Alternatives to restraining children for clinical procedures

Imelda Coyne and Paula Scott explore this controversial practice and the advice given in nursing policy

Abstract

On children’s wards, restraint appears to be used often, rather than as a last resort, to assist the delivery of clinical procedures. The difference between restrictive physical intervention and therapeutic holding seems to depend on the degree of force used and whether the child gives consent. Restraint can have a negative emotional and psychological effect on children, parents or carers, and nurses. Healthcare staff need to examine their daily practice and always employ a range of interventions to seek a child’s co-operation with procedures. Restrained should only be used when there is no alternative in a life-threatening situation. It is essential that all hospitals providing care for children have an explicit restraint policy and provide education, training and guidance for all healthcare staff.

Keywords

Children’s nursing, children’s rights, clinical procedures, restraint, therapeutic holding

THE MANAGEMENT of children requiring invasive procedures can be challenging and cause distress for all concerned. Physical restraint of children and infants is commonly used to carry out clinical procedures successfully in the hospital setting. In the Oxford Dictionary, restraint is defined as ‘the action of keeping someone or something under control, deprivation or restriction of personal liberty or freedom of movement, or a device which limits or prevents freedom of movement’ (Oxford Dictionaries 2014). Therefore restraint is about using action or a device to control and restrict movement.

The definition of restraint has negative connotations when applied to the performance of nursing procedures. In contrast to mental health and residential settings, published empirical research on use of restraint appears to be limited in children’s nursing (Brenner 2007). This article will discuss guidelines and understanding of restraint, drawing on empirical studies of children in the acute setting. The focus is on the use of restraint to deliver clinical procedures (Table 1). The consequences of restraint for children, parents, carers and nurses are considered. This will provide background for the discussion of alternatives and nurses’ responsibilities.

Understanding of restraint

There are a number of terms used to describe restraint – including holding still, immobilisation, using physical force, containing, supportive holding, clinical holding and therapeutic holding – and these are often used interchangeably, which can create confusion (Hull and Clarke 2010).

More than ten years ago, the Royal College of Nursing (RCN) (2003) defined restraint as the ‘positive application of force with the intention of overpowering the child and applied without the child’s consent’. In an update of the 2003 restraint guidelines (RCN 2010), the term ‘restraint’ was replaced with ‘restrictive physical intervention’, accompanied by a recommendation that this should only be used in three situations to prevent serious harm: to prevent children from leaving the ward, to prevent them harming themselves, and to minimise injury to others.

According to the RCN policy, the distinction between restrictive physical intervention and therapeutic holding is the degree of force required and the intended consequences. Although restrictive physical intervention and therapeutic holding should be seen as quite different, they arguably exist on a continuum only differentiated by degree of force and intention.

Undoubtedly, this distinction can create confusion for nurses in terms of knowing what type of restraint
to use and what degree of force is permissible before it becomes an inappropriate type of ‘restraint’ or ‘non-therapeutic holding’ of the child. It could be argued that when restraint is used to carry out a procedure to which the child objects, and without the child’s permission, then this should be seen as ‘restrictive physical intervention’, not therapeutic holding. In contrast, when a child is positioned and movement is restricted so that a clinical procedure can be carried out in a safe and controlled manner, and with the child’s consent or that of his or her parents or family carer, this could be seen as therapeutic holding.

Jeffrey (2010) tried to distinguish between supportive holding (similar to therapeutic holding) and restraint, and concluded that there were a number of similarities that made demarcation difficult. She recommended clearer guidelines and continuing education for nurses. Similarly, the RCN (2010) recommended locally based training of practitioners in the theory and practice of safe and appropriate holding techniques, to meet the needs of staff in differing healthcare settings.

However, an alternative position is to argue that – irrespective of the terminology, degree of force or intention – restraint is wrong and alternatives should be used. In 2010, at the European Association for Children in Hospital (EACH) conference in Dublin, a final resolution was agreed and endorsed by delegates that restraint should be avoided in all medical/nursing procedures, unless there is no alternative in a life-threatening situation.

EACH states: ‘Regarding invasive procedures (eg bone marrow puncture, endoscopy, extensive wound care), procedures requiring immobility (eg imaging) and other painful or stressful procedures (eg intravascular access, lumbar puncture, suturing of wounds, ENT [ear, nose and throat] and dental procedures, urinary catheterization), forcible restraint is an unacceptable technique in direct contradiction to the child’s right to protection from all forms of physical or mental violence. It is not in the best interest of the child’ (EACH 2012).

This is an important statement that has implications for children’s nurses and restraint practices.

Restraint for clinical procedures
Selekman and Snyder (1995) examined the use of restraint for children in four settings in the United States, and identified four main reasons: promotion of immobility, administration of medications, preventing interference with wound dressings, and preventing a child from getting out of bed. Nurses are often involved in the restraint of young children who find it difficult to sit still during procedures or object to potentially uncomfortable experiences such as venepuncture (Sparks et al 2007). Many children are also restrained for radiographic examinations with or without their consent (Hardy and Armitage 2002, Graham and Hardy 2004).

Restraint is often used when a child is uncooperative, or when movement during a procedure may be harmful. The decision to use restraint may be informed by the subjective beliefs and values of the individual nurse rather than an analysis of the situation or use of explicit guidelines. Studies suggest that restraint is used more frequently with younger children than with older children (Ofogbey and Playfor 2004, Snyder 2004), whereas Demir (2007) identified a lack of nurses as the reason for Turkish nurses’ use of restraint on children’s wards.

Effects on children, parents and nurses
Published research on the impact of restraint on children in hospital is limited and, in some cases, dated. From the child’s perspective, being restrained by an adult (or adults) for clinical procedures is likely to create feelings of anger, fear, confusion and emotional stress. Selekm and Snyder (1996) suggest a relationship between the use of physical restraint and fears of developing trusting relationships in the future, and the contributory

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<th>Table 1</th>
<th>Clinical procedures where restraint may be used</th>
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<td>Category</td>
<td>Type of procedure</td>
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<tr>
<td>Nursing procedures</td>
<td>Venepuncture.</td>
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<td>Intravenous line placement.</td>
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<td>Wound care.</td>
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<td>Nasogastric tube insertion.</td>
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<td>Tracheostomy care.</td>
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<td>Urinary catheterisation.</td>
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<td>Administering medications.</td>
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<td>Administering injections.</td>
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<td>Intravenous site care.</td>
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<td>Medical procedures</td>
<td>Bone marrow biopsy.</td>
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<td>Endoscopy.</td>
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<td>Lumbar puncture.</td>
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<td>Suturing of wounds.</td>
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<td>Dental procedures.</td>
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<td>Diagnostic procedures</td>
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<td>Magnetic resonance imaging.</td>
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The decision to use restraint may be informed by nurses’ subjective beliefs and values rather than an analysis of the situation.

In Snyder’s (2004) study, children and their parents reported feeling fearful and angry and that, if other methods of distraction had been used by the healthcare team, some of the restraining events could have been avoided. Folkes (2005) recorded that children who were subjected to physical restraint during a clinical procedure found this controversial practice more stressful than the pain involved in the clinical procedure itself. In another study, although most of the children understood the reason for restraint, these children said that it should only be used as a last resort, if someone was likely to get hurt, and should never involve feelings of pain (Steckley and Kendrick 2008).

Healthcare professionals usually seek parents’ help and co-operation in restraining their child for a procedure. It is assumed that having a parent or carer assist by providing support and reassurance throughout is better for the child. However, this assumption may not hold true for all parents and carers, and may depend on the procedure and the situation. Some parents find the experience stressful and traumatic (McGrath et al 2002, McGrath and Huff 2003).

Samela et al (2010) undertook research to uncover the strategies used by children to deal with fear in hospital and found that children relied on their parents’ presence and sought their protection. Parents, however, often exempt themselves from assisting with procedures as they feel this would go against their natural instinct to protect their child from harm, and this led Pearch (2005) to conclude that parents should be given choice and not be coerced into assisting.

Restraint can cause varying degrees of discomfort for nurses, as they want to promote best care, act as the child’s advocate and do no harm. It is challenging when children do not want to have the procedure performed and there is justifiable clinical need. Nursing students and qualified staff have reported distress, anxiety, guilt and professional conflict when involved in restraining a child for clinical procedures (Valler-Jones and Shinnick 2005, Lloyd et al 2008, Darby and Cardwell 2011).

Pressure to ‘get the job done’, lack of forethought and inadequate staffing may result in restraint being used more often than necessary (Lai 2007). Other factors include concerns about safety coupled with a lack of knowledge (Demir 2007). Additionally, nurses were unsure of the law on child restraint and consent, and identified a need for more formal guidance (Robinson and Collier 1997).

Children’s rights
When a child objects to medical or nursing procedures in the clinical setting, nurses should ensure that the child is not subjected to any form of inhumane treatment, such as restraint may be considered to be (Power 2002), and that the child’s rights are protected. There is legislation to guide nursing practice in relation to the use of restraint (Pearch 2005): children’s welfare as well as their interests have been given legal protection through the Children Act 1989 and United Nations Convention on the Rights of the Child (UNCRC 1989).

The EACH Charter (EACH 2006) lists the rights of children before, during and after their stay in hospital, and maintains that there should be organisational frameworks and appropriate training for staff to mitigate children’s distress, fear and pain. This includes de-escalating feelings of helplessness and avoiding the use of restraints unless there is no alternative in a life-threatening situation (EACH 2010). Consequently, all nurses caring for children need to be fully aware of the rights of children and practise accordingly, or they run the risk of causing harm and could be subject to litigation (Pearch 2005).

Implications for nursing practice
Nurses need to be able to justify their actions and work in accordance with the code in the UK (Nursing and Midwifery Council 2008) and in Ireland (An Bord Altranais 2000). They are bound by a duty of care and a moral obligation to provide safe, compassionate care to all patients. To adhere to the code, nurses should ensure that they practise in accordance with the principle of beneficence and non-maleficence. This means considering all alternative methods of carrying out the procedure, unless it is a life-threatening situation where restraint may be necessary.

Before using restraint (non-therapeutic holding), both the child and the parents’ consent should be obtained. Healthcare staff should explain what is happening, use limited force and accomplish the procedure quickly. Parents’ preferences should be sought and if parents or carers do not wish to help, their wishes should be respected. Numbers of staff...
should be limited to what is necessary to carry out the procedure safely and the incident of restraint should be recorded in case notes.

In non-life threatening situations and where the procedure is not a critical necessity, time should be taken to explore all possible options rather than resorting to restraint. The strategies that can be used to promote co-operation may be grouped into three stages: before, during and after the procedure (Table 2).

**Before the procedure**
Preparation is essential, as children have reported feeling unprepared for procedures and a general lack of information (Coyne and Conlon 2007, Coyne and Kirwan 2012). Tailored information and explanations can promote understanding and co-operation. Nurses should seek help and guidance from play specialists, as these are skilled in therapeutic play and preparation techniques. Creative art techniques such as puppets, modelling clay, toys and storybooks

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<th>Stages of the procedure</th>
<th>Actions that can be used</th>
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| Before the procedure    | ■ Talk to the child to assess developmental maturity.  
  ■ Determine the child’s preference.  
  ■ Encourage the child to ask questions and express feelings and anxieties.  
  ■ Provide age-appropriate information.  
  ■ Explain what the child will see, feel, hear and smell during the procedure.  
  ■ Explain the steps of the procedure.  
  ■ Say it will hurt if it will.  
  ■ Negotiate a time with the child to perform the procedure.  
  ■ Offer options and choices when possible, for example different colour or type of medicine.  
  ■ Demonstrate procedure on a toy.  
  ■ Let the child play with the equipment. The child may like to use equipment on a teddy or doll.  
  ■ Explain different coping techniques, for example distraction or involvement, relaxation, stories, music, blowing bubbles, counting, controlled breathing.  
  ■ Discuss and practise preferred coping technique with the child and parents or family carer.  
  ■ Use a topical preparation (anaesthetic cream) one hour before venepuncture or cannulation.  
  ■ Provide parents with information including how to support their child.  
  ■ Explain to the parents or family how they can help if they wish to be present during the procedure.  
  ■ If child has had an extremely distressed reaction to the procedure before, consider using sedation. |
| During the procedure    | ■ Maintain a calm positive atmosphere.  
  ■ Use distraction techniques that the child prefers, for example talking, looking away, imagery, music, media.  
  ■ Assist the child in using preferred coping technique, for example distraction or involvement, relaxation, stories, music, blowing bubbles, counting, controlled breathing.  
  ■ Provide simple explanations throughout the procedure.  
  ■ Proceed at the child’s pace.  
  ■ Incorporate the child’s preference for positioning when possible.  
  ■ Tell the child to cough during a needle insertion as this can sometimes help.  
  ■ Encourage parent or family carer to provide comfort.  
  ■ Some children may prefer to look while the procedure is taking place and/or be actively involved.  
  ■ For infants, the use of oral sucrose solution and/or breastfeeding can provide some comfort during short painful procedures. |
| After the procedure      | ■ Use debriefing with the family and the child.  
  ■ Encourage the child to express feelings.  
  ■ Provide reassurance and praise.  
  ■ Consider giving a certificate, star, or treat as a reward.  
  ■ Critically appraise the situation and consider how the process could be improved if necessary.  
  ■ Ask parents or family carer for any thoughts or advice they may have.  
  ■ Record what helped the child to cope with the procedure so these actions can be used again. |
can be used to explain and demonstrate the details of a procedure.

It helps children if they can visualise what the procedure will look like and how it will affect them. Having time to play with the equipment can make it easier for a child to ask questions and express feelings. Nurses can use this information to help lessen the child’s fears, rectify misconceptions and provide further age-appropriate information. For example, Kolk (2000) found that children who were well prepared displayed significantly less distress before and during venepuncture than those who had not been prepared, regardless of age, gender or ethnicity.

In a Swedish study of five-year-old children’s behaviours during an immunisation procedure, Harder et al (2011) revealed the ways in which nurses helped the children to prepare and cope with the procedure, by allowing them time and showing increased sensitivity and responsiveness. Sometimes nurses may conclude that allowing extra time or postponing the procedure is not realistic practice in a busy children’s ward, but Runeson et al (2002) showed that children who were included in discussions from the beginning required less time from nurses during the actual procedures.

Adequate pain relief is also of paramount importance, as fear of pain may increase pain sensation (Willock et al 2004). For children who are extremely distressed, the procedure should be postponed and they should be referred to a play specialist and/or child psychologist. For intractable but non-urgent situations, sedation might be considered (Willock et al 2004).

**During the procedure** Children’s coping behaviours are strongly influenced by the situation and the actions of the healthcare professionals (Ellerton et al 1994). Employing appropriate body language, a gentle tone of voice, simple words and being honest are actions that can help gain a child’s trust (Table 2).

Children also appreciate being given a choice about how the procedure will be undertaken and most prefer to be included in decisions about their care (Coyne and Kirwan 2012). Allowing the child to choose which arm to present for the insertion of a ‘freddie’ (term used to describe an intravenous (IV) cannula), or which coloured bandage should be applied, are simple examples of how nurses can involve the child and promote co-operation.

During the procedure, games or distraction techniques can be used. Some children may prefer to be involved, so they should be allowed to help. Asking the child to take slow deep breaths or count to ten can help a child to focus beyond the procedure. Auditory and musical aids with visual distraction have been found to be of particular benefit for younger infants (Sparks et al 2007). Knowing how to position the child can help with successful treatment intervention.

In a study by Sparks et al (2007), children rated IV insertion as less painful and parents viewed the event as less distressing when the child was settled in the upright position and held by the parent. No significant difference in IV success rate and a much higher child and parent satisfaction outcome were reported.

**After the procedure** Procedures can be a frightening experience for children of any age, so debriefing is essential. Nurses need to explain why the procedure had to be done, respond to the child’s questions and provide further information and comfort. Praise the child for being brave and co-operative, and provide a reward, such as a sticker, star or certificate. It is helpful to document the child’s preferred coping technique so that the same can be used for further interventions.

The importance of appropriate, adequate preparation and sensitive emotional support cannot be overemphasised. Some interventions may help some children but not others. Therefore nurses must use their clinical judgement to assess each child and situation individually, taking into account the uniqueness of each child, and tailoring preparation and interventions accordingly.

**Conclusion**

It appears that restraint in children’s wards is a widely used intervention, underpinned by unspoken assumptions, and is rarely documented in nursing notes. The fact that restraint remains under-reported makes it difficult to determine the reasons for and frequency of use in children’s nursing practice.

The dearth of research into the use of restraint with children for clinical procedures hinders understanding of the extent of the problem and the development of clear evidenced-based guidelines (Hull and Clark 2010). To date, researchers and practitioners have paid insufficient attention to the use of restraint and the effects of restraint on children. It is time for change and it is urgent that further research is conducted to determine:

- The frequency of occurrence and rationale for the use of restraint.
- Nurses’ views.
- Service users’ views.
- The psychological impact of restraint on children, parents, carers and healthcare professionals.
Healthcare staff should receive training in communication skills, therapeutic holding and alternative techniques. All hospitals that care for children should have a specific policy on restraint. To practise in accordance with current UK guidelines (RCN 2010) and EACH recommendations (2012), and to promote the best interests of the child, restraint should be avoided if at all possible. The continued use of restraint in place of therapeutic holding has ethical and moral implications for all concerned. Although guidelines and clinical supervision can help guide nurses’ practices, they are not a panacea for all situations.

Therefore nurses need to assess whether restraint is appropriate in any given situation and to use all other alternatives to seek a child’s co-operation.

It could be argued that if the use of restraint was reported as a critical incident, then healthcare staff might be more circumspect and only resort to restraint when all other alternatives had been tried. An individualised approach is required, which respects the rights of the child, takes account of preferences, and treats the child and family with dignity, care and respect.

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References


