Aromatherapy and massage: the evidence

Sandra Buckle considers the safety and efficacy of the use of aromatherapy and massage by children’s nurses

The use of complementary therapies in children’s health care is widespread (Ernst 1999, Simpson et al. 1998). A review by Kemper (2001) showed that up to 75 per cent of children have used at least one therapy by adolescence (Kemper 2001). The review also reported that a high percentage of physicians either provided a complementary therapy within their practice or were willing to refer to an independent practitioner. The World Health Organization estimates that globally 80 per cent of primary consultations occur within holistic therapies (Archer 1999).

Aromatherapy and massage in particular are being used increasingly by nurses (Anderson et al. 2000, Asquith 1999, Buckle 1999), possibly because they lend themselves to part-time study and so are feasible for practising nurses to undertake. The focus of these therapies is on symptom control rather than cure, and emphasis is given to the promotion of health and reduction of stress (Kemper 2001) – all of which fits well with the ethos of holistic care on which nursing is based.

However, nursing practice needs to be evidence based and I am concerned that the popularity of aromatherapy and massage has led to their inclusion in the practice before efficacy is proven. Balancing this concern is the ethos of patient autonomy and empowering patients to take an active part in their health care: reasons to support patients in their decision to use complementary therapy (Ellopoulos 1999).

General evidence

The beneficial effects of massage alone are well supported by research (McCormack 1991). Unfortunately the claims for aromatherapy are largely unsubstantiated by research evidence, as are the claims in classic aromatherapy textbooks (Lawless 1992, Tisserand 1990, Worwood 1990). More recent publications aimed at health professionals (Vickers 1996, Price and Price 1999) often refer back to herbal texts whose evidence is based on historical use. This does not mean that the claims they make are false, but it does make formulation of evidence-based practice difficult for children’s nurses.

The lack of research has led nurses to publish their practical experiences (Asquith 1999, Thorne 1996), but most authors admit that we need evidence from the increasing number of complementary therapies undergoing scientific evaluation before efficacy can be proven (Archer 1999, Perrin 2000).

Although there is evidence of the positive effects of aromatherapy and massage on sleep patterns (Asquith 1999) and anxiety (Dunn et al. 1995), a systematic review by Cook and Ernst (2000) indicates that the effects are small. Randomised controlled trials report reduction of muscle tension by massage (Vickers and Zollman 1999) and short-term chronic pain relief (Martin 2001) which make it a valuable therapy for patients with those problems. Helping a patient to relax and sleep is well within the remit of children’s nursing, so this evidence of general effectiveness could be useful for practice.

There is statistically significant evidence of the efficacy of essential oils against bacterial infections, including MRSA and fungal infections (Asquith 1999, Caelli et al. 2001). One double-blind controlled trial supported the use of the essential oil Matricaria chamomilla in wound healing (Glowania et al. 1987). Studies of analgesic, anti-inflammatory and anti-spasmodic oils have also shown efficacy (Buckle 1997). Spurling (2000) points out that there is evidence that stress reduction can be beneficial in improving immunological status. This evidence appears to support the inclusion of aromatherapy in areas of nursing such as wound healing and infection control.

CAM research is in its infancy and suffers from lack of resources, but there has been no evidence of harm following appropriate administration of therapies. The use of oils does not lead to bacterial resistance (Asquith 1999, Caelli et al. 2001), is often less expensive than allopathic medicine with few or no side effects (Caelli et al. 2001), and the pleasant smell and taste can make
patient compliance more likely, which is particularly important when nursing children. Given that there is no evidence of harm, and some evidence of usefulness, it would seem reasonable that nurses continue to use these therapies while a wider body of evidence is being gathered, as long as issues such as safety and standards of care are addressed appropriately.

Aromatherapy and massage in children

Neonates: Much of the work cited in the previous section could be applicable to the sick child, however the studies were not carried out on children and no mention is made of dosages of oils with relevance to paediatric patients. There is a body of well-evaluated work on the benefits of massage (Wilkinson 1996) and a Cochrane Review of massage and growth rate (Vickers et al 2000) concludes that massage of premature and low birth weight babies does promote growth and decreased length of stay in hospital. However, the research methodology in some studies is described as weak, and no work seems to have been done which includes evaluation of the cost of nursing time in carrying out the massage; an important consideration for community children’s nurses. As with other evaluations of these therapies the conclusion is that more research would be useful.

Special needs: A number of studies point to benefits of these therapies for children with special needs. Aromatherapy and massage can promote bonding between parent and child, encourage tactile development, improve sleep patterns and increase the production of endorphins, giving improved pain relief (Buckle 1997, Kemper 2001, Porter 1996). This could be very useful for children such as those with cerebral palsy who suffer with muscular spasm. Deficits with senses such as sight and hearing make touch very important. Practitioners in this field note that lack of touch can lead to abnormal behaviour and see massage as therapeutic for this group (Sanderson and Harrison 1992).

Parents of special needs children often have a multitude of professionals to liaise with and can feel a loss of control over their lives. Teaching parents to massage their children could be seen as a way of empowering them to regain control in one area (Darbyshire and Morrison 1995).

Asthma: A Cochrane Review of the effectiveness of complementary therapies for asthma showed only one small trial (of poor quality) that pointed to improvements in lung function with essential oil use (Hondras et al 2000). However, Field et al (1998) did show evidence of a reduction in anxiety and cortisol levels after massage: as many asthmatics suffer a deterioration in their condition when they are anxious, this could be seen as an appropriate therapy for them, even without proof of the efficacy of essential oils.

Neurological problems: A case study using aromatherapy massage for a patient diagnosed with Guillain-Barré syndrome (Shirreffs 2001) noted the patient’s perception was that muscle problems were helped by treatment and that it gave him something positive to look forward to. The massage also helped to stimulate colonic movement and avoid a medical approach to normalising defecation. Again, the family reported that being able to ‘do something’ was helpful to them and the endorphin release would have been useful for pain control.

A study at a neuro-psychiatry seizure clinic (Bets 1996) showed a reduction in medication and seizures in patients of all ages when aromatherapy was used for patients whose seizures are stress related. Smelling a particular aroma can be associated with stress reduction (Bets 1996) and as many people with epilepsy have increased fits when stressed this could be a useful therapy. However caution is needed as anecdotal evidence points to particular oils, such as rosemary and hyssop, triggering seizure activity (Lawless 1992).

Skin problems: The evidence for aromatherapy being beneficial to eczema sufferers is largely anecdotal, apart from one well-designed trial that showed improvement in skin condition but could not separate the beneficial effects of the carrier oils from the therapeutic effect of the essential oils (Anderson 2000). There is however evidence of the effectiveness of essential oils on head lice (Veal 1996) and as many eczema sufferers find allopathic preparations to kill head lice exacerbate their eczema, the use of aromatherapy would seem to be worth considering. This evidence is interesting as it is one of the few studies where an attempt has been made to evaluate different oils and doses for one problem.

Children who have areas of skin prone to fungal infections (i.e. trachecostomies, gastrostomies) are often on multiple medications for other problems. For these children the opportunity to avoid the potential toxicity of anti-fungal medications by use of oils with proven anti-fungal properties (Price and Price 1999) would seem worthwhile.

Little research has been carried out into the use of aromatherapy for diseases such as arthritis (Brownfield 1998), and I could find no specific mention of paediatric inflammatory illnesses such as Still’s disease. However Buckle (1997) does note evidence of the anti-inflammatory properties of oils in animal studies, so this could be a case where anecdotal evidence is founded on fact. The evidence discussed above supports the use of aromatherapy and massage by children’s nurses as a direct therapy in some cases, but just as important is the fact that knowledge of its efficacy will allow the nurse to discuss these issues with families from an evidence-based perspective.

Palliative care

An area where there is more evidence for the use of aromatherapy and massage is in the care of patients with cancer and those requiring palliative care. Although much of the research pertains to adults (Stringer 2000), it often addresses issues such as stress, relaxation and general wellbeing and, therefore, has relevance to younger patients. Successes in the treatment of childhood cancers mean that children’s nurses are seeing more teenage patients both during cancer treatment and for palliative care. Psychological issues are of particular
importance for these patients who are going through a transitional stage as well as coping with issues around often unpleasant treatments and their own mortality.

If the use of aromatherapy and massage did no more than help nurses to break down barriers to communication (Vickers and Zollman 1999) it would seem to be worthwhile. There is also evidence of its usefulness for specific problems such as chronic pain (Buckley 1999), constipation (Mantle 1996, Ernst 1994), mucositis (Gravett 2000), central line infections and skin problems (Gravett 2001), as well as odour control during the palliative phase of care. As none of the literature points to problems that an experienced aromatherapist would not be aware of I am convinced of the usefulness of aromatherapy and massage in these specific areas by children's nurses.

Aromatherapy, massage and nursing

Having accepted that there is some evidence of the effectiveness of aromatherapy and massage, it could still be argued that the children's nurse is not the appropriate professional to undertake these therapies for the sick child. Is this nursing? Are we introducing a new idea? Or, as Snyder (2001) postulates, returning to our roots? Complementary therapies and nursing do share an holistic approach, and aromatherapy and massage fit with theoretical nursing models (Frisch 2001).

The nurse using these therapies would be able to offer continuity of care and have an in-depth understanding of the child's needs that a non-nursing professional would not have, including the ability to assess when a treatment is suitable and knowing how to adapt the treatment to suit the child's condition and cognitive ability. The nurse, as therapist, would also reduce the risk of inappropriate touch from a non-professional (Porter 1996).

One area where the children's nurse could find the therapies of benefit is in facilitating an opportunity for the child to forge a positive relationship with the nurse and encourage discussion (Stringer 2000). This could be particularly useful with older children or in emotive areas such as chronic ill health and life-limiting illness. Although the use of complementary therapies is becoming more acceptable to people, as with any nursing intervention, the nurse needs to consider issues of culture, diversity and patient choice when using aromatherapy and massage in practice.

Although there is a role for the children's nurse in being merely an advisor, referring patients to non-nursing therapists and discussing issues with the families, I think the children's nurse can offer a quality of care that others cannot. This would also be a way of ensuring that complementary therapies are available for those who cannot afford to pay for them.

Challenges

Using therapies of proven benefit to enhance care offers huge possibilities for practice development; however, the popularity of these therapies could lead to a demand for the service that outstrips resources. At present there are major issues over the regulation of training and standards of care within complementary therapies and there is a body of literature that relates this specifically to nursing practice, including issues such as insurance cover and vicarious liability (Fowler and Wall 1997, Smith 1995, Styles 1997, Thran 1996).

The Nursing and Midwifery Council has no remit for course standards outside the National Health Service (Dimond 1998) but is careful to

REFERENCES


Frisch N (2001) Nursing as a context for alternative/complementary modalities. Online Journal of Issues in Nursing. www.nursingworld.org (last accessed on 16.5.01)


state that professional codes still apply when using complementary therapies (Price and Price 1999), including the need for practice to be based on current available knowledge (Tiran 1996). This, combined with the need to comply with safety regulations such as COSHH and CHIPS (Dimond 1998, Fowler and Wall 1997, 1998) and be aware of toxicity issues in using oils (Styles 1997), will present challenges to those developing such a service.

Although there are studies that show that essential oil treatments are cheaper than allopathic medicine (Gravett 2000, Stringer 2000), some do acknowledge that the cost of staff time can negate this saving (Buckle 1999). Purchasers of services will need to be convinced that the cost/benefit ratio is effective and this can probably only be done by research including quality of life issues, which is expensive in itself.

Although more doctors are now interested in complementary medicine (Kemper 2001) another challenge could be in gaining the approval of the child’s consultant or GP to administer treatments that they perceive to be a challenge to their autonomy (Archer 1999).

Overall there are many challenges to a service introduction in this area, but the possibilities of enhancing patient care lead me to conclude that the idea is worth pursuing.

**Recommendations**

The literature demonstrates that there are areas where there is evidence of the efficacy of aromatherapy and massage. This includes areas that benefit the sick child in the community. The areas that lack evidence do not necessarily point to a lack of efficacy, merely that more research is needed to provide a research base for practice.

The complex nature of the therapies and the need to consider potential for harm has led me to conclude that minimum standards for training need to be implemented nationally and that managers must ensure issues such as safety and liability are covered before service implementation. One approach could be for nurses who are prescribing essential oils to undertake a form of nurse prescribing training.

There are implications in terms of cost and time to introducing this kind of service, but the benefits in terms of life quality for children with special needs or terminal illness raises the question of the ethics of not having treatments available that have proven beneficial. Other ethical issues will also need considering, such as equity of service provision and informed consent by the children – particularly those with communication problems. Issues of culture and diversity would also need addressing.

**Conclusions**

The breadth of evidence of the effectiveness of aromatherapy and massage is such that it is worthwhile facing the many challenges that successful service implementation will require. While realising that resources and service priorities may make this look down on a manager’s list of priorities compared with other service needs, I would argue that there is evidence that children’s nurses could usefully include these therapies within their practice for the benefit of the child and family.

My recommendations for future practice would be to acknowledge and face the challenges to enable this service to develop, particularly within community children’s nursing. I would specifically recommend the post of specialist practitioner in aromatherapy and massage in any team implementing this service to ensure that practice is research based, limitations are acknowledged and the necessary further research is undertaken.