with fists on the floor					
excess range ankle dorsiflexion and foot eversion	1			1	
excessive range external shoulder rotation with elbow flexion 90°			1	1	
excessive range cervical rotations			1		
excessive range cervical inflexions			1		
excessive range hip abduction supine			1	1	
excessive range metatarsophalangeal $\leq 90^\circ$			1	1	
lumbar lateral hypermobility			1		
prone knee hyperflexion				1	
patellar hypermobility – hold prox. On tibia move patellar sideways				1	
ecchymoses				1	
Total scores	5	9	11	10	5
Cut-off points	≥ 3	≥ 5	≥ 5	≥ 5	≥ 3
Alternative cut-off points		$\geq 4 \geq 6$ (2)			

* 1 point each side + Hospital del Mar (Barcelona)

Sources: Bulbena et al (1992) Cherpel & Marks (1999) Désirée (1997) Kerr et al (2000)

HYPERMOBILITY AMONG CHILDREN

Prevalence and Assessment Criteria

A critical Literature Review

Bulbena et al carried out a prospective study in 1992 with the purpose of determining the validity of different sets of criteria used to define hypermobility syndrome. They state that hypermobility assessment should reflect both the number of joints involved and the extent to which they move. The investigation was carried out at the Hospital del Mar Barcelona. All consecutive cases of HMS at the rheumatological out-patient clinic over a 9 month period constituted the sample.

The inclusion criteria was a score of ≥ 5 in Beighton's system. Exclusion criteria were restricted to that of somatic illness only. 114 cases and 59 controls made up the study. The correlation between Beighton, Carter and Rotes was analysed. Concurrent validity and predictive validity were analysed. An interater analysis was made and a hierarchical cluster analysis was also conducted. There was a high criterion validity especially in respect of Carter with a cut-off point of ≥ 3 with Beighton and Rotes both placing theirs at ≥ 5 . They then analysed items, frequency, reliability and clustering. The most prevalent criterion was Carters ankle and foot hypermobility, followed by finger hyperextension and thumb abduction, next was patellar hypermobility, shoulder rotation and hip abduction. No significance was found between females and males.. On the basis of the analysis of frequency, reliability and clustering Bulbena et al (1992) created a new set of criteria, which was correlated with Carter and Beighton at different cut-offs. Bulbena et al concluded that a high correlation existed between ≥ 3 - Carters criteria cut-off and ≥ 5 the cut-off point of Beighton and Rotes et al. Beightons criteria cut-off at ≥ 4 and that of Rotes at ≥ 6 seemed to be measuring slightly different phenomena. They suggested a new set of criteria, the Hospital del Mar (Barcelona) criteria for the clinical assessment of joint hypermobility and they also suggested a different cut-off for males of ≥ 4 and for females of ≥ 5 .

Discussion

A review of recent literature about hypermobility among children and adults reveals problems according to defining manifestations of hypermobility and benign hypermobility syndrome. The terms are used somewhat inconsistently. There is agreement that is one of exclusion and is difficult because it cannot be supported by radiographic or laboratory testing. (Cherpel & Marks 1999 and Russek 1999). The differential diagnostic disorders are those with generalized hypermobility as found in Ehlers-Danlos Syndrome, rheumatoid arthritis' lupus and Marfan Syndrome (Russek 2000). Kirk et al, Carter & Wilkinson and Beighton et al are the early main sources to the understanding of hypermobility as a condition and the diagnostic criteria. Most literature has been published in the medical literature detailing the hypermobility syndrome and its orthopaedic manifestations. The literature pays little attention to the different scoring systems and especially to the inconsistent use of cut-off points.

Physiotherapists are often asked to assess patients with musculoskeletal complaints. They are also involved in clinical team-assessments of children with various disorders or conditions. It is therefore of importance to be able to recognize the hypermobility condition or syndrome (Cherpel & Marks 1999). The diagnosis of hypermobility is closely related to the diagnostic criteria and cut-off points.

The studies selected for this review are two epidemiological of primary and secondary aged school children in Holland and Egypt. The studies can be considered comparable to a certain degree because of the almost equal population size of 910997 children. The population is in both studies selected from children in both primary and secondary schools. The Désirée et al (1997) study divides the children into two age groups, which gives the opportunity of analyzing the increase or decrease of the phenomenon in relation to age. Unfortunately, others overlap the two age groups and loose this opportunity. The Ayman et al (1998) study does not divide into different age categories, but notes the average age. The optimal choice would be to divide the children into clear-cut age groups, to present the data of the range and the average and to relate this data set to set.

HYPERMOBILITY AMONG CHILDREN

Prevalence and Assessment Criteria

A critical Literature Review

These two studies use the Beighton system for scoring with a ≥ 4 criteria cut-off point without discussing this choice. This reflects in the literature where Beighton et al is a commonly used diagnostic tool but where the cut-off criteria either varies or threatens the validity of the study as mentioned by Kerr et al (2000). Some researchers use a modified Beighton of ≥ 3 out of 5 items. This is the same scoring system as Biro/Russek (1999). The results from the Désirée et al (1997) study and the Ayman et al (1998) study agree that the difference between dominant and non-dominant sides of the body is of statistical significance with more frequency in the non-dominant side. This result argues for the use of the full Beighton system because this gives a score for both left and right and differences between the sides can be measured. One weakness of the Beighton et al system is that the items in the upper extremity have been too heavily weighted. A further weakness is the item *forward trunk flexion* which is of questionable validity (Cherpel & Marks).

The literature shows different results in relation to frequencies of musculoskeletal complaints and injuries from different joints related to hypermobility. Bulbena et al (1992) analysed in their study the most prevalent criterion among a minor group of index cases. Ankle and foot hypermobility was most prevalent, followed by finger hyperextension. The most frequent finger hyperextension correlates with Ayman (1998). There is in the literature a disagreement about the prevalence of hypermobility in joints, especially knee joints. Kerr et al (2000) reports 25.6% symptomatic knee joints observed in 39 children and 2.6% symptomatic in the ankle and joints of the feet. This disagrees with Bulbena (1992) and Ayman (1998). The Bulbena analysis shows hypermobility as the seventh in the row of frequencies after patellar hypermobility. Ayman et al reports that knees rarely are hypermobile.

The weakness of the Bulbena et al (1992) research is the age of the participants and the fact that the control group as pointed out in the article is older and taller than the research group. We have seen that there is a statistically significant decrease in hypermobility with increasing age reported from several studies (Ayman et al 1998, Bulbena et al 1992 and Cherpel & Marks 1999)

Another weakness is the use of the ≥ 5 Beighton criteria cut-off point for inclusion into the research group. We cannot exclude that the prevalence of joint hypermobility would have differed with different inclusion criteria.

Table 3: Ayman et al (1998) Hypermobility among Egyptian children

Prevalence and distribution of hypermobility among study population* (Beighton criteria)

	Girls N=498(%)	Boys N=499(%)	Total N=997(%)
Non-hypermobile (HMS>4)	409(82.0)	427(85.6)	836(83.9)
Hypermobile ≥ 4	89(18.0)	72(14.4)	161(16.1)
Fingers	87(97.8)	69(95.8)	156(96.9)
Thumbs	82(92.0)	69(95.8)	151(93.8)
Elbows	34(38.2)	32(44.4)	66(41.0)
Back	19(21.3)	17(23.6)	36(22.4)
Knees	3(3.4)	2(2.7)	5(3.1)

*No statistical significant difference of prevalence of hypermobility between girls and boys ($p>0.05$).

HYPERMOBILITY AMONG CHILDREN

Prevalence and Assessment Criteria

A critical Literature Review

Cherpel & Marks (1999) quote El-Sharif (1991) for the frequent involvement of knee and/or ankle joints with recurrent and persistent pain. This is what Kerr et al (2000) experience in Edinburgh at The Royal Hospital for Sick Children. The disagreement about the involvement of the knee joint needs further research.

By using the suggested Hospital del Mar (Barcelona) criteria there is a possibility to distinguish between hypermobility/hyperflexion in knee and patellar hypermobility. This might influence the sum of hypermobility prevalence in knee joints and be an important factor in the choice of stability exercises. No other studies make this distinction.

Conclusion

The prevalence of the hypermobility manifestation and syndrome is closely related to age, sex, genetics and diagnostic criteria. Hypermobility is statistically more frequent in females with a significant negative correlation with increasing age. There is a significantly higher level frequency of hypermobility in the non-dominant side of the body.

There is a considerable disagreement about the prevalence of hypermobility associated with specific joints, with most disagreement concerning the knee joints. The problems of diagnosis are related to the inconsistent use of scoring criteria and cut-off points. The Beighton et al system is the most reported scoring system and with this review the full Beighton criteria with a ≥ 5 cut-off could be recommended. The alternative to the Beighton et al criteria is the criteria applied by the Hospital del Mar in Barcelona. The strength in the Hospital del Mar system lies in the testing of important joints such as the shoulder and ankle joints and the possibility of distinguishing between knee hyperflexibility and patellar hypermobility.

Further research is needed involving an investigation of children paying particular attention to the importance of the age variable. The use of the Hospital del Mar criteria with the recommended cut-off points might provide the researcher with the opportunity to focus on the prevalence of musculoskeletal complaints and pain related to joints. For this purpose the Beighton scoring system is not useful. In the future initiative may benefit those young people complaining of patellar femoral or non-specific pain in the knee and be a diagnostic tool in preventative physiotherapy.

References

Key articles

Ayman K et al (1998) Hypermobility Among Egyptian Children. Prevalence and Features. Journal of Rheumatology 25:1003-5

Bulbena A et al (1992) Clinical Assessment of Hypermobility of Joints. Assembling Criteria. Journal of Rheumatology 19: 115-122

Cherpel A & Marks R (1999) The Benign Joint Hypermobility Syndrome. NZ journal of Physiotherapy 27.3: 9-22

Désirée G A et al (1997) Hypermobility in Two Dutch School Populations. European Journal of Obstetrics and Gynaecology 73: 189-192

HYPERMOBILITY AMONG CHILDREN

Prevalence and Assessment Criteria

A critical Literature Review

Supplementary literature

Crutchfield A & Barnes M (1993) Motor Control and Motor learning In Rehabilitation. Stokesville, Atlanta

Kerr A et al (2000) Physiotherapy for Children with Hypermobility Syndrome. Physiotherapy 86.6: 113-117

Russek L N (1999) Hypermobility syndrome. Physical therapy 79: 591-599

Russek L N (2000) Examination and treatment of a Patient with Hypermobility Syndrome. Physical therapy 80: 4

Appendix 1

Appendix: Hospital del Mar (Barcelona) Criteria dor Clinical assessment Of joint Hypermobility

UPPER ARM

- 1 THUMB: passive apposition of the thumb to the flexor aspect of the forearm <21 mm
 - 2 METACARPOPHALANGEAL: with the palm of the hand resting on the table passive dorsiflexion of the fifth finger is $\geq 90^\circ$
 - 3 ELBOW HYPEREXTENSION: passive hyperextension of the elbow is $\geq 10^\circ$
 - 4 EXTERNAL SHOULDER ROTATION: with the upper arm touching the body and with the elbow flexed at 90° (the forearm is taken into external rotation up to $>85^\circ$ of the sagittal plane (shoulder to shoulder line)
-

LOWER EXTREMITIES - SUPINE POSITION

- 5 HIP ABDUCTION: passive hip abduction can be taken to an angle of $\geq 85^\circ$
 - 6 ROTULAR HYPERMOBILITY: holding with one hand the proximal end of the tibia the rotular can be moved well to the side with the other hand
 - 7 ANKLE AND FOOT HYPERMOBILITY: an excess range of passive dorsiflexion of the ankle and eversion of the foot can be produced
 - 8 METATARSOPHALANGEAL: dorsiflexion of the toe of the foot over the diaphysis of the first metatarsal is $\geq 90^\circ$
-

LOWER EXTREMITIES - PRONE POSITION

- 9 KNEE HYPERFLEXION: knee flexion allows the heel to make contact with the buttock
 - 10 ECCHYMOSES: appearance of ecchymoses after hardly noticed minimal traumatism
-

Source: Bulbena A et al (1992) Clinical Assessment of Hypermobility of Joints. Assembling Criteria Journal of Rheumatology 19: 115-122

ETHICAL CONSIDERATIONS IN PAEDIATRIC RESEARCH

Lecture at Research Study Day at Homerton College, Cambridge, April 2002

Terry Pountney PhD MA MCSP

Research Physiotherapist,

Chailey Heritage Clinical Services, East Sussex

Research involving children raises some ethical issues not encountered with competent adults. This means that when planning a research study careful consideration must be given to the ethical aspects which are which are unique to research involving children. These ethical considerations cover every aspect of the research process through the stages of design, implementation and dissemination.

The following aspects of research should be considered:

- Legal Aspects (legislation, acts and judgement)
- Funding
- Content
- Methodology
- Consent
- Dissemination

Research Ethics Committee

Before embarking on any research the study proposal and protocol needs to be scrutinised by the local or multicentre ethics committee.

Research Ethics Committee are made up from a mix of professional and lay persons and has two main roles:-

1. "to provide independent advice to participants, researchers, funders, sponsors, employers, care organisations and professionals on extent to which research studies comply with recognised ethical standards"
2. "to protect dignity, rights, safety and well-being of all actual or potential research participants",

Ethics committees offer assistance to researchers to improve project proposals and advise on changes to applications which can then be resubmitted. It is very important to ensure integrity of research applications both to protect participants in the research but also as an adjunct to help with obtaining funding. Many sponsors will not consider a grant application without adequate ethical approval.

Completing the ethics form can be a daunting prospect but can help focus your ideas and ensure that you are aware of all the factors which require attention when designing a research study. Qualitative methodologies may sometimes prove difficult to fit into a largely quantitative format bias but currently the application forms are being revised to be more user friendly to the qualitative researcher. Further information can be obtained from Central Office for Research Ethics Committees (COREC) <http://www.corec.org.uk/>.

An application should be made to the Ethics Committee when the research involves:

- NHS patients including private sector
- Access to records of NHS patients
- Foetal material and IVF
- Recently dead in NHS premises
- Use of or potential access to NHS premises or facilities

Where less than five centres are involved applications should be made to the Local Research Ethics Committees(LREC) and for five or more centres to the Multicentre Research Ethics Committee (MREC).

ETHICAL CONSIDERATIONS IN PAEDIATRIC RESEARCH

Lecture at Research Study Day at Homerton College, Cambridge, April 2002

Legislation on Children's Rights

There are four main acts and judgements which apply to children and are designed to ensure children's rights are taken into consideration when undertaking research. The main points of these four are summarised below.

UN Convention on Children's Rights (<http://www.unicef.org/crc/crc.htm>)

- Right to make informed decisions (Need to ensure information is accessible to children)
- Dignity
- Self respect
- Self determination
- Non interference

Children Act 1989

- Children and parents participate in decision making
- Children's feelings and wishes sought (sought not necessarily followed but taken into account and reasons for not following given.)
- Consideration of religious persuasion, racial origin, culture and language. The context of research interventions should not violate these and provision needs to be made for information in the child and family's preferred language.

European Charter for Children in Hospital (<http://each-for-sick-children.org/charter.htm>)

- Protection from unnecessary treatment and interference
- Child and parents rights to informed participation
- Children's wishes and feelings incorporated into decision making.

The Gillick Judgement

- Consent by the child can be given if they have "Sufficient understanding & intelligence to enable understanding fully what is proposed"

Funding Source

The provenance of funding for research can create ethical dilemmas and all elements of bias should be minimized in research studies. Where this is not possible the sponsors role in the study should be clear and ownership of the results and the rights to disseminate the findings held by the researchers.

Research Content

The content of research studies can raise ethical questions in light of the legislation relating to children including:

- What is the purpose of the research?
- Will it add to our existing knowledge?
- Will it improve clinical practice?
- How common is the problem?

When conducting research the likely outcomes need to warrant the degree of intervention or interference in the child's life which may entail loss of school or leisure time and possibly some pain or discomfort. Research studies which are unlikely to add the useful body of knowledge in paediatrics may not be ethically sound.

ETHICAL CONSIDERATIONS IN PAEDIATRIC RESEARCH

Lecture at Research Study Day at Homerton College, Cambridge, April 2002

Methodological Concerns

The methodology used in a research study include the following aspects all of which can raise ethical considerations: sample selection; outcome measures; informed consent / assent...child; reliability of communication; confidentiality and use of findings. Questions on all these areas will be asked on the ethics committee application form.

Sample Selection

The way a sample is selected can substantially affect the outcome of a research study in any population but in children there is often an added bias where parents, professionals or carers are responsible for referring children to research studies. This situation can leave you with a pre-screened sample of children who other people think will be "suitable" for the study and may not therefore represent the whole population. This may lead to the exclusion of children with behavioural difficulties or poor communication for instance and lead to certain groups of children being over or under represented. Efforts need to be made to reduce this effect as far as possible.

The size and homogeneity of the sample needs to be big enough to ensure that significant results can be gained. In some conditions such as cerebral palsy there is a wide spectrum of disability an inclusion criteria at this level may lead to a heterogeneous sample which is not capable of giving valid results.

Methodology

The procedure for conducting the research needs to be detailed clearly for the family and child so that they have a clear understanding of what their involvement entails. Details answering the following questions should be given: How invasive/intrusive is the intervention? How severe are the risks/harms and how likely are they to occur? How long will the harmful effect last?

As mentioned above it is vital that the procedures and interventions warrant the likely benefits to be gained from the research and children are not being put through unnecessary interventions for purely interest purposes.

Confidentiality

Confidentiality of the participants in the study should be maintained from the beginning of the study through to the dissemination of findings. All results need to be anonymised and aggregated and individual case studies or photographs used only with the child and parent's specific consent.

When working with children, however, professionals must be careful to promise only limited confidentiality as if a child discloses of matter for concern, e.g. abuse - they have a moral and professional duty to report this.

Construction of Questions

When designing questions or discussion topics for focus groups care is needed to ensure that the language used is unambiguous. Studies have shown that children usually answer yes to yes/no questions and happily attempt to answer nonsensical questions (Taplin et al 1999). Clearly such pitfalls could lead to invalid results.

ETHICAL CONSIDERATIONS IN PAEDIATRIC RESEARCH

Lecture at Research Study Day at Homerton College, Cambridge, April 2002

Consent

Involving children in decision making in both clinical and research settings is a challenging task. The law states that children can give consent provided they have "sufficient understanding and intelligence to understand fully what is proposed" (Gillick Ruling). A child's ability to give informed consent is dependent on "their lived experience" or social context in terms of how much understanding they have of likely interventions. Attitudes to when children are competent to consent vary and in research studies it is advisable to obtain parental consent as well as from the child. In cases where it is not possible to gain the child's consent in many cases assent needs to be gained at the point of intervention and may include reacting to observable behaviours, such as crying, facial expression and body language. The law focuses on the point of consent or refusal but puts little emphasis on the process of sharing information with children and enabling them to make choices. This process is ongoing and may require the development of trust between the researcher and child. The child and family must always be aware that they can withdraw from the study at anytime without jeopardizing their access to treatment.

The information that is required for consent: is detailed in the ethics application form and needs to include: Title of study; Invitation paragraph; Purpose of study; Subject selection; Details of procedures; What are the alternatives; Harms / benefits; New information; End of study; Complaints; Confidentiality; Results; Funding & organisation of research; How to withdraw from study.

All the information must be presented in a way that is accessible to the children and parents. Language must be at an appropriate level and pictorial information can be used to increase understanding. Photographs of the people, places and equipment to be used in the study should be included. Where a child has communication difficulties the researcher should familiarise themselves with the method to ease communication. Communication comprises 3 phases: receiving information; understanding information and responding and all need to be successfully achieved for informed consent to be given.

To ensure that consent is truly given it is important to let the child be in control of the interview i.e. able to stop at any time, make no assumptions about what the child is saying, be patient where the child has difficulty understanding and reflect what the child says back to them to confirm what they said.

Adults/Children's Views

There are very sound reasons to access children's rather than adult views. Children remember different events and the same events differently and they ascribe different levels of importance to events. Studies suggest that a 2 year old can recall events accurately and at by 4 years of age have an autobiographical memory.

Dissemination

Once the research study is complete it is important that the findings, good or bad are disseminated to the children and families involved in the study and then to the wider professional audience. Publication in journals which are read by the target should include clearly stated implications for practice. However, journal publications are not always sufficient to ensure findings are to be implemented into practice. Feedback within smaller groups or via professional organisations may be needed to change practice & behaviour.

ETHICAL CONSIDERATIONS IN PAEDIATRIC RESEARCH

Lecture at Research Study Day at Homerton College, Cambridge, April 2002

Conclusion

When undertaking research with children we are in a privileged but responsible position and must plan the study to ensure that it is ethically sound with the well-being and rights of the children paramount.

References

Alderson, P. In the Genes or in the Stars? Children's Competence to Consent. *Journal of Medical Ethics* 1992, **18**: 119-24.

Balen, R., C. Holroyd, G. Mountain, et al. Giving Children a Voice: Methodological and Practical Implications of Involving Child in Research. *Paediatric Nursing* 2000, **12**, no. 10: 24-29.

Brook, G. Children's Competency to Consent. *Paediatric Nursing* 2000, **12**, no. 5: 31-35.

DoH. The Children Act. London: HMSO, 1989.

Gillick V. W, Norfolk & Wisbech Health Authority. In *3 All ER 402 43*, 1985.

Ward, L. *Seen and Heard: Involving Disabled Children and Young People in Research and Development Projects*: YPS, 1997.

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

ALISON ALEXANDER

CHILDREN'S CENTRE, ROYAL UNITED HOSPITAL, BATH

INTRODUCTION

This case-study presents a child who, for the purposes of this report, will be known as "Jack". Verbal parental consent was given for this case-study to be presented.

History of Present Condition

Jack was initially referred at the age of three and a half years to the Paediatric Therapy Services, over concerns raised by his Health Visitor regarding his locomotor delay and hyperactivity problems. At this stage no diagnosis had been made. The nature of Jack's problems indicated an assessment of co-ordination difficulties was the most appropriate action.

A parental questionnaire indicated that their concerns were placed more with gross than fine motor skills; Jack was subsequently placed on the Physiotherapy waiting list.

Jack was assessed by a paediatric physiotherapist at the age of four years five months. He attended with his Mother.

Past Medical History

Jack was delivered quickly following his Mother having pre-eclampsia. He had been an 'unhappy' baby, and his development was approximately as follows:

Sitting	6½ months
Standing	7½ months
Crawling	10 months
Walking	1 year
Talking	1 year

He had received no other previous intervention for his co-ordination difficulties.

Drug History

Nil

Social / Family History

Jack lives with his parents and younger sister (two years at the time of assessment). He always attended treatment with his Mother. Jack was attending Nursery four mornings a week at the start of treatment, but midway he started school, attending for mornings only.

Jack was assessed using the Michele Lee assessment procedure (Lee and French (1994); Lee (1996)).

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

Relevant findings at Subjective Assessment

Jack's Mother's main concerns were his poor balance (tripping, falling and bumping into things), his running ('clumsy' style), his poor ball skills, and his difficulties with holding a pen and writing ('awkward' style). She reported that he also has very poor concentration with a short attention span.

Relevant findings at Objective Examination

Jack was difficult to formally assess as he was unable to concentrate on one thing for very long, and was easily distracted. He used many diversion tactics to evade tasks he thought might be too difficult. Thus objective findings were collected over two sessions, and following observation of Jack in play.

General

- low muscle tone with hyper-extensibility at knees, shoulders, elbows, wrists and thumbs
- reduced pelvic and shoulder girdle stability
- inability to hold still in one position, and tendency to lean against person or furniture
- incorrect copying of limb postures; poor positioning of himself in relation to other people or objects (proprioception/spatial awareness/body perception)
- unable to listen to, and follow more than one verbal or visual instruction in sequence

Gross Motor Skills

- unable to maintain total body flexion or extension
- poor hip extension and wide base needed for balance in any high/half kneeling activity; unable to achieve prone kneeling position
- abnormal postures and mirroring in hands on increased effort/concentration
- very poor balance and stability standing on one leg; unable with eyes closed
- low ground clearance when hopping or jumping (two hops only on either leg); flexed posture
- immature ball skills
- poor direction and grading of movements

(A full list can be found in Appendix A)

Main Problems

- 1 Very poor total body anti-gravity flexion and extension control
- 2 Reduced pelvic girdle stability
- 3 Reduced shoulder girdle stability
- 4 Poor grading and control of movements through reduced general postural control
- 5 Reduced proprioception and body perception

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

- 6 Sensory modulation problems
- 7 Limited concentration/attention span
- 8 Poor verbal and visual sequence recall
- 9 Mildly tactile defensive

Aims of Treatment

These were devised by the Physiotherapist after assessment, then discussed with, and agreed by Jack's Mother at his initial treatment session.

- 1 To improve total body flexion control so that Jack can hold a supine curl for 10+ seconds
- 2 To improve total body extension control so that Jack can maintain arm, shoulder and head raise in prone for 10+ seconds
- 3 To improve pelvic girdle stability so that Jack can maintain prone kneeling while raising one arm and/or one leg to balance
- 4 To improve shoulder girdle stability so that Jack can manage 35+ paces on his hands in 'wheelbarrow' walking
- 5 To improve verbal and visual recall so that Jack can remember two visual or verbal instructions in sequence

Jack's Mother's aims of treatment were that she would like to see improvement in his balance and writing ability

DISCUSSION OF TREATMENT

Jack had not been given a formal diagnosis regarding his co-ordination difficulties. This is not unusual. Over the years many terms have been used to describe or label a child with problems in motor organisation (clumsy child syndrome, minimal brain dysfunction, motor learning difficulties, sensory integration dysfunction, perceptuo-motor dysfunction, and developmental dyspraxia). Chu (1998) highlights the lack of consensus in the use of these terms and stresses the importance of an accurate diagnosis so that appropriate intervention can be provided. The diagnostic label of Developmental Co-ordination Disorder ('DCD') was introduced in 1987 (DSM 111-R, American Psychiatric Association, 1987) and was updated in 1994 (DSM-IV, 1994). It identified such motor co-ordination problems in children not caused by any other known physical disorder. DCD is identified when a child demonstrates motor co-ordination that is markedly below the chronological age and intellectual ability of the child and interferes significantly with academic achievement or activities of daily living (Willoughby and Poltajko, 1995). Jack's difficulties will hereafter be described using this term.

DCD may manifest itself in difficulty with fine motor tasks such as fastening buttons or writing, or with gross motor tasks such as hopping, jumping or ball skills (Sims et al, 1996). Attempts to document the long-term prognosis for these children have produced conflicting results. Results from a study by Losse et al (1991) suggest that most children at sixteen years (initially tested at six years) still have difficulties with motor co-ordination, have poor self-concept and are experiencing problems of various kinds in school. In contrast, Gillberg et al (1989) indicated that untreated motor perceptual problems had resolved in 70% of the cases, suggesting a Fair natural prognosis by their early teens. Moreover, secondary problems may develop which lead to underachievement in school, emotional and social difficulties and poor self-esteem (Losse et al 1991; Schoemaker et al, 1994; Lee and Smith, 1998).

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

Physiotherapy can offer an extended service to children with DCD and their families. Their background in normal and abnormal motor control, motor learning and motor development can be used to individually assess, plan programmes for, treat, and educate children, as well as consult with their families (Steyer David, 1994). For therapists to develop effective treatment strategies for these children it is important to understand the nature of the motor co-ordination problems they have.

Children with DCD have been the focus of study for some time. However, controversy exists regarding the nature of their motor co-ordination problems, and, therefore, regarding its treatment (Willoughby and Polatajko, 1995). The investigation of these problems has involved a wide range of tasks. Smyth and Mason (1997) summarise research carried out on different approaches and theories of the cause of these problems. Their conclusion from these studies is that children with DCD produce poorer performance on these tasks. They are reported to have poorer kinaesthetic skills (Hoare and Larkin, 1991), visuo-spatial problems (Wilson and McKenzie, 1998); slower movement times (Van der Meulen et al., 1991), longer reaction times, and are less accurate in moving targets (Smyth and Mason, 1997). Steyer David (1994) raises the issue that most of these studies have used experimental motor learning tasks that are non-functional and performed away from everyday environmental contexts. It is unclear how performance on these tasks is related to functional motor tasks in every day environments.

There is a scarcity of Physiotherapy-based research in the field of DCD. This urgently needs addressing in order to provide credible evidence to support physiotherapy in the management of these children.

The treatment Jack received was based on the outcome of the initial assessment carried out, and was based on an eclectic approach. The extensive list of problems identified meant that it was not deemed realistic to try for improvement in all areas. Instead, after discussion with his Mother, a decision was made to address a relative few aims. Jack's compliance with therapy was variable during treatment and at home, and his attention problems meant the sessions were shorter and therefore more focused on only a few issues. Lee and Smith (1998) recommend setting achievable goals with the child and parent to keep outcomes relevant to them. This was the intention with Jack's therapy. Thus, his treatment focused on exercises to improve proximal strength and stability, anti-gravity postural control, movement grading and control, and short-term visual and verbal memory skills.

Controversy exists regarding whether intervention should be directed toward the underlying impairments, the functional limitations, or toward the actual disability, or encompass a combination of all these areas (Steyer David, 1994). It has been suggested through research into motor learning that to decrease the functional limitation the specific functional task or motor skill needs to be practised in its appropriate functional environment (Gentile, 1987).

Jack's treatment always took place in a large physio gym. This may have been out of context for him, finding it harder to relate back to skills at home and school. However, his younger sister and other therapists in the gym provided realistic distractions for Jack while exercising.

Getting changed at the end of the session was considered part of the therapy, ie. to improve functional limitations related to static balance (standing on either foot to put trousers on, and fastening shoes). This was a more global approach to management and was applied in combination with treating the underlying impairments (ie. his low tone, poor stability and reduced proprioception / body perception).

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

Jack presented with generalised low tone and a degree of joint hyper-extensibility. Many children with DCD present with this, particularly in the upper limbs (Baker, 1981). In combination this means that maintaining posture up against gravity requires more effort than usual. Jack appeared to need to keep moving to some extent to keep his posture - this increased effort leads to fatigue. Exercises to improve muscle tone and anti-gravity flexion/extension control were included into his home programme as this was a long-term aim with Jack.

Linked to his low muscle tone, Jack's poor proximal stability at pelvic and shoulder girdles was another major focus of treatment. One of his Mother's main concerns was his poor writing. A lack of shoulder stability affects distal control and quality of movement. This in turn affects fine motor control and manipulative skills (ie. pencil control and writing). Considering this, the aim was to improve shoulder girdle control to facilitate subsequent improvement in Jack's writing and other fine motor skills. The author was unable to access evidence-based references to support this theory, although much reference is made to this approach anecdotally (Baker, 1981; Steyer David, 1994; Kirby, 1999; Lee (course notes), 2000).

Another area of concern was Jack's poor proprioception and body perception. This is allied closely with low tone and reduced proximal stability and it was deemed important to treat them together. Low tone is associated with a diminished stretch reflex (Baker, 1981). When present alongside low proprioceptive feedback from the body and limbs the child has poor sensory feedback from which to monitor, control and grade his movements. This produces difficulty in coordinating and organising the gross motor activity of movement of one part of the body in relation to another (Baker, 1981); this leads to the appearance of 'clumsiness'. Hoare and Larkin (1991) suggest that children with DCD are less sensitive to sensations of movement than unaffected children. The sense by which movement is perceived by proprioceptors and other somatosensory receptors is called 'kinaesthesia'. Much research has investigated this sense in relation to children with DCD (Laszlo and Bairstow, 1985; Hoare and Larkin, 1991; Polatajko et al., 1995; Sims et al, 1996) Laszlo and Bairstow (1985) claimed that the perceptual system should be separated from the motor system to understand the nature of the dysfunction, and that tasks in which the child moves may obscure sensory problems. These distinctions have since been disputed, as separating them makes it difficult to understand how sensory information is used in movement control (Smyth and Mason, 1998).

Polatajko et al. (1995) researched kinaesthesia training and suggest from their results that a more direct, repetitive training of a specific skill has a strong effect. The author regards this to be a 'splinter skill', the motor learning for which cannot be translated to other skills, and is therefore not functionally useful. The methods used are considered to be extremely task-specific and not related to functional skills and environment. This is not appropriate for a child such as Jack who needs to be able to move and interact with appropriate movement control and postural awareness in his own environment. Thus Jack's problems were treated in an integrated approach, and based very much on functional tasks involving increasing levels of extraneous stimulation to emulate a busy household or classroom environment, and the demands these place upon the child (Van der Weel et al., 1991; Steyer David, 1994).

Jack's compliance with treatment was variable throughout the six weeks, and the home exercise programme had to be carefully designed for ease and adaptability at home. His Mother was keen to do daily activities of some sort, but this depended on Jack's mood. From experience with other families the Physiotherapist suggested trying to encourage family participation so that Jack would not feel set apart; this worked well. Lee and Smith (1998) reported that younger children were not as compliant with home exercises but emphasised that the home programme was one of the key factors in ensuring treatment success. Conversely, Baker (1981) anecdotally

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

claimed that treatment results improved once the home exercise programme was stopped. They claimed parents either found it difficult to carry out an effective programme at home, or that too much parental pressure was counter-productive.

TREATMENT OUTCOMES

Full reassessment results are listed in Appendix B. Areas re-tested were directly related to the aims of treatment. In summary, objectively Jack showed a marked improvement (100%) in all but hopping on his left leg. His Mother and the therapist were delighted with these results. Subjectively, Jack's Mother reported that he was now able to walk at her side when out shopping without tripping, falling over or knocking into her or other people. Also that he can concentrate at home more, practising his writing (which had improved), and sitting to play proper games (something he had never previously been able to do). She felt she had a "normal little boy" for the first time, and was loving it!

No standardised outcome measures were used in the assessment and evaluation of Jack's treatment. Reassessment and percentages were the only means of evaluating effectiveness, these are acknowledged by the author to be crude measurements and not accurate analysis of factual evidence. Lee and Smith (1998) stress that percentages are a quick and effective method of indicating treatment effectiveness, for the benefit of the child and family, and for referrers and teachers. However, Bower (1997) emphasises the importance of the routine use of standardised, reliable, valid and responsive measures to gain accurate analysis of the effect of treatment intervention, upon which future developments of the profession are dependent. Much of the research into DCD makes use of the Movement Assessment Battery for Children ("Movement ABC": Henderson and Sugden, 1992) (Schoemaker et al., 1994; Smyth and Mason, 1997; Smyth and Mason, 1998; Williams et al, 1999) as a standardised outcome measure of motor skill improvement. This is being considered for use in developing the local Physiotherapy service for DCD where Jack attends.

Research into Physiotherapy intervention in DCD is sparse. Lee and Smith (1998) devised a set of non-standardised outcome measures for dyspraxia. These were then used to audit the effects of Physiotherapy intervention in children with DCD, as used in Jack's treatment. A small convenience sample was used reducing the external validity of the study, methodology was poorly documented, and no mention was made of actual treatment methods used. However, the authors were able to show a positive treatment effect, with the majority of subjects not requiring future courses of intervention. They also received positive feedback from other physiotherapists, referrers and parents on the use of the outcome measures. These results must however be viewed with caution in generalising to the DCD population.

Williams et al. (1999) measured the effectiveness of a physiotherapy intervention programme using the Movement ABC Test. Again the sample size was very small with a lack of specific inclusion criteria (all referrals received from a Paediatric Consultant), thereby limiting external validity. Treatment was provided in groups, thus reducing the standardisation of intervention for each child. However, a positive outcome was again reported, in particular to ball related skills.

Schoemaker et al. (1994) investigated the sensori-motor approach to treatment of children with DCD. This was a controlled study with good methodological documentation; however, the sample size was small. Improvements in motor skills were recorded in the children with DCD whereas the performance of the control children remained unchanged. It was also reported that the DCD group maintained their level of improvement for up to three months after treatment, but not beyond this. The authors acknowledged that the results were

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

obtained 'out of context' from daily life situations, thereby limiting generalisation to the DCD population.

These studies provide a positive outlook on Physiotherapy intervention in DCD, but further, more large-scale, randomised-controlled studies are vital in order to prove the efficacy of Physiotherapy within the management of these children, in line with the current climate of clinical effectiveness and clinical governance.

The role of the family and other agencies in Jack's management

Jack's Mother was very motivated for his treatment and became a 'natural therapist' in devising and adapting activities for Jack to do at home. The issue of home exercises within his management was discussed earlier. Lee and Smith (1998) emphasise the importance of carry-over of treatment at home for effective improvement, and in Jack's case this was certainly true, but unproven. At the time of treatment Jack was awaiting assessment by the Educational Psychologist. This input on his hyperactivity and behavioural problems may shed light on direction for future physiotherapy management. Jack was also on the waiting list for Occupational Therapy regarding his fine motor and organisational skills. Future physiotherapy treatment will be planned in conjunction with this.

Jack started school midway through treatment and the author acknowledges the effect this may have had on treatment outcomes. It cannot be discounted that some of the improvements seen in Jack's motor skills were due to the teaching input and peer socialisation, and to the confidence this gave him. Jack's teacher completed a questionnaire as part of the initial assessment process in which they expressed no concerns regarding his fine and gross motor, and social skills. Future contact with his school will be maintained in order to provide advice on possible modification of the PE curriculum and classroom management to help to prevent the possibility of future social and emotional limitations and academic underachievement (Steyer David, 1994).

CONCLUSION

In summary, Jack's treatment outcomes were good. Acknowledgement has been made for the poor calibre of the non-standardised outcome measures used. He achieved all but one (number 5) of the treatment aims and subjective reports from his Mother support this positive outcome, indicating that treatment effects were transferable into functional motor skills for home and school life. The author did not use the complete evaluation process as set out by Lee and Smith (1998) but will consider this, as well as the possible use of the Movement ABC for future treatment outcome evaluation. Standardised outcome measures need to be incorporated to develop the local Physiotherapy service for children with DCD, and to prove its efficacy. Another consideration for the future is to incorporate group work into the treatment process. This has been shown to be an effective way of treating larger numbers of children (Addy, 1996). Jack would be a suitable candidate for inclusion.

Jack will be reviewed in six months, his Mother was happy to continue activities at home as able until then. Lee (1994) recommends review at three months after the end of treatment, and Schoemaker et al. (1994) report that no further improvement was seen after this time. In Jack's case patient case-load and waiting lists prevent this from becoming protocol at the present time. Long-term management of Jack and other children seen within the service remains an issue yet to be reviewed. Lee and Smith (1998) reported that only four children out of sixty required a second course of treatment. Handing over the locus of control to the child and family is a positive step forward in their management. Addy (1996) emphasises that the involvement of the child,

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

parents, school and other professionals in their approach was successful in encouraging the generalisation of skills in different contexts. This in turn raises self-confidence and self-esteem of the children. Jack completed treatment a happy and more confident little boy with a delighted Mother.

With regret, due to the time and word limitations, the author was unable to discuss all the issues surrounding Jack's treatment. The therapist was relatively new to the treatment of children with DCD at the time of Jack's intervention, and acknowledges this in the evaluation of her treatment methods and outcomes.

REFERENCES

- ADDY, L.M. (1996) A Multiprofessional Approach to the Treatment of Developmental Co-ordination Disorder. British Journal of Therapy and Rehabilitation, 3 (11); 593-599
- AMERICAN PSYCHIATRIC ASSOCIATION (1987) Diagnostic and Statistical Manual of Mental Disorders. American psychiatric Association, Washington DC
- BAKER, J. (1981) A Psycho-motor Approach to the Assessment and Treatment of Clumsy Children. Physiotherapy, 67 (12); 356-363
- BOWER, E. (1997) Measurement. Journal of the Association of Paediatric Chartered Physiotherapists, September; 18-25
- CHU, S. (1998) Developmental Dyspraxia 1 :the diagnosis. British Journal of Therapy and Rehabilitation, 5 (3); 131-138
- GENTILE, A.M. (1987) Skill Acquisition: Action, Movement, and Neuromotor Processes. In CARR, J.H., SHEPHERD, RB. (Eds)(1987), Movement Science: Foundations for Physical Therapy in Rehabilitation. Rockville, MD; Aspen Publishers; 93-154
- GILLBERG, I.C., GILLBERG, C., GROTH, J. (1989) Children with Pre-school Minor Developmental Disorders, V: Neurodevelopmental Profiles at Age 13. Developmental Medicine and Child Neurology, 31; 14-24
- HENDERSON, S. E., SUGDEN, D.A. (1992) The Movement ABC Assessment Battery. Psychological Corporation, London
- HOARE, D., LARKIN, D. (1991) Kinaesthetic Abilities of Clumsy Children. Developmental Medicine and Child Neurology, 33; 671-678
- KIRBY, A. (1999) Dyspraxia The Hidden Handicap. London: Souvenir Press
- LASZLO, J., BAIRSTOW, P.J. (1985) Perceptual Motor Behaviour: Developmental Assessment and Therapy. London, Holt, Rinehart & Winston
- LEE, M. (1996) Setting up a Dyspraxia Physiotherapy Service. Lee Publications: Denham
-

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

- LEE, M., FRENCH, J. (1997) *Dyspraxia - A Handbook for Therapists*. Association of Paediatric Chartered Physiotherapists Publications, Chartered Society of Physiotherapy. London
- LEE, M., SMITH, G.N. (1998) The Effectiveness of Physiotherapy for Dyspraxia. Physiotherapy, 84 (6); 276-284
- LEE, M. (1998) *Dyspraxia: Self-confidence and Self-esteem*. British Journal of Therapy and rehabilitation, 5 (10); 500-501
- LEE, M. (2000) A Physiotherapy Approach for the treatment of Dyspraxia (course notes). Portland Hospital, London
- LOSSE, A., HENDERSON, S.E., ELLIMAN, D., HALL, D., KNIGHT, E., JONGMANS, M. (1991) Clumsiness in Children - Do They Grow Out Of it? A 10-year Follow-up Study. Developmental Medicine and Child Neurology, 33; 55-68
- POLATAJKO, H.J., MACNAB, J.J., ANSTETT, B., MALLOY-MILLER, T., MURPHY, K., NOH, S., (1995) A Clinical trial of the Process-orientated Treatment Approach for Children with Developmental Co-ordination Disorder. Developmental Medicine and Child Neurology, 37; 310-319
- SCHOEMAKER, M.M., HIJLKEMA, M.G.J., KALVERBOER, A.F. (1994) Physiotherapy for Clumsy Children: An Evaluation Study. Developmental Medicine and Child Neurology, 36; 143-155
- SIMS, K., HENDERSON, S.E., HULME, C., MORTON, J. (1996) The remediation of Clumsiness, 1: An Evaluation of Laszlo's Kinaesthetic Approach. Developmental Medicine and Child Neurology, 38; 976-987
- SMYTH, M.M., MASON, U.C., (1997) Planning and Execution of Action in Children With and Without Developmental Co-ordination Disorder. Journal of Child Psychology and Psychiatry, 38 (8); 1023-1037
- SMYTH, M.M., MASON, U.C., (1998) Use of Proprioception in Normal and Clumsy Children. Developmental Medicine and Child Neurology, 40 (11); 672-681
- STEYER DAVID, K., (1994) Developmental Co-ordination Disorders. In: CAMPBELL, S.K., (1994) Physical Therapy for Children
- SUGDEN, D.A., CHAMBERS, M.E. (1998) Intervention Approaches and Children with Developmental Co-ordination Disorder. Paediatric Rehabilitation, 2 (4); 139-147
- VAN DER MEULEN, J.H.P., DENIER VAN DER GON, J.J., GIELEN, C.C.A.M., GOOSKENS, R.H.J.M., WILLEMSE, J., (1991) Visuomotor Performance of Normal and Clumsy Children, 1: Fast goal-directed Arm Movements With and Without Visual feedback. Developmental Medicine and Child Neurology, 33; 40-54
- WILLIAMS, C.A., SMITH, J., AINSLEY, J. (1999) The Effects of a Physiotherapy Intervention Programme on Children with Developmental Co-ordination Disorder. Journal of the Association of Paediatric Chartered Physiotherapists.
-

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

WILLOUGHBY, C., POLATAJKO, H.J. (1995) Motor Problems in Children with Developmental Co-ordination Disorder: Review of the Literature. The American Journal of Occupational Therapy, 49 (8); 787-794

WILSON, P.E., MCKENZIE, B.B. (1998) Information Processing Deficits Associated with Developmental Co-ordination Disorder: A Meta-analysis of Research Findings. Journal of Child Psychology and Psychiatry, 39 (6); 829-840

BIBLIOGRAPHY

BROWNSON, J., WALMSLEY, S. (2000) Developmental Co-ordination Disorder: Evidence-based Summary. Journal of the Association of Paediatric Chartered Physiotherapists, September; 20-24

GILLBERG, I.C., GILLBERG, C. (1989) Children with Pre-school Minor Developmental Disorders, IV: Behaviour and School Achievement at Age 13. Developmental Medicine and Child Neurology, 31; 3-13

HAWKINS, S., GADSBY, M. (1991) Perceptual-Motor Deficit: A Major Learning Difficulty. British Journal of Occupational Therapy, 54 (4); 145-149

MACLEAN, M.F. (1991) Parents as Co-Therapists for Children with Motor-Learning Difficulties: A Review of the Literature. British Journal of Occupational Therapy, 54 (2); 65-68

MACLEAN, M.F., CHESSON, R. (1991) Factors Affecting Parent's Role as Co-Therapists: A Pilot Study of Parents of Children with Motor-Learning Difficulties. British Journal of Occupational Therapy, 54(7); 262-266

McKINLAY, I. (1987) Children with Motor-Learning Difficulties: Not So Much a Syndrome - More a Way of Life. Physiotherapy, 73 (11); 635-637

PETERS, J.M. (2000) Developmental Co-ordination Disorder: From Research to Diagnostics and Intervention. Journal of Paediatric Chartered Physiotherapists, June; 5-8

STEPHENSON, E., MCKAY, C., CHESSON, R. (1990) An Investigative Study of early Developmental Factors in Children with Motor/Learning Difficulties. British Journal of Occupational Therapy, 53 (1); 4-6

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

APPENDIX A

Relevant Findings at Objective Examination

General

Muscle tone - generally low

Joint range - hyper-extensibility at knees, shoulders (external rotation), elbows, wrists and thumbs

Muscle stability - reduced at pelvic and shoulder girdles

Posture - sitting - slumped in chair

standing - tendency to lean against furniture or person, or fold arms across body could not stay still in one position for long; always fidgeting

Symmetrical integration - unable to jump with feet together; difficulty pushing large ball away with both hands; tendency to use just right hand

Bilateral integration - good rolling in both directions; poor jumping sideways (feet apart, land separately)

Midline crossing - NAD on formal testing

Proprioception - poor body position copying with eyes open and closed

Body perception - poor positioning of himself on the mat and floor for exercises

Spatial awareness - bumping into objects ++

Knowledge of two sides - observed during activities not to have a hand preference

Gross motor sequencing - verbal - did not listen to complete instructions

visual - difficulty remembering more than one task to copy

Gross Motor Skills

Total body flexion - (supine) maintained for 2 seconds only

Total body extension - (prone) unable to maintain at all

Kneeling **high** - wide base; unwilling to get into, or maintain position

high half - hands on thigh for support; dramatic falling over onto the mat

walking backwards - poor balance with reduced extension and increased circumduction at hips

4-point - could not achieve this position, even with verbal and physical prompts

Walking **Forwards** - NAD

Backwards - refused

on toes forwards - reduced balance

on toes backwards - refused

Fogg test - positive: ++ mirroring in hands and abnormal arm posturing

CASE STUDY - INTRODUCTION TO PAEDIATRICS - CYMRU 2000

Running - heavy heel strike; inconsistent and 'messy' style; arms flapping

Standing on one leg - very poor balance and stability; unable with eyes closed - would not attempt it

Hopping - low ground clearance; only managed two on either leg; unable to hop backwards or sideways

Jumping - low ground clearance; associated flexion at arms and hips; unable to jump backwards or sideways

Ball skills - good catching with both hands; poor grading and direction of throw. Very poor football skills with either leg

APPENDIX B

		Reassessment scores	Initial scores
Total body flexion		13	2
Total body extension		14	0
Wheelbarrows		52	18
4-point kneeling	R arm/L leg	10	0
	L arm/R leg	4	0
	R arm/R leg	3	0
	L arm/L leg	6	0
Walking backwards		good	refused
Hopping	right	4	3
	left	2	3
Jumping	on the spot	6	0
	forwards	10	3
Verbal sequence		1 out of 2	nil out of 2
Visual sequence		2 out of 2	nil out of 2

THE 1ST ANNUAL APCP POSTER COMPETITION 2002.

**“CHILDREN’S PHYSIOTHERAPY GOES
EVERYWHERE”**

A great opportunity!!

In order to update our resources and create a source of publicity material APCP has decided to hold an annual poster competition. This first competition is to be sponsored by APCP.

The theme is: **“Children’s Physiotherapy goes everywhere.”**

The Executive Committee will judge the competition at Conference in Birmingham in October 2002.

WIN

£100 book token for professional category

£50 Smiths vouchers for children

Reproduction of winning designs as poster and information leaflets.

How to enter

We are looking for creative and informative designs which reflect the diverse nature of Paediatric Physiotherapy. Designs can include photographs, drawings, text – in fact anything which informs on Paediatric Physiotherapy.

There are two categories:

- 1) Professional – open to APCP members**
- 2) Children – open to under 16 year olds**

Entry is free.

Send your design, which should be A2 size, in a packing tube or stiffened envelope with completed application form.



ENTRY FORM

Name

Contact Address

.....

Tel

Email

Category : 1) Professional – APCP membership no

2) Child – date of birth

School

I confirm that my entry is original work

Signed

**Send to: Gill Holmes, PRO c/o RLCH NHS Trust, Alder Hey, Eaton Road,
Liverpool, L12 2AP.**

Closing date September 30th 2002.

For further details or more application forms contact :

Gill Holmes PRO c/o RLCH NHS Trust, Alder Hey, Liverpool. L12 2AP.

Closing date 30th September 2002.

LITIGATION ADVICE

The physiotherapy profession is facing continual challenges to provide a high quality service in line with legislation, treatment practices and the need for evidence based practice. As is reported in the Rules of Professional Conduct (2002) the physiotherapist's role has changed significantly in the last thirty years with physiotherapists now having autonomy and with this comes added responsibility in relation to scope of practice and CPD.

An emerging issue facing paediatric physiotherapists is that of litigation, one that is familiar to our colleagues working in other fields.

It is essential that paediatric physiotherapists familiarise themselves with the CSP Rules of Professional Conduct 2002 (an ethical framework within which physiotherapists are required to act) and the CSP Standards of Physiotherapy Practice, 2000 (defines the practical application of the ethical principles) on issues relating to consent, duty of care / civil liberty and documentation. The APCP publication "Paediatric Physiotherapy Guidance for Good Practice" (revised 2002) should also be consulted.

When a paediatric physiotherapist receives a child for assessment and treatment, the legal and professional 'duty of care' towards the child is established. To ensure that the therapy provided is of benefit to the patient the therapist must keep up to date with evidence based practice e.g. guidelines, care pathways, research. It is essential that the paediatric physiotherapist considers the issue of consent as the child may be too young or unable to actively and consciously participate in making decisions regarding treatment.

The physiotherapist works in partnership with children and their families to enable them to make informed decisions about treatment options and setting of realistic, achievable goals.

It is essential that there is effective communication between the physiotherapist and the child and carers to ensure full understanding of the reasons, benefits and the planned levels of the intervention. When the treatment plan has been agreed with the child and carers it must be documented.

Documentation is necessary "To facilitate patient management and satisfy legal requirements,...." (Core Standard 14) Records must be concise, legible, in a logical sequence and dated - if an incident occurs when treating a child a report should be completed as soon as possible after the event and a copy held with the child's notes.

It is important to remember that physiotherapists should work safely, effectively and maintain full patient records to avoid claims of negligence.

Further information on negligence can be obtained from the CSP - the Legal Work Pack is available from the Professional Affairs Department.

It remains to say that in the current climate of litigation physiotherapists must be aware of their professional responsibilities and that employers should support their employees in identifying learning needs to enable therapists to deliver a quality service to the child and their family.

Further information and references are in the following publications:- Association of Paediatric Chartered Physiotherapists (Revised 2002) Paediatric Physiotherapy Guidance For Good Practice. APCP Publications, The Chartered Society of Physiotherapy (2002) Rules of Professional Conduct. CSP London

The Chartered Society of Physiotherapy (2000) Core Standards. CSP London

Adare Brady
Chairman APCP

Clinical Interest Group (CIG) Liaison Officer's Report – July 2002

The Clinical Interest / Occupational Group Liaison Committee meets four times a year at the CSP Offices. It has a wide and varied agenda focusing around sharing information about developments within the profession and acting as a consultation forum. There is representation from all the recognised clinical interest / occupational groups.

This report aims to disseminate some of the information shared at the meetings.

- **There has been much discussion and work done on organising twinning arrangements with the Czech Republic physiotherapists and the CSP:** At present all arrangements are 'on hold', there has been difficulty matching the bids submitted with what is felt to be required within the different social, cultural and professional field. For instance, there is no equivalent of the clinical interest groups in the Czech Republic. Suggestions now include ideas such as career development guidelines, exchanges, secondments involving CIG members visiting to support professional and service development and the promotion of overseas membership to current CIGs. The APCP have established overseas membership.
- **NICE Guidelines:** Now into 7th wave of the NICE Guidelines with a new programme of guidelines. Information is available from www.nice.org.uk. Information is also available from Ralph Hammond - (CSP's NICE Guidelines representative) telephone number 020 7306 6636 or email hammond@csphysio.org.uk to review what 'conditions' / 'subjects' have been registered with the CSP. It was important to note that 'Augmentative feeding' has not. Ralph stressed the importance of CIG involvement to share their knowledge and clinical experience in the development of a specific guideline. 'Subjects' registered include: sarcoma, brain tumour, skin tumours, osteoporosis, depression in children, Parkinson's disease, tuberculosis, pressure sores and suspected tumours. The APCP will continue to be actively aware of the programme of guidelines, through liaison with Ralph, to try and ensure involvement when appropriate. (There was discussion at the national committee meeting about whether the APCP needed a 'nice' rep!)
- **Outcome measures:** The outcome measures group is now established. All clinical interest and occupational groups have a nominated member, Terry Pountney is the representative from the APCP. The group will meet electronically and the main content of work will be around collating reading lists, suggested outcome measures, recommendations of measures and CSP approved measures.
- **Setting the Agenda:** This is the pilot project in Northern and Yorkshire. The concept is to establish an electronic networking system for all CSP members to meet their identified and changing communication needs. The project is due to go 'live' within the next week or so. All clinical interest and occupational liaison officers have been asked to sign up and also to encourage all national committee members to do like wise, so taking part in the pilot. Mary Harrison is the APCP's 'rep' in Northern and Yorkshire and has registered the APCP. At present it is only being promoted for all CSP members in Northern and Yorkshire. Registration, for those in the Northern and Yorkshire is electronic and the address is <http://www.interactivecsp.org.uk/register/> You will need your CSP membership number.

Question for you all – Do you have access to email at work? Could you feedback this information to your regional reps?

- **Time out survey:** This survey, organised by the CSP, sought to establish whether clinical interest and occupational groups activities were supported by work places and what was the time commitment. Results from this survey have now been collated and were presented during the Clinical Interest and Occupational

APCP MATTERS

Group Liaison committee meeting. I shall be identifying key aspects of the results and reporting them to you in time for the next journal.

- **Clinical Interest / Occupational groups and their relationship with CSP Council:** During the meeting, discussion took place around these links as currently there is no formal communication mechanism between individuals representing the CSP and CSP Council (the policy -making body of the CSP). Questions such as how do clinical interest and occupational groups' report, feedback and raise concerns were asked. It was evident that developing stronger communication links is important. Individual clinical interest and occupational groups' issues will now become a standard agenda item at the Clinical Interest and Occupational Groups Liaison committee meetings.
- **Clinical Educators:** There is national framework for the accreditation of clinical educators. The Education and Professional Practice Committee were commenting on the draft framework.

Linda Fisher – Clinical Interest Group Liaison Officer

RESEARCH

Following the research study day in April, there were a number of suggestions as to how the APCP could help to promote research among its members. These included: providing a source of advice, funding, networking, and information. We are endeavouring to carry out as many of these ideas as possible.

Research study days and workshops

As the feedback from the Cambridge study day was so positive, we are intending from now on to hold an annual research meeting. This will include a free paper session to provide a forum for research projects to be shared. The next one will be in the Spring, with details in the next Journal. As well as these meetings, all the APCP regions are being encouraged to hold their own local workshops to assist members to develop their research ideas and share their knowledge. Smaller meetings will hopefully enable people to share ideas and seek advice in a more informal environment. These meetings will be advertised in a similar way to the study days via the APCP and CSP Journals to enable any member to attend other regions research meetings. I will also let those who have joined the research group register, know when these meetings are occurring, by e-mail.

Do you have a research idea you would like to explore with someone?

Contact me and I will put you in touch with an experienced researcher who should be able to discuss this and give advice and support.

Do you want to find out about sources of funding for a proposed project?

Do contact me as I may be able to point you in the right direction to try to find funding.

Networking

If you are undertaking any piece of research, however small, please fill out the form at the back of this Journal to let me know what you are doing. By having a list of those involved in projects, it has enabled me in the past to put others in contact with those researching similar fields. I will also be able to let you know when there are research meetings planned.

Useful Websites

RDInfo: This database is now funded by the DoH and is available on www.rdinfo.org.uk It is easily searched to find over 800 funding sources for healthcare research in the UK. This covers 1700 different awards totaling over £45m. Well worth a look.

RDAnnounce: This new web-based NHS R&D alert facility carries details of the most recent announcements from the DH?NHS R&D. It includes funding calls, key publications and other developments such as policies It is found on www.doh.gov.uk/research/rdannounce.htm

RESEARCH

PEDRO: <http://ptwww.cchs.usyd.edu.au/pedro/> This is a database of abstracts of randomized controlled trials of physiotherapy topics

NICE database: http://.nice.org.uk/database/db_ind.htm

Current controlled trials:

http://controlled-trials.com/login.cfm?form&returnto=home_page.cfm

www.ex.ac.uk/stloyes/schhom.htm Electronic distance learning module: the university of Exeter have produced a module to introduce principles and application of evidence based practice

Chartered Society of Physiotherapy: www.csp.org.uk

CIRRIE is the Centre for International Rehabilitation Research Information and Exchange. They have a free database for international research on rehabilitation. It also has a directory of international research centres and conferences. <http://cirrie.buffalo.edu/search>

(PIER) Paediatric Information and Education Resource

This is a free web site developed by the Sheffield Children's Hospital to encourage communication between health professionals involved in the care of children. The site contains many national and local guidelines for paediatric care, examples of patient leaflets, educational material and research findings. <http://www.pier.org.uk>

Username: PIER Visitor, Password: Browse

OMNI (Organising Medical Networked Information). Provides a gateway to many quality Internet sites dedicated to health and medical sciences. Based at the University of Nottingham, at <http://omni.nott.ac.uk>

Sarah Crombie

Research Liaison Officer

REGIONAL REPRESENTATIVES

EAST ANGLIA

Ms Sue Coombe
32 High Bungay Rd
LODDEN
Norfolk
NR14 6JT

LONDON

Ms Jeanne Hartley
Physiotherapy Dept
Great Ormond Street hospital
LONDON
WC1N 3ZJH

SCOTLAND

Ms Laura Wiggins
Broomlea School
168 Broomhill Drive
GLASGOW
G11 7NH

SOUTH WEST

Ms Ruth Davies
Child Development Unit
Musgrove Park Hospital
TAUNTON
Somerset TA1 5DA

SOUTH EAST

Mrs Peta Smith
Physiotherapy Dept
Mary Sheridan Centre
43 New Dover Rd
CANTERBURY CT1 3AT

WALES

Mrs Jill Williams
Nursery Unit
The Hollies Special School
Pentwyn
CARDIFF

NORTH WEST

Pamela Bland
Physiotherapy Dept
Paediatric Out-Patients
Queens Park Hospital
BLACKBURN
BB2 3HH

TRENT

Ms Claire Hill
Physiotherapy Dept
Sheffield Children's Hospital
Western Bank
SHEFFIELD
S10 2TH

NORTHERN IRELAND

Mrs Judith McArthur
Physiotherapy Dept
Whiteabby Hospital
Doagh Road
NEWTONABBE
Northern Ireland BT37 9RH

WEST MIDLANDS

Susan Rideout
Physiotherapy Dept.
Birmingham Children's Hospital
Steelhouse Lane
BIRMINGHAM B4 6NL

NORTH EAST

Mrs M Harrison
11 Whitsundale Close
KNARESBOROUGH
N Yorkshire
HG 0HX

OVERSEAS

Mrs Gill Holmes PRO
Physiotherapy Dept
Alder Hey Children's Hospital
Eaton Road
LIVERPOOL L12 2AP

REGIONAL REPORTS

SOUTH WEST

There is a lot of quiet activity going on by the regional and conference committee at the moment. As you can see in this journal, here is the first advertisement for next years' conference and national AGM, to be held in Bournemouth. I think we have a good line-up of topics and excellent speakers to present them. It has taken a lot of work to get this far and there is still more to come. Please do think about attending and making the most of it being in our region. If all our membership came, we would exceed the quota!

Don't forget that on 28th September, there is the study day on Childhood Pain This will be very interesting, taking the topic from its development in gestation to management. It is being held in Gloucester. Please look out for the advertisement in Frontline and come along.

These two events are all that are currently organised but if you wish to run something and would like help or advice, any of the regional committee is approachable.

RUTH DAVIES

LONDON

The study day on the Movement ABC in April was very well attended and the feed back from delegates was very positive. One of the important parts of the evaluation forms for the committee is the little bit at the end which invites you to let us know what other topics you would like us to arrange lectures on.

Just to show you that we do take notice we have arranged an evening lecture on Chronic Fatigue in the Physio Department at Great Ormond Street Hospital. This will take place on September 19th at 6 pm for a 6.30pm start. The speakers will be Melanie Bladen, Senior Physiotherapist and Anna Gregorowski, Adolescent Nurse Specialist who both work with patients with Chronic Fatigue at GOSH. Please give me a call if you would like to attend but fliers will soon be on their way to hospitals, CDCs etc so keep your eyes open. I'm taking bookings so send your applications to me at GOSH or if you need

any further info please ring me: 020 7405 9200 Bleep 690.

A one-day splinting course has been arranged for Saturday 26th October at the Bobath Centre. Ring Kate Beattie (020 8444 3355) to book your place as soon as possible as places will be restricted. It should be a great day and you'll even have a chance to make splints of your own to take home as souvenirs! Look out for the fliers.

We welcome Lesley Katchburian, Melissa Fuentes and Lucy Alderson to the Committee.

Happy holidays – may the sun shine for you all!

JEANNE HARTLEY

TRENT

Thanks to the help of Gina Thornton-Keighthly and Jane Halford Trent region is now back on track.

We have an Osteogenesis Imperfecta study day in Sheffield planned for 2nd November 2002. With study days by Gill Stern and an overview of sleep systems planned for the New Year.

For any information regarding Trent apcp or the courses planned over the next year contact Claire Hill on 01142267890.

CLAIRE HILL

EAST ANGLIA

I have taken on the role of Regional Representative from Fiona Down, who has now stepped down, and has taken up a place on National Committee as Treasurer. The East Anglia Committee would like to thank her for all her hard work as Regional Rep, and wish her well with her new role.

Following the cancellation of our AGM in March, this was held in June, during an extremely successful and information-packed two-day Gait Analysis

REGIONAL REPORTS

Course which we arranged in Cambridge. There are some changes to the East Anglia Committee – Nicky Smith has resigned, and we would like to thank her for all her hard work in getting our website up and running (www.apcp-eastanglia.org.uk), which was officially launched during the AGM, and to congratulate both her and Bruce on the birth of their baby.

We would also like to welcome two new members who have joined the Committee – Penny Smith, based at Luton & Dunstable, and Christine Mills, based at St. Albans Childrens Centre.

Arrangements are progressing for this year's Conference which will be held during the CSP Annual Congress on 11th, 12th, and 13th October in Birmingham, and we are looking forward to a lively and interesting three days.

We have a new programme of study days planned, starting in November, looking at the new SEN Code of Practice, and how this relates to physiotherapy. Future study days for 2003 are also planned, on subjects including the ABC Movement Test, Rheumatology, and Sensory Integration.

Other suggestions for study days would be most welcome – please contact any of the committee members with ideas.

SUE COOMBE

NORTHERN IRELAND

The committee have been busy organizing next year's programme of evening meetings. We have made one change in that the first meeting will be held in October, instead of September.

The planned topics and speakers are as follows:

14th October 2002 – An update on Talipes. Speaker – Catherine Duffy - Orthopaedic Consultant. Venue – Fleming Fulton School. Time 7.30pm.

11th November 2002 – An update on Orthotics. Speaker – Paul Gawley – Senior Orthotist. Venue – Fleming Fulton School. Time 7.30pm.

10th February 2003 – Chest Physiotherapy. Speaker – To be confirmed Venue – Fleming Fulton School. Time 7.30pm. (AGM to be held prior to this meeting at 7.00pm)

10th March 2003 – Physiotherapy at the Children's Hospice. Speaker – Ruth Graham – Senior Physiotherapist. Venue – Children's Hospice.

All N.I.A.P.C.P. members will receive a full programme over the summer with confirmation of dates and times.

We are hoping to organise a Paediatric Hydrotherapy Course in 2003.

JUDITH McARTHUR

NORTH WEST

In the next few days we will be contacting the person who is to have a bursary of £250 for the Introductory To Paediatrics Course in November. Congratulations to the winner!

Some of you will have attended Conditions of the Newborn this week, our thanks go to the speakers. Our next course will be held on 29th November at Alder Hey, where we will be looking at muscle physiology, gait analysis and surgery. Please look at the course section in the journal for more information. Please also make a note in your diaries for the 8th March, 2003! This will be the date for our next AGM.

If you have any ideas for future course topics or speakers please contact me by post (address in the journal) or Email pam.bland@btinternet.com

PAM BLAND.

NORTH EAST

September 2002

The long awaited website for Yorkshire and Northern Region is ALIVE!!! There have been teething problems with registration etc but hopefully you will not have been put off by these hitches. There is the opportunity to access valuable information, share and

REGIONAL REPORTS

obtain clinical knowledge with colleagues. The potential is far reaching. So far we have had 64 registrations on the Paediatric network, which is only a quarter of the NE membership and some of these could be outside of the pilot area. So log on and have a look around the networks and do impart that wealth of knowledge and expertise with your peers.

Another successful study day in June, facilitated by Christine Shaw on the M.O.V.E. concept, with a pleasing attendance. By the time you receive this Journal we will have had our next study day at Hartlepool, entitled 'Respiratory Physiotherapy for Children in Hospital or at Home' by Liz Hardy – details went out in a flyer in July. For those members who are able to access the Setting the Agenda Website, all future study days will be advertised in the events section of the Paediatric network but a flyer will be sent out as usual to all NE members. The application form for the study days can now be downloaded from the document section and sent to the Course Co-ordinator.

Your Regional Committee have been hard at work organising future study days until March 2004 including topics such as Sports Injuries in Children, Muscle Imbalance, Legal Issues in Paediatrics, Caseload Weighting and Paediatric Hydrotherapy. The Website and flyers will keep you informed.

Welcome to our latest 10 new members. We have reached the 200 target for the NE membership!!

Jane Hallford has not received any requests for videos from the Library for some considerable time so the committee have decided not to purchase any further videos. Instead it has been suggested that the monies should be used for bursaries to enable members to attend courses, conference etc. Applications for such bursaries should be made in writing to the Secretary of the Committee (details can be found in the document section of the above network).

MARY HARRISON.

WALES

Following a slight rearrangement of Committee members in June, we now are blessed with two chairpersons! What you might call rotating chairs or even musical chairs. Sue Hudspith, who works at Eveswell Clinic in Newport, will chair meetings in that area, while Jacqueline Brown, who works for the Family Support Team at Brynterion Hospital in Llanelli, will chair meetings in the west.

Due to circumstances beyond our control, we were unable to stage our proposed programme for May – Juvenile Idiopathic Arthritis Overview, and for July – Paediatric Hydrotherapy, led by Helen Whitelock. Neither of these study days has been abandoned, and we hope very much to include them in our programme at a later date.

Our study day on September 19th is definitely running – Sleeping and Lying Postures, led by Terry Pountney from Chailey Heritage. This is being held at Llanfrechfa Grange, Cwmbran, Newport, just off the M4. I hope that, by the time you read this, we will have had a good response from you to join us on the 19th, and that the day proves to be very successful.

On October 14th, at 7.30 pm, we have planned an evening meeting at Eveswell Clinic in Newport. Dr Robert Van Deurson will speak on Analysis of Gait and Functional Movement. The cost of this will be £5 for members and £10 for non members. All membership should have received more information about this and following courses.

In early December, we are holding an afternoon workshop on the difficult topic of Consent. We have a facilitator with us to direct the discussion, and the afternoon will be followed by our Christmas celebration evening.

Our website is now accessible, www.apcp-wales.org.uk. We will be updating it in August with new information.

REGIONAL REPORTS

C.S.P. + A.P.C.P Conference October 2002.

Don't forget to apply to the Committee for support if you wish to attend Conference. The A.P.C.P programme looks very interesting, and it would be nice to see lots of you there.

All in all, A.P.C.P Wales flourishes, but we would like to have more feedback from you all out there about what the membership requires in terms of information and services. Are we getting it right?

Hywl!

JILL WILLIAMS

WEST MIDLANDS

Following a very successful day course on neuroplasticity held in March, incorporating the AGM, we have planned further day courses around the region.

Confirmed for Thursday 20th February 2003 is a Sensory Integration Workshop. Tutor Joy High. This will be held in Wolverhampton and again we will hold the AGM at a suitable time during the day. Places are limited but if you are interested please register this with Julia Wilson at Birmingham Children's Hospital 0121 333 9480, more details will be published as they become available.

In the planning process are a Gait Analysis day in May/June and a Muscle Imbalance course for the Autumn of 2003.

We would like to encourage both members and non-members to attend these courses.

The treasurer would like to remind people that bursaries area available for those unable to secure course funding. A maximum total of £300 annually, depending on the strength of the branch bank account. Applications for this funding should be made to The Treasurer APCP c/o Lindsay Rae, Physiotherapy Department, Birmingham Children's Hospital, Steelhouse Lane, B4 6NH. or 0121 333 9480.

SUSAN RIDEOUT

APPLICATIONS FORM FOR APCP PUBLICATIONS - 2002

NEW 2002 PUBLICATIONS:

Obstetric Brachial Plexus Palsy - A guide to physiotherapy management:	£10.00
Hip Dislocation in Children with Cerebral Palsy - A guide to physiotherapy management:	£7.50
Paediatric Physiotherapy - Guidance for Good Practice (Revised 2002) members	£2.00
until end of Conference 2002 - thereafter £5.	
non members	£5.00

Evidence Based Practice in Paediatrics:

- Management of Obstetric Brachial Plexus Palsy £3.00
 - Hip Subluxation and Dislocation in Children with Cerebral Palsy £3.00
- OR £5.00 for the pair

Paediatric Manual Handling - Guidelines for Paediatric Physiotherapists £10.00

Human Postural Reactions - Lessons from Purdon Martin by Dr. John Foley £5.00

Postage and Packing included in the price with all of the above

P & P not included in the following prices:

Tests & Measures Resources Pack (2nd edition)	£3.50
Haemophilia Booklet	£3.50
Baby Massage	£1.00
The Children Act 1989 "A synopsis for Physiotherapists"	£2.50
Statutory Assessment of Children with Special Educational Needs	(to be updated)
Guidelines for Calculating Caseloads	(to be updated)

*POST & PACKING COSTS (UK Only): Single copies: £0.50
 2 - 5 copies: £1.00
 6 -10 copies: £2.50

FOR MORE THAN 10 COPIES OR FOR POSTING TO OUTSIDE UK - POSTAGE UPON REQUEST PLEASE

TERMS: CASH WITH ORDER Cheques & postal orders made payable to "APCP Publications" & included with order.**

SEND ORDER WITH PAYMENT to:

Lorna Stybelska, Paediatric Physiotherapy Dept, Cumberland Infirmary, Carlisle, Cumbria, CA2 7HY.
Work tel: 01228 814739.
Home tel: 016974 72207. e-mail:stybelskal@aol.com

Name & Address
for delivery

.....

.....

Prescribing Rights For Physiotherapists.

I am sure you are all aware of the debate in Frontline regarding prescribing rights for physiotherapists. The final report of the Crown Review of Prescribing, Supply and Administration of Medicines recommended that the law should be changed to allow professions other than doctors and nurses to prescribe drugs. A steering group has been set up by the CSP to take forward the issue of prescribing for physiotherapists and I have the honour of representing paediatric physiotherapy and APCP at these meetings.

Of course, there are many issues around this topic particularly with regard to education, training, keeping abreast of new pharmaceutical developments, communication, safety and patient access. However, it has been shown that the cost of supplying drugs prescribed by nurses and pharmacists has reduced expenditure, waiting lists, time off work for patients etc. Prescribing rights will not be mandatory for physiotherapists but those who would like to prescribe will be able to with appropriate training. It is thought that this would be particularly appropriate for physiotherapists working in musculoskeletal clinics, private practice, community settings (children & elderly care) etc.

How many of you have had children in your care who could do with simple analgesia or a bronchodilator to facilitate a treatment session? You cannot prescribe and have to find a doctor to write the prescription, particularly frustrating and time consuming for all when sometimes the medication can be bought over the counter at the local chemist or supermarket! How many times has the doctor asked you what you want him/her to write your patient up for?

After considerable discussion it has been agreed to look at condition driven groupings as an initial indication for prescribing rights. The initial groups identified were drugs for the management of:

- Neurological conditions
- Musculoskeletal conditions (including arthritis and rheumatological conditions).
- Respiratory disorders
- Cardio-vascular disorders
- Pain
- Patients with mental health problems
- Dermatological conditions (including burns)
- Gynaecological and urological conditions

It was noted that drugs for the management of infections would also need to be included in each category.

It is probable that prescribing rights will be under Patient Group Direction (PGD) this will direct the use of a certain group for appropriate conditions i.e. a specific protocol.

Some physiotherapists, such as those in private practice or musculoskeletal clinics who diagnose and treat, for example shoulder dysfunction by injection, may become Independent Prescribers. The important thing is that they are able to diagnose. Most specialist physiotherapists will be Supplementary Prescribers using PGDs. This would be of particular benefit for patients with long term conditions who see a physiotherapist on a regular basis and would be in a position to identify benefits from a change in a drug regime. These would usually be patients who do not see a specialist doctor on a regular basis and could have to wait some time for an appointment.

HERE AND THERE

Included in the discussion is also the right to prescribe appliances and devices. This will include splints such as AFOs, spinal orthoses etc, etc.

For physiotherapists the right to prescribe is primarily all about enhancing therapeutic aims, facilitating management of the patient's condition and improving quality of life. Access for patients will be improved and waiting times reduced. It may also facilitate working time directive problems for junior doctors! Physiotherapists have been autonomous clinicians for a number of years and the recommendation of the Crown Report that identifies physiotherapists as possible early candidates for prescribing authority is a major step for the profession.

I would be very grateful to hear thoughts and opinions from APCP members. I would also like to know if any of you are working with a PGD, particularly if you have been involved in the making of it! Now is your chance to let me know what you think – please either write to me in the Physiotherapy Department, Great Ormond Street Children's Hospital, London WC1N 3JH or contact me by e-mail: hartlj@gosh.nhs.uk. It is really important that I have some feed back from you – I am trying to represent you but unless you contact me the steering group may have the opinion of only one paediatric physiotherapist!

Thank you
Jeanne Hartley

SETTING THE AGENDA PILOT WEBSITE – PAEDIATRIC NETWORK.

This went 'live' on the 8th July. The network has sections for news items, events, discussion forum, useful links, projects and initiatives, polls and documents. There is also an email for 'contact your peers' We have 4 moderators of the network who are members of the NE region of APCP. It has been a major learning curve for the 4 of us but a very exciting venture as surely this is the way forward to enhance CPD, improve communications and accessible networking. Initially the moderators have been responsible for putting on most of the material but it is hoped that many members of CSP who have an interest in Paediatrics and not just the NE members will access it and use it as an instant tool to share and obtain clinical information and knowledge. So far 64 members have registered for the Paediatric network and feedback has stated that the Paediatric network is most proactive. If this pilot project proves successful then it will be rolled out nationally next year.

Website address – <http://www.interactivecsp.org.uk>

Mary Harrison
Network moderator

HERE AND THERE

CALL FOR HIGH-LEVEL INDEPENDENT REVIEW ON SEN

The statutory framework for identifying and meeting children's special educational needs is serving some children poorly, says an Audit Commission report out today.

Statutory assessment and statements of SEN: in need of review? presents evidence on both the shortcomings and strengths of the statutory framework - and concludes that a high-level independent review is needed to consider options for future reform.

While the framework serves some children well, there is evidence that many children and their families are having poor experiences. Key concerns include:

- statutory assessment is a costly, bureaucratic and slow process - a statement takes 6 months to produce and costs an estimated £2500 - but often it 'adds little value' in helping to meet a child's needs, according to parents and teachers;
- many parents found statutory assessment a stressful and alienating process - most of those met by the research team said they 'had to fight' to get a statement;
- statements provide little guarantee that a child will get the support they need in school, due to weak monitoring arrangements in many LEAs and schools and shortfalls in some health and social services for children;
- children with similar needs are getting different levels of support depending on where they live, which school they go to and how assertive their parents are.

The report also highlights aspects of the statutory framework which are valued by parents and professionals. These include the formal recognition of a child's needs provided by a statement, and the advice received from the educational psychology service and other agencies (although often this came prior to statutory assessment). Statements can also provide added rigour to planning to meet the needs of individual children - and pressure on all concerned to work together to this end.

The paper makes recommendations at two levels.

First, action that local authorities and schools can take to help meet children's needs more effectively within the current framework. Twelve recommendations are put forward, based on innovative local practice. They include:

- further delegation of SEN resources - to give schools the means and incentive to intervene at the earliest opportunity, enabling them to meet more children's needs without having to request a statutory assessment; and linked to this,
- the development of rigorous monitoring arrangements so that parents may be confident that their child will get the support that they need in school.

Secondly, the need to begin a national debate about options for future reform. The Government has made a number of recent changes, including a new SEN Code of Practice and the SEN and Disability Act 2001. These represent steps in the right direction - but tensions remain at the heart of the statutory framework. In particular:

- LEAs are held responsible for arranging provision to meet the needs of children with statements - but resources are increasingly controlled by schools

HERE AND THERE

- some children require the support of health and social services, but these agencies are only required to respond in so far as their resources allow
- statements place unlimited demands on limited LEA budgets.

Given the great diversity of views that exist - some rooted in years of negative experience - the report concludes that a high-level review is needed to consider options for future reform.

Sir Andrew Foster, Controller of the Audit Commission, said:

“There is much that local authorities and schools can do to help meet children’s needs more effectively. But action at a local level can only take us so far. Our system of education has changed enormously since statements were first introduced, nearly 20 years ago. Much progress has been made in that time. However key parts of the statutory framework are inconsistent with the roles now played by local authorities, schools and other agencies in meeting children’s needs.

“We therefore urge the Government to establish a high level independent review - to pave the way for a system that is fairer, more efficient and more responsive to the needs of young people and their families.”

Notes to editors

1. SEN covers a wide range of needs including learning, behavioural and physical difficulties. 1 in 5 school children has SEN and 1 in 30 has a statement. Statements are intended for children with higher levels of need and are drawn up by the LEA, through a 6-month ‘statutory assessment’ process, involving health and social services.

2. Statutory assessment and statements of SEN: in need of review? is the first report from an Audit Commission project on children with SEN. It will be followed in Nov. 2002 by a wider report, looking at how well children’s needs are being met, in the context of policy on inclusion.

3. The report is based on research in 5 authorities in England and Wales, including interviews with LEA officers, headteachers, governors and school SEN co-ordinators, structured discussions with parents of children who have SEN and a review of 100 case files of children who have statements. It also draws on a national survey of LEAs and analyses of national data.

4. The Audit Commission is an independent body established under the provisions of the Local Government Finance Act 1982 and the NHS and Community Care Act 1990. Its duties are to appoint auditors to all local and health authorities and to help them bring about improvements in economy, efficiency and effectiveness directly through the audit process and through value for money studies. It also has a duty to carry out Best Value inspections of certain local government services and functions. Further details about the Commission can be obtained from its web site - www.audit-commission.gov.uk

Press Office for the Audit Commission

Telephone 020 7960 6606 Fax 020 7960 6690

**The Audit Commission for Local Authorities and the National Health Service in England and
Wales, 1 Vincent Square, London SW1P 2PN.**

COURSES

CHARTERED SOCIETY OF PHYSIOTHERAPY

2002 CONGRESS

BIRMINGHAM NEC

11th - 13th OCTOBER

AFFECTING CHANGE

in association with the

2002 Annual Conference of the

**ASSOCIATION OF PAEDIATRIC
CHARTERED PHYSIOTHERAPISTS**

As announced in the March Journal, the 2002 Annual APCP Conference will take place during the CSP Congress in October this year.

Our programme (full details in March Journal) will run concurrently with a number of other CIGs, including Orthopaedics, Acupuncture, Neurology, Mental Health, Sports Medicine, Physiotherapy Managers, and Occupational Health. There are also a number of free paper sessions over the three day programme, as well as a trade exhibition.

The hotel which we have nominated as our base is the Copthorne Hotel
(contact telephone No. 0121 200 2727)

COURSES

PROGRAMME

FRIDAY, 11th OCTOBER 2002

12.30 Registration.

14.00 - 17.30 Topic: Paediatric Outcome Measures.

Speaker: Virginia Knox - Paediatric Physiotherapist from the Bobath Centre, London.

(Afternoon tea and exhibition viewing to be staggered between 15.00 and 16.00 - Virginia will continue her presentation after tea.)

17.30 Welcome reception in the trade exhibition.

SATURDAY, 12th OCTOBER 2002

08.30 Registration.

09.15 Opening keynote address.

10.45 - 12.30 Topic: Cerebral Palsy in Adulthood and Implications for Paediatric Practice.

Speaker: Chris Barber, Physiotherapist from Bobath Centre, London.

(Morning coffee, exhibition and poster viewing staggered between 10.45 and 12.00 - Chris will continue her presentation after coffee)

12.30 CSP award ceremony in main auditorium.

13.15 Lunch in exhibition hall.

14.15 Concurrent free paper sessions - in all halls.

15.50 Afternoon tea and final exhibition viewing.

16.15 - 17.30 Topic: Nocturnal Ventilation for Muscular Dystrophy

Speaker: Michelle Eagle, Research Practitioner in Neuromuscular Disorders, Institute of Genetics International Centre For Life, Newcastle

17.30 CSP AGM in main auditorium for all CSP members.

20.30 APCP Supper at Cophthorne Hotel.

SUNDAY, 13TH OCTOBER 2002

09.00 Registrations.

09.30 Topic: Multi-agency provision for children and young people with disabilities, and their families.

Speaker: Linda Fisher, Paediatric Physiotherapist currently seconded to Essex county council to lead a pilot project on multi-agency provision.

(Morning coffee between 11.00 and 11.30)

11.00/11.30 Topic: Managing the curriculum for children with severe motor difficulties.

Speaker: Pilla Pickles, author of the book by this title.

13.00 Round-up session in each hall.

COURSES

CONFERENCE DINNER

will be held on:

SATURDAY 12TH OCTOBER

at the

COPTHORNE HOTEL

£30 (members) £40 (non-members)

(to include dinner, speaker and entertainment)

HOW TO BOOK:

If you would like to join us for the APCP Conference Supper,
you will need to book direct with us.

This cannot be booked through the CSP. A DINNER TICKET
will be sent to you upon receipt of the attached BOOKING form.

The Congress package (which includes the full CSP programme, trade exhibition,
and daytime catering) should be booked through the CSP – details and booking form
are in Frontline. Please be sure to identify yourself as an APCP Member on the form.

We look forward to seeing as many of you as possible in October.

COURSES

APCP CONFERENCE 2002

DINNER

COPTHORNE HOTEL, BIRMINGHAM

SATURDAY 12TH OCTOBER

£30 (members) £40 (non-members)

NAME

CONTACT ADDRESS

.....

.....

TEL

Vegetarian Menu required Yes/No

Any specific dietary requirements

**Please return this form, together with a cheque for £30,
made payable to 'APCP Conference Account' to:**

Sue Coombe/June Fisher
Jenny Lind Physiotherapy Dept
Norfolk & Norwich University Hospital NHS Trust
Colney, Norwich. NR4 7UZ

Please return as soon as possible, but at the latest by 1st September

COURSES

APCP CONFERENCE 2003

At

THE MARSHAM COURT HOTEL, BOURNEMOUTH

THURSDAY 3RD – SATURDAY 5TH APRIL



CONFERENCE PROGRAMME

Thursday 3 April

13.30 – 13.45	Opening
13.45 – 14.45	Making the right start Helen Robinson, Neonatal Physiotherapist
14.45 – 15.00	tea
15.00 – 16.00	Outcomes of pathology Dr Rebecca Mann, Consultant Paediatrician
16.00 – 16.30	free paper session

Friday 4 April

09.00 – 10.00	Adolescent knee pain Sue Close, Paediatric Physiotherapist
10.00 – 11.00	Management of the long term ventilated child in the community speaker to be confirmed
11.00 – 11.30	coffee
11.30 – 12.30	National AGM
12.30 – 12.45	Jenx Award
12.45 – 14.00	lunch
14.00 – 15.15	workshop 1
15.15 – 15.45	tea
15.45 – 17.00	workshop 2

Saturday 5 April

09.00 – 10.00	Dealing with adolescent children with JIA Dr Jackie Clinch, Consultant Paediatric Rheumatologist
10.00 – 11.30	Strength training in CP Dr Margaret Mayston, Clinical Director Bobath Centre
11.30 – 11.45	closing speech
11.45	coffee in bar

WORKSHOPS

Aromatherapy

Pam Buckley

Posture management : John and Liz Goldsmith
Neurological casting : Shelley Cox
Craniosacral therapy : Anneli Hulkkonen

WORKSHOPS

NAME: _____

Delegates have the opportunity to attend two workshop sessions
Please indicate your preference in order 1 – 4

- A) Aromatherapy
- B) Craniosacral therapy
- C) Neurological splinting
- D) Postural management

CALL FOR PAPERS!

Should you wish to present any research or critical reviews
of literature in a ten-minute slot, we welcome your application.
Please supply your abstract.

COURSES

CONFERENCE PACKAGE

Bournemouth 2003

NAME:	member	non member
COMPLETE PACKAGE	£250	£300
Hotel accommodation		
All daytime catering and Thurs pm dinner		
Entry to conference sessions		
Overnight B&B based on two sharing		

(PLEASE INDICATE WITH WHOM YOU WISH TO SHARE IF KNOWN)

SINGLE ROOM SUPPLEMENT DAILY	£20	£20
---	------------	------------

FRIDAY	£100	£120
Full day lectures		
Lunch, tea, coffee		

THURS OR FRIDAY NIGHT ACCOM	£75	£75
Per night including breakfast		

THURSDAY PM LECTURES	£50	£60
Including tea		

SATURDAY AM LECTURES	£50	£60
Including coffee		

CONFERENCE DINNER	£25	£25
Friday evening		
Those delegates not wishing to attend must make their own arrangements for this evening		

THURSDAY NIGHT DINNER	£20	£20
Available in the hotel		

WELCOME RECEPTION PRIOR TO THURS PM DINNER
Please indicate whether you wish to attend *yes / no*

COURSES

Please send completed forms to

Ms Gill Smith / Mr Rob Shaw, Physiotherapy, CDC, Poole Hospital NHS Trust,
Longfleet Rd, Poole, Dorset BH15 2JB.

Cheques should be made payable to:
APCP SW Region Conference 2003

Closing Date for applications will be 28 Feb 2003

Cancellations will be refunded up until the closing date but subject to a £20 fee.
However substitute delegates are welcomed at no extra charge.

APPLICATION FORM

NAME:

ADDRESS:

.....

.....

POST CODE:

TEL NO:

EMAIL:

FAX:

PLACE OF WORK:

APCP NO. AND REGION:

NATIONAL COMMITTEE MEMBER: YES / NO

DO YOU HAVE ANY DIETARY OR SPECIAL REQUIREMENTS? PLEASE DETAIL -

.....

.....

COURSES

HALLIWICK ASSOCIATION OF SWIMMING THERAPY



Courses in 2002

Foundation Course The Halliwick Concept

Module A

Module B

Hull	November 9th & 10th 2002	November 23rd & 24th 2002
------	--------------------------	---------------------------

Courses in 2003

Foundation Course The Halliwick Concept

Hull	February 15th & 16th	March 15th & 16th 2003
Brent	March 8th & 9th	May 10th & 11th 2003
Windermere	April 8th & 9th	April 10th & 11th 2003
Hull	November 8th & 9th	November 22nd & 23rd 2003

Advanced Course Teaching The Halliwick Concept **Pre requisite Foundation Course**

Brent	March 8th & 9th	May 10th & 11th 2003
Hull	June 7th & 8th	June 21st & 22nd 2003

For further information send a **SAE** to the course organiser

Hull and Windermere

Brent

Rose Mulchinock
8 Woodcroft Ave
Hull
Yorkshire
HU6 8LH
01482 807 812

Bob Chapman
46 Craven Gardens
Barking
Essex
IG11 0BN
020 8252 4851

The Chailey Approach to Postural Management

Course Dates 2002 - 2003

This two-day course will develop your knowledge of the Chailey Levels of Ability as an effective assessment tool to measure postural ability. This information is then used to work out programmes for twenty-four hour postural management. You will learn about the design of equipment, how it compliments the Chailey Levels of Ability and how to use the equipment as part of a postural management programme. It is suitable for all healthcare professionals who want to develop or refresh their knowledge of postural management and equipment related issues.



Active Design Ltd
 68K Wyrley Road
 Birmingham B6 7BN
 Tel: (0121) 326 7506
 Fax: (0121) 327 8807
 E-mail: courses@activedesign.co.uk
 Web: www.activedesign.co.uk/courses

Course cost £150.00

This includes a copy of the book 'The Chailey Approach to Postural Management', lunch and refreshments on both days, an attendance certificate and a resource pack at the end of the course. Price excludes VAT.

** Dates and venue to be confirmed.*

THE APCP RESEARCH GROUP REGISTER

If you would like to be a member of the APCP research group, please fill in the form below and return it to Sarah Crombie, Research Officer, 10a Record Road, Emsworth, PO10 7NS. This information will be used to inform you of research study days and help us to learn more about our members' research interest.

Name

Contact
Address

Post Code

Tel. No.

Fax No.

E-Mail:

What are your research interests?

Are you undertaking any type of research project small or large? **YES/NO**
If so please give a brief summary . . .

Would you be happy for other physiotherapists with similar research interests to be put in touch with you? **YES/NO**

Thank you for completing this form.

Notes for Contributors

The Editorial Board welcomes research material; referenced articles and evaluations of physiotherapy practice; informal articles.

Manuscripts should be sent to Mrs Sally Braithwaite, 531 Church Road, Yardley, Birmingham, B33 8PG.

Copy to be submitted should be typed on one side of the paper, double spaced and with ample margins. All pages should be numbered consecutively.

Manuscripts should provide the title of the article and the author(s) name(s) and full postal address for correspondence.

References should be given in the Harvard System.

In text Author(s) name and initials followed by the date of publication. Use a,b, to indicate more than one publication in the same year. Where there are 3 or more authors use first name followed by et al.

For books Laszlo, J. & Bairstow, P. (1985) *Perpetual Motor Behaviour* (Rinehart and Winston)

For chapters within books

Morley, T.R. (1992) Spinal deformity in the physically handicapped child, in : G.T. McCarthy (Ed). *Physical Disability in Childhood* (Churchill Livingstone)

For articles Scott O.M., Hyde S.A., Goddard C.M., Dubowitz V., (1981a) Prevention of deformity in Duchenne muscular dystrophy. *Physiotherapy* 67(6), 177-80.

Tables and Figures

The approximate position of the tables and figures should be indicated in the manuscript.

Keys to symbols should be included.

Tables should be numbered by Roman numerals and figures by Arabic numerals.

Figures should be supplied in a finished form, suitable for reproduction. Figures will not normally be redrawn.

Proofs will be sent to authors if major alterations have been made to the text.

The Editorial Board reserves the right to edit material submitted for publication.

Cover designed by John Soper

Printed and bound by

G. H. SMITH & SON, EASINGWOLD, YORK

ISSN 1368 - 7360



In this issue:

Hypermobility Among Children

**Ethical Considerations In
Paediatric Research**

Case Study

