Clinical holding with children who display behaviours that challenge

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Abstract

Nurses hold children to administer treatment, prevent treatment interference and to undertake clinical assessments, which can sometimes be invasive, as part of their regular duties. Clinical holding ensures this treatment or assessment is carried out safely, however, it has been reported that there is little training available in this area. This article explores the prevalent clinical holding techniques used by nursing staff when caring for children with behaviours that challenge. As an initial insight into what the researchers hope will become a more in-depth 2-year study, this investigation looks to explore current practice when holding children and the factors influencing this. It is hoped that this will inform the development of a training package offered to nurses when caring for these children. Thirteen semi-structured interviews took place with a small group of nurses, which were given thematic analysis. The overarching themes influencing holding practice were the nursing role itself along with intrinsic and external factors.

Key words: Child nursing ■ Clinical holding ■ Learning disabilities ■ Nursing education and training

In recent years, the practice of holding children has been referred to as therapeutic holding, supportive holding, immobilisation, physical restraint, restraint and clinical holding (Homer and Bass, 2010; Jeffery, 2010; Royal College of Nursing (RCN), 2010; Darby and Cardwell, 2011). This article will use the term clinical holding to describe the practice being explored.

It has long been common practice that for treatment to take place, in some circumstances a child or young person may have to be held by the nursing team so that part, or in some extreme circumstances all, of their body is rendered immobile. This allows for accurate investigation or treatment to take place (Page, 2015).

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It has been identified that the clinical holding training given to nurses is limited in its content and delivery (Page and McDonnell, 2015). The only available evidence that could be found in nursing textbooks demonstrated cuddling and wrapping techniques prescribed for use with young children. The usefulness of these techniques is limited, as it could be argued that these may not be appropriate, effective or safe to use with an older child (Page, 2015). There are no evidence-based techniques available in practice for use with the older child, the child who offers some resistance to being held, or the child with a learning disability or behaviours that challenge (Coyne and Scott, 2014; Page, 2015).

Furthermore, Valler-Jones and Shinnick (2005) identified that holding techniques are not routinely taught within higher educational institutes (HEIs). Page and McDonnell (2015) identified that there may be a theory-practice gap with healthcare staff not having the right skills to hold children and identified that not only are HEIs not preparing student nurses for clinical practice where clinical holding may be used, there is also a deficit of nurse lecturers and clinical mentors who have been taught clinical holding skills themselves.

> **'It appears that restraint in children's wards is a widely used intervention, underpinned by unspoken assumptions, and is rarely documented in nursing notes.' (Coyne and Scott, 2014:26)**

Behaviours that challenge may make it difficult for nurses to manage a person's quality of care. The intensity of such behaviours can put parents, carers and nurses at risk of injury (McDonnell, 2010). This study aimed to investigate further why this may be. Given that there is little in the way of formal training in this area, the researchers aimed to provide a 'snapshot' into what current practice involves, how this information is conveyed across a team and what factors influence this.

This is the first article from a 2-year project funded by the Wellcome Trust using qualitative research to develop best practice on holding children with behaviours that challenge for clinical procedures and inform policy development.

Method

Design

The intention of this study is to research within the paradigm of participatory action research. This provides a unique framework based on conducting research with and for

the participants. External researchers developed a research proposal alongside nurse managers of the ward on which the study was to centre. The research proposal was accepted and funded by the Wellcome Trust.

While external researchers undertook interviews of nurses, two interviewees were later to become active collaborators when they contributed to the write-up and also supported the study across the ward, encouraging colleagues to take part and challenging reservations around discussing what could be considered a taboo subject.

Ethical approval was gained and the team were able to develop the interview guide based on the PhD literature review of one of the authors (AP) and the experience of her supervisor (AM). Appropriate prompts were collaboratively added by the interviewers.

Thematic analysis was employed (Braun and Clarke, 2006), which is a useful method for identifying, analysing, and reporting patterns (themes) within data. This approach can also generate unanticipated insights and due to the limited research on clinical holding this was viewed as an advantage. Finally, as noted by Braun and Clarke (2006), this approach is beneficial for producing analysis for informing policy development, which is an ultimate aim of this research.

Participants

This research was conducted at a specialist children's hospital. The study group were nurses assigned to a clinical research ward, whose work with a group of children undertaking clinical trials would become the topic of the interview process. The children have a condition that, among other aspects, may present with behaviours that challenge, learning disability and movement disturbances. A purposive sample was used consisting of 13 interviews with nurses and clinical support workers who encounter challenging conditions and behaviour. Each participant had experienced clinical holding prior to the interview for various reasons (for example, undertaking heart-rate observations, blood-pressure measurement and intrathecal-access medical procedures).

In order to preserve the principles of a least-intrusive approach, it was considered appropriate for the researchers not to observe the procedure, despite the obvious advantages of such. Also the highly confidential nature of clinical trials taking place would not be jeopardised. The long-term nature of the trials has allowed the nurses the opportunity to become familiar with their client group and the medical procedures taking place.

Data collection

Data were collected by two of the authors (CG and FM) through semi-structured interviews between August 2014 and October 2014. These two authors were not known to the participants and had no nursing background, however, both are experienced researchers. Both these authors visited the ward prior to undertaking the interviews to have a tour of the environment and gain an understanding of the medical and nursing procedures undertaken with this specific group of children. The interviews took place on the unit at the children's hospital, at a time that was suitable for the participants, over six occasions. The interviews explored professional opinions on the procedure they had just completed, which involved clinical holding, and the nurses' own views on specific clinical holding issues (see the interview guide, *Box 1*). The interviews lasted between 14 and 35 minutes. All interviews were tape recorded.

Ethics

This research was approved by the Research Development Strategic Committee at the hospital and Birmingham City University Faculty Ethics Committee. Information regarding the study was disseminated at the hospital prior to interviews and via team meetings. If staff wished to participate, they approached the interviewer present in the clinical area on that specific day after being involved in a clinical hold with one of the children receiving treatment in the unit and signed consent was obtained. None of the participants withdrew their consent from the study.

Data analysis

The audiotapes were typed verbatim in the 'play-script' method by the same two authors who conducted the interviews. They were analysed using the six stages of Thematic Analysis recommended by Braun and Clark (2006). A manual system was implemented, and although this method is time consuming compared with computer-based coding methods, the authors believed manual coding would provide a comprehensive and detailed approach.

Box 1. Interview schedule

- Details of qualifications, when started work at specialist unit, when started work at research facility
- What training have they received to help them manage challenging behaviours? (give details if applicable of training, length of training, delivered by, date of training etc)

Format of interview

- Consent form (including taping interview)
- Interview script
- Thoughts about application of holding questionnaire

Interview script

- What medical/nursing procedure have you just been involved with?
- This research is about the holding you used with the child for the medical/nursing procedure. Please give a detailed description of what you did (to hold them).
- Describe how you felt just before you were involved with this medical/nursing procedure
- What were your thoughts/feelings during this procedure?
- Describe how you felt immediately after being involved with this procedure
- How successful do you feel this procedure went?
  (may want to explore this from the child and staff's viewpoint).
- How successful do you feel the holding for this medical/nursing procedure went?
  (may want to explore this from the child and staff's viewpoint).
- How often have you carried out this holding for this medical/nursing procedure?
- When were you taught how to hold the child?
  Who by?
- How would you refer to what you did to hold the child during this medical/nursing procedure? (only use the words holding/restraining if the member of staff is unable to answer this question without a prompt)
  Why do you say this?

Results

Data analysis resulted in the identification of three key themes each with interlinking subthemes, as illustrated in *Figure 1*: nursing role, intrinsic values and external influence. In this section the meaning of each theme is presented with direct quotations from the participants. The themes illustrate numerous variables influencing the effectiveness of clinical holding. This includes components around how much training they have received, responsibilities of the nursing role, experiential elements of success and mentoring within that role, the knowledge of their client group, and intrinsic values such as assumptions and beliefs held by themselves and the family of their patients.

Nursing role

The role of the nurse is constantly evolving in order to enable the delivery of evidence-based care within a wide range of different settings. The role of the clinical research nurse (CRN) is intertwined with the holistic responsibilities of the familiar nursing role and the protocols, governance and management of clinical trials. A high degree of autonomy is held by the CRN and this is coupled with a high level of patient contact, using communication and practical skills constantly. Specific skills often vary depending on the type of trial being conducted, with the CRN playing a major role as patient advocate to ensure the safety and protection of patients in their care (Gibbs and Lowton, 2012).

Thematic analysis identified three separate themes underpinning the nursing role that influenced their holding of a child: knowledge, practice and resistance. Each of these will be addressed in turn.

Knowledge

Knowledge regarding the patient, procedure, condition and the necessary clinical holding were mentioned by participants throughout the interviews. Participants commented that their knowledge of clinical holding was developed informally. With no formal training in this area, their experiences on the unit were the only way they gained knowledge of clinical holding and this has led to participants being harmed during the holding process (discussed further in theme 3, resistance).

'Thinking back I don't know if anyone has ever formally said "hold out their arm" or "hold it this way" I think it's just things I've picked up over the years.' (PIN4)

'Staff came off worse, pinched, bitten, that sort of thing, because of the holding.' (PIN8)

Practice

In order for good practice to take place the participants mentioned an ongoing conflict between the need to complete the procedure and the ongoing emotional state of the child. The participants' confidence in their ability to carry out a procedure by holding a child in a particular way was related to the child's level of distress. In one case the procedure and distress were prolonged while alternative options were considered.

'I think we were all just not really knowing what to do because he was just so distressed. I mean we did pause a few times to try and, you know, stop and calm and reassess.' (PIN2)

Time and replicability were considered to be important variables in order for an appropriate hold for the procedure to take place, while considering the needs of the patient.

'How am I going to be able to do this safely? What can I do? And one technique is not going to work the same as it does the next week, that's the unique problem.' (PIN9)

The procedure was considered by the research population to be vital to the wider scoping clinical trials taking place with their patient group. However, there was an awareness that for good nursing practice to take place, the procedure cannot take precedence over the needs of the patient or indeed their own safety.

'We got done what needed to be done so from that point of view it was a success, it was the manner in how it ended up being done, it was very much out of my comfort zone.' (PIN2)

'It was successful because it worked but I felt there could be, we could try to think of another way to do it so my back isn't hurting and the patient is still comfortable.' (PIN1)

The positioning of the patient was vital for certain procedures with clinical holding ensuring the patient remained still for the procedure to take place.

'We know that if we don't get the hold right we might not get intrathecal port into him properly, which might stop us from giving him the drug … so there's a lot of pressure on us to get this right.' (PIN9)

Resistance

There was a varying response regarding the child's resistance during the holding techniques, where some reported no resistance at all while others discussed the resistance causing injury to staff and child, and the inability to carry out the procedure. Resistance towards the hold was influenced by either the nurse's or child's response to it. Participants reported a varying response to resistance, some adapted the clinical hold to use locking movements, while other participants stated that they took a more passive response.

'His knees were bent but I'm preventing him from moving them further so it could be kind of holding his legs and locking the joints.' (PIN5)

'It wasn't hurting him as it wasn't locked in and he could easily move away from me if he needed to.' (PIN8)

Another aspect of resistance was with regard to the need to release the hold. Staff felt they had little awareness around the

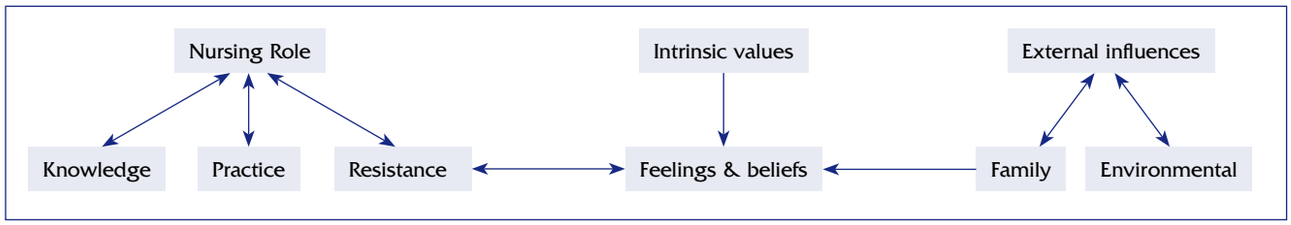

Figure 1. Final themes identified from thematic analysis

point at which this should take place.

'At one point I stopped them, stopped the procedure because the patient got so distressed and he was really crying and we all went "let's give him a minute, let's let him calm down" but actually the parents were saying "no that's just going to make this worse".' (PIN9)

This theme therefore links back to the subtheme of 'practice'. The child's resistance to being held can determine the replicability of the hold or whether the procedure can take place. This study identified that locking movements were sometimes used to compensate for the child's resistance and relates back to the participant comments about need for the procedure to be completed. It also relates back to a lack of formal training.

The size of the child and any movement which was symptomatic of their condition was recognised from the participants' perspective as a need to ensure some controlled movement, as they realised that preventing the resisting child from moving at all may cause injury. However, participants were conscious that this created further problems.

'If they are pulling away or trying to twist away and if I am holding his arm or if I am holding his head, even though I am not stopping him moving, I could probably, you might then find my fingers digging into him maybe a little bit more'. (PIN4)

It was reported that the child's level of resistance when pulling away from the participant's hold has led to both staff and patient injury.

'If someone's trying to fight you off rather than go with it I guess they could hurt themselves or whoever was holding might need to hold harder and could increase the risk of injury that way.' (PIN10)

Intrinsic values

How the participants felt about the resistance towards the treatment or hold was found to be interlinked with their feelings and beliefs regarding their role in this instance.

Nurse's feeling and beliefs

The appropriateness of the hold was found to be intrinsic to the participant's beliefs and feelings surrounding clinical holding. These ranged from some participants feeling fine and happy about the hold they used, to others who reported a negative impact on their emotional state with feelings of caution and worry.

'Fine didn't think there was going to be many issues he might get up but there wouldn't be a problem with me getting him and sitting him back down.' (PIN11)

'I cried that is the truth … it was awful yeah I got very upset.' (PIN2)

Participants reported that perceived family expectation led to feelings of anxiety and concern around the level of hold used, the degree of force complicit in the hold and any consequent pain felt by the child, linking in values such as those held by the patient's family.

'I think what the parents are expecting us to do is something I'm never going to do and I'm never going to endorse the staff doing either. I've got all those thoughts in my mind that they think I'm being obstructive because well she won't, why won't she just let us do this.' (PIN9)

External influences

For the purposes of this study, external influences pertain to factors that are outside the nurse's control, such as the environment where they are working (physical and social), and the expectations of parents around clinical holding.

Family

The presence of the family had an impact on the hold used to carry out the procedure, either through their expectation of what staff should be doing or their direct involvement in the clinical holding. Participants reported feeling the pressure of family expectation on their ability to carry out the hold in order for the procedure to take place.

'I know the family have expectations that we'll get it right I can tell they are worried about how we do it.'(PIN9)

In most cases participants reported that the family informed them of the type of hold that should be used on their child.

'It's really working on what dad was saying how the patient would be comfortable.' (PIN1)

In some instances, family involvement led to them directly taking hold of their child and dictating the level of force required.

'I think the force that had to be used by mum and dad was extreme and distressing for both, for everybody involved, patient, mum and dad,

dad was almost concerned by "am I okay holding my child this firm?".' (PIN2).

Environment

Participants reported environmental factors influencing the effectiveness of the hold. This ranged from the physical environment, such as where the procedure took place, to increased social understanding of the clinical environment. While participants appeared to understand these issues, their responses revealed that this was through experience rather than a firm knowledge base such as a developed strategy plan for each child's needs.

'The bed's quite low because he likes it to be down he doesn't want it to be higher … and just less nurses probably, I think he'd probably feel less anxious if there were less of us around.'(PIN5)

This study identified that participants were using versions of distraction.

'He was quite interested in his treat that he was eating at the same time so that really helped. And we were all talking, he got his favourite thing on the telly and singing along to that' (PIN8)

In addition to the physical environment, the social environment of the unit had an impact on achieving a successful outcome. Participants reported that they provided reassurance to the child through explanation of the procedure.

'I'm always trying to be quite calm and use quite a quiet voice and keep everything quite low key and "you're okay it won't be long", those sorts of things, and I say that to reassure.' (PIN9)

While others suggested that this was led by the family of the child providing reassurance through distraction and emotional support.

'During the procedure as well they try to talk to him as well, like, you know, give him—he's got this DVD player that he watches so they tend to, you know, distract him with that.' (PIN3)

Discussion

In this article, three over-arching themes were discovered to influence current practice on the use of clinical holding by nurses when caring for children whose behaviours may challenge. These are the 'nursing role' 'intrinsic values' and 'environmental influences'.

Within the nursing role, it was identified that there is little training provided for nurses that addresses either clinical holding or the management of behaviours that challenge. This has previously been reported by Valler-Jones and Shinnick (2005) and the RCN (2010). Nurses in this study admitted that at times parents have directed the holding based on methods they have used with the child. Given the likelihood that the parents have received no formal training on what is an acceptable holding technique, this may precipitate unsafe practice. This study has identified that a lack of training on clinical holding and lack of knowledge about behaviours that challenge have led to a situation where nurses are unable to engage in or prescribe a set of techniques that challenge, through effectiveness, any holding that they or the parents are undertaking during the actual process or afterwards. The findings of this study replicate the research by Page and McDonnell (2013), which identified that parents do often hold their child and healthcare staff have been known to look to them to judge whether the process was acceptable.

The danger of adopting a passive role in this instance has lead to feelings and beliefs of disempowerment. Page (2015) reported this finding also and went on to state this may be due to healthcare staff not receiving specific training on holding techniques, being unaware of what techniques can be used and having a lack of confidence in the safety and effectiveness of the techniques currently in use. This may be developed further within the breadth of this 2-year study.

Participants were aware of the need for a positive environment to reduce the stress felt by the child, using techniques such as distraction and verbal reassurance. However, because participants had limited information about distraction techniques, they were reliant on the family to distract the child with resources such as food or with the child's tablet computer. This concurs with the low-arousal approach (McDonnell, 2010), which seeks to reduce stress as an effective management strategy to reduce behaviours that challenge (Evans, 2014). Developing a strategy plan for each child that refers directly to the optimum environment, use of distractions and preferred method of clinical hold, if any, would increase the effectiveness of that strategy and minimise distress and ineffective and unsafe holding.

It does appear that with each sub-theme having an inter-linking connection, initiating change within the dynamic could take place with adjustment to any component. By developing a greater understanding of each component through more focused discussion it may be possible to develop this model further, ultimately effecting change in this area.

Limitations

The authors are aware that the sample size is relatively small and the data collected from one hospital. This article provides an initial insight into an otherwise poorly researched and understood area (Hull and Clarke, 2010). However, this study does validate previous empirical research in this area and provides further insight into nurses' beliefs about this phenomenon and how these beliefs influence their practice.

Future research

The project group initially aim to present the findings of this study to focus groups in which the nurse collaborators would support discussion around the individual needs of patients who may present with behaviours that challenge, training needs and the development of policy. The collaborating team discussed the results and further development of a focus group as a second stage in the project at a 'writers' retreat'.

Further research looking into safe, effective and socially valid training and delivery of practical techniques for these groups is required. The findings from the semi-structured interviews will inform the development of a 2-day bespoke

training event. This ultimately aims to bridge the gap as stated by these nurses in the interviews regarding their knowledge and confidence when implementing clinical holding. The impact of this training on their clinical practice will then be investigated in a further study as it has yet to be discovered whether training in low-arousal approaches and holding techniques will improve the efficacy of the nursing role when caring for children with behaviours that challenge.

Since this ongoing project is designed to take place over 2 years, the effectiveness of any intervention through focus group, training and policy development can be observed and measured.

Conclusion

This research aimed to develop an understanding of current practice regarding clinical holding when caring for children whose behaviours may challenge. It can be concluded that little training is available and staff have been reliant on previous experiences or family input. This article also highlights the conflicting needs of fulfilling the nursing role while maintaining a safe environment and trying to meet the expectations of parents. Similarly, the feelings and beliefs associated with not being able to safely and effectively undertake the nursing role when a child begins to behave in a way that challenges, will affect the outcome of the hold. As demonstrated by McDonnell (2010) through the low-arousal approach, increasing positive thought and confidence may counteract this. This study has provided a 'snapshot' into an underdeveloped element of clinical practice where there is a lack of both theoretical and practical resources. BJN

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Conflict of interest: none

KEY POINTS

- Clinical holding training is limited in its effectiveness for preparing nurses to hold children whose behaviours may challenge when undertaking treatment
- Nurses have become reliant on family input and guidance in this area particularly in circumstances where the child is resistance to the holding technique being used
- Central to this is the intrinsic values held by the nurses around their role and the confidence they have in their own abilities
- Where there is resistance from the child, the clinical holding has been known to cause pain to both the child and nurses undertaking the hold
- Further training in low-arousal approaches is hoped to reduce the stress felt in situations where clinical holding may take place and increase the confidence of nurses applying these techniques

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