Research news

Complementary therapies in children with cerebral palsy

Many parents of children with cerebral palsy (CP) use complementary and alternative medicines (CAM) including cranial osteopathy. This pragmatic randomised controlled trial, commissioned by the Cerebra Foundation, investigated the effect of cranial osteopathy on the health and wellbeing, including physical functioning, of children with CP.

The 142 children aged five to 12 with CP were randomised to receive six sessions of cranial osteopathy with a registered osteopath or to a waiting list in which they were given pre-paid vouchers for the therapy on completion of the two interviews over six months. Objective measures of motor function and children's quality of life were taken at six months by a blinded physiotherapist.

There were no statistically significant differences between the children who had received cranial osteopathy and those who had not, or between the two groups at six months on parents' assessment of level of pain, difficulties in sleeping or parents' reported quality of life. Carers of children receiving cranial osteopathy were nearly twice as likely as those with children on the waiting list to report that their child's global health had 'improved' at six months rather than 'decreased' or 'remained the same'.

Wyatt K, Edwards V, Franck L *et al* (2011) Cranial osteopathy for children with cerebral palsy: a randomised controlled trial. *Archives of Disease in Childhood*. 96, 6, 505-512.

Advice on best inhaled medication route for asthma

The inhaled medication route is essential in controlling asthma but many patients have difficulty in gaining the correct technique. Available inhaler device types include pressurised metered-dose inhalers (pMDIs) and dry powder inhalers (DPIs) but there is weak evidence as to which patients are most successful in using correctly. This retrospective matched cohort study investigated the impact of inhaler device on real-world effectiveness by comparing the same drug combination delivered by two different inhaler devices.

All school staff should be knowledgeable about the management of diabetes in children

Asthma outcomes at one year were studied through anonymous patient records in the UK General Practice Research Database. Patients with asthma were identified who had received a first prescription for fixed-dose combination (FDC) fluticasone-salmeterol by pMDI or DPI and were matched by baseline demographic and asthma severity measures.

Patients in the pMDI cohort had significantly greater odds of achieving asthma control in 12 months than those in the DPI cohort. Patients using pMDI had significantly greater odds of experiencing no exacerbations and not requiring asthma therapy changes than those patients with DPI. The authors conclude that pMDIs appear to offer better asthma outcomes and this needs further testing.

Price D, Roche N, Christian Virchow J *et al* (2011) Device type and real-world effectiveness of asthma combination therapy: An observational study. *Respiratory Medicine*. May 24. [Epub ahead of print]

Diabetes management by children in school

For children with type 1 diabetes it is important that self-management skills are promoted in school, where they spend 25 per cent of their time. This qualitative interview study investigated the concerns of primary school teaching staff and parents, and related these to the views expressed by healthcare professionals (HCPs).

Twenty two teaching staff supporting children with type 1 diabetes and five outreach paediatric diabetes specialist nurses participated in semi-structured interviews. Teachers expressed concerns about being responsible for children with diabetes; because of the invasive nature of injecting insulin, blood glucose testing and the need to be vigilant to the possibility of the child becoming unwell and needing treatment. Concerns were also expressed about the potential for the child to mismanage their condition. Parent/child dynamics were also reported as influencing school management. The HCP perspectives converged with the teachers.

Suggested strategies to address the concerns of teaching staff included increased training for teachers, more accessible knowledge about diabetes for all school staff, as well as a range of practical management tips and communication strategies between child, parent, school and HCP.

Boden S, Lloyd CE, Gosden C *et al* (2011) The concerns of school staff in caring for children with diabetes in primary school. *Pediatric Diabetes*. 2011 May 19. doi: 10.1111/j.1399-5448.2011.00780.x. [Epub ahead of print]

The involvement of fathers to encourage breastfeeding

This action research study, in three Sure Start children's centres, used focus groups to explore the views of local families and staff and other stakeholders on breastfeeding promotion. Participants felt that the community discouraged breastfeeding and that it was not promoted in the centres due to staff lack of knowledge. Suggested improvements included: 'breastfeeding welcome' signs, greater focus on fathers in antenatal education, health professional involvement in support groups and training for all staff.

The centres implemented these changes, including the appointment of two fathers' workers to engage with fathers in the antenatal period and promote understanding of breastfeeding.

Condon L, Ingram J (2011) Increasing support for breastfeeding: what can Children's Centres do? *Health and Social Care in the Community*. May 4. doi: 10.1111/j.1365-2524.2011.01003.x. [Epub ahead of print]

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