



Children's Pain Assessment: Implementing Best Nursing Practices

Keywords:

Children, pain assessment, change management, evidence-based practice

Duration of project:

May 2000 – June 2003

Report received for publication December 2003

Project leaders:

Liz Bruce, CNS, Pain Control Service and Linda Franck, Professor of Children's Nursing Research Great Ormond Street Hospital for Children NHS Trust and Institute of Child Health, London

Contact details:

BruceE@gosh.nhs.uk

Summary of project:

This three-year international project was implemented to improve pain assessment practices for children in hospital by providing information and encouraging sharing of best practice through the provision of web-based resources. Practitioners with an interest in improving pain assessment practices met at an initial workshop to reach consensus regarding the essential elements of best practice relating to children's pain assessment. Project participants were keen to develop practice in their clinical areas, carry out surveys and share their experiences via a website. The website was developed and participants contributed by providing their hospital guidelines, participating in online chats, exchanging information via a bulletin board and completing periodic surveys. Survey results showed that pain assessment and management for children in hospital has improved over time. Feedback has provided evidence of the value of a web-based resource for those interested in improving practice related to children's pain assessment.

Background

Pain assessment is an essential part of the pain management process. Research has demonstrated that when routine standardised nursing pain assessment is

implemented, patients receive improved analgesia, experience less pain, and are more satisfied with care (Treadwell et al., 2002). Valid, reliable and developmentally appropriate pain assessment tools are now available for the assessment of pain in children (Franck et al., 2000; Gaffney et al., 2003). Although research has demonstrated the importance of systematic pain assessment in improving pain management, these findings have not been sufficiently incorporated into nursing practice and most nurses do not use formal pain assessment tools when assessing children's pain (Boughton et al., 1998; Jacob & Puntillo, 1999).

There is now considerable research regarding how to assess pain in children and clinical practice guidelines to improve the recognition and assessment of acute pain in children have been published (Royal College of Nursing Institute, 1999). Despite these valuable resources, there are no specific recommendations regarding which assessment tools to use for which children. Research has shown that education is effective in changing nursing pain assessment practices, but ongoing reinforcement is needed to implement and sustain new practices over time (Francke et al., 1997; de Rond et al., 2001). The aims of this three-year project were therefore:

1. To disseminate research findings regarding nursing assessment of pain in children
2. To reach consensus on guidelines for the implementation of standardised paediatric pain assessment in hospital settings
3. To evaluate the effectiveness of the project in changing pain assessment practices and improving pain management

Project implementation

Aim 1: To disseminate research findings regarding nursing assessment of pain in children

The two main activities that were utilised to achieve this aim were the workshops and website. In addition, a number of presentations and publications increased awareness of the project and more specifically the availability of the website as a resource.

Workshops

An initial workshop was organised to coincide with the 5th International Symposium on Paediatric Pain and attracted 31 participants. Nurses attending the three-day conference were invited to attend a satellite symposium to develop strategies to address the project aims. At this workshop, the potential for establishing clinical benchmark indicators to evaluate changes in pain assessment and management practices was discussed. All who attended were in a position to influence pain assessment practice, including ward sisters and staff nurses, nurse specialists in acute and chronic pain, members of acute and chronic pain teams, educators and researchers. The group also had international representation with participants from UK and Ireland, Sweden, Canada, USA, Finland, Australia and South Africa. Consensus was reached on the essential elements for implementation of children's pain assessment in hospital settings and the group discussed the process for ongoing communication and evaluation of practice. A website was proposed as a resource, with links to other sites and as a vehicle for sharing information.

In June 2003, a second workshop was organised as part of the main programme of the 6th International Symposium on Paediatric Pain in Sydney, Australia to present the Children's Pain Assessment Project (CPAP) and survey results. Over 50 participants from five continents, representing nursing, medicine and psychology attended the workshop. Participants discussed the opportunities and challenges they currently face in implementing consistent and meaningful pain assessment. The issues were widely debated and there was consensus among participants that the CPAP website and surveys provided useful resources not duplicated elsewhere. Many of the participants had accessed the site and there was strong support for its continuation.

Website

A website was designed to provide resources and encourage sharing of best practice related to pain assessment. The facilities include a bulletin board, links to related websites and resources and a protocols and guidelines section, where hospitals can share their guidelines and documentation. The website went live in February 2001. It was only available to the original project participants initially, but was made available to the general public in 2002. The site is updated monthly to add new study days, conferences and internet resources.

The use of the website has increased and continues to be used worldwide as a resource for information about

children's pain assessment by multiple disciplines (nursing, psychology, medicine, etc.). Despite great efforts, the bulletin board feature has not gained extensive international acceptance as a vehicle for sharing information. In 2003 an average of three questions per month were posted on the site. Although it is used infrequently, when questions are posted they are answered by the project co-ordinators, or requests are passed on to other pain professionals to ensure a response is posted.

Aim 2: To reach consensus on guidelines for the implementation of standardised paediatric pain assessment in hospital settings

Consensus was reached at the first workshop on the essential elements for implementation of children's pain assessment in hospital settings: Commitment, Competency, Assessment, Documentation, Treatment and Audit. However, consensus could not be reached on the specifics of implementing standardised pain assessment. For example, there was large variation and inconsistency in practice in the use of specific pain assessment tools, documentation and audit. We were, therefore, unable to evaluate actual practice through audit as originally planned. However, we were able to track trends in practice with regard to hospital and paediatric ward level policies, procedures, and resources for patient pain management through surveys of project participants.

Aim 3: To track trends in nurses' views on pain assessment and management practices and resources at the clinical unit and hospital levels

It had originally been hoped to evaluate the effectiveness of the project in changing pain assessment practices. However, at the first workshop it became apparent that this was unlikely to be possible as participants expressed concerns about confidentiality, data protection, resources and intellectual property rights. The third aim was therefore revised and, instead, it was agreed that nurses' views about pain assessment and management would be tracked over time.

Three surveys were completed over the winters of 2000-2002. Surveys 1 and 2 were only available to the 30 original project participants and were completed by 15 and 14 respondents respectively. Survey 3 was available online for the worldwide paediatric nursing community and was completed by 28 respondents via the website.

Table 1. Survey findings related to the essential elements of pain assessment

| ELEMENT | FINDINGS |
|---|--|
| Commitment | Increasing numbers of hospitals have public statements of commitment and written information for families. |
| Competency | Increasing numbers of hospitals reported resources and staff with special expertise in pain and an increase in training opportunities and incentives offered to staff. More units reported education provided at induction and annually. |
| Standardised assessment tools | More units reported using standardised assessment tools; predominately a faces scale (all types) and numeric rating scale. Observation of pain behaviour was most commonly done without a standardised tool. |
| Documentation | Documentation of pain assessment on the medical record is required by the majority of units. |
| Treatment | The use of pain assessment and management protocols increased. |
| Audit | There was an increase in units reported conducting audits of pain education, assessment, parent/patient satisfaction and other activities. |
| To view the full survey results go to http://www.ich.ucl.ac.uk/cpap/best_nursing/results3surveys.pdf | |

Improvements over time were observed in a considerable number of the agreed elements essential for optimal pain assessment (see Table 1). Activities such as documentation of pain assessment, teaching and audit all increased over time. Protocols and policies were in place for 100% of respondents by survey 3, while provision of funding remained low for all three surveys. The number of wards with pain assessment protocols and policies was high for all three surveys, increasing to 95% by survey 3. However, pain assessment competencies had been established for less than half the respondents. In addition to the surveys, e-mails from colleagues and comments from participants at the ISPP indicate that the site provides valuable information for a range of health care professionals and for families.

Evaluation

This project has contributed to increased awareness of, and access to, research evidence, which will facilitate optimal assessment and management of children's pain. Innovative use of conference workshops and the internet led to the project having a much wider impact than originally envisaged. E-mails from colleagues and the general public and feedback from delegates at international conferences indicate that the site is a valuable resource for a range of health care professionals and also for families. New knowledge regarding the effectiveness of the dissemination, consensus building, and practice survey strategies used in this project may be applied to research utilisation for other areas of nursing practice.

Limitations

The provision of web-based resources is clearly of value, but this method of communication and information is not currently available to all and its use can be time consuming. The main limitations of this project were due to the project supervisors having to rely on others, such as the website designers, which delayed the production of the website, and the original project participants, who were often too busy to complete surveys and participate in discussions and evaluation of the site. The impact of the website on the practice of those who have accessed it is difficult to evaluate, particularly once a site is made available to the general public. However, as a result of the positive feedback from health professionals who have accessed the website, the project organisers hope to continue to maintain and update the site.

Implications for Practice

Sharing of evidence regarding best practices and innovative ideas for implementation of optimal pain assessment strategies needs to be encouraged among nurses in clinical practice. Consensus building and networking activities such as topical workshops are effective in developing and sustaining interest and motivation. Web-based resources can reach a wide audience, but nurses may be reluctant to use the web as a primary source of networking and sharing information. Strategies should be developed to overcome barriers to sharing of data for benchmarking purposes and evaluating effectiveness of practice changes.

References

Boughton, K., et al. (1998) Impact of research on pediatric pain assessment and outcomes. *Pediatric Nursing*. Vol. 24. No. 1. pp 31-35.

de Rond, M., de Wit, R., and van Dam, F. (2001) The implementation of a Pain Monitoring Programme for nurses in daily clinical practice: results of a follow-up study in five hospitals. *Journal of Advanced Nursing*. Vol. 35. No. 4. pp 590-598.

Franck, L.S., Greenberg, C.S., and Stevens, B. (2000) Pain assessment in infants and children. *Pediatric Clinics of North America*. Vol. 47. No. 3. pp 487-512.

Francke, A.L., et al (1997) Effects of a continuing education program on nurses' pain assessment practices. *Journal of Pain & Symptom Management*. Vol. 13. No. 2. pp 90-97.

Gaffney, A., McGrath, P.J., and Dick, B. (2003) Measuring pain in children: Developmental and instrument issues. In Schechter, N L. Berde C. B. and Yaster M. (eds.) *Pain in Infants, Children and Adolescents* (2nd edition) pp128-141. Philadelphia: Lippincott, Williams & Wilkins.

Jacob, E. and Puntillo, K. A. (1999) A survey of nursing practice in the assessment and management of pain in children. *Pediatric Nursing*. Vol. 25. No.3. pp 278-286.

Royal College of Nursing Institute (1999) *The recognition and assessment of acute pain in children: recommendations*. London: Royal College of Nursing Institute.

Treadwell, M.J., Franck, L.S., and Vichinsky, E. (2002) Using quality improvement strategies to enhance pediatric pain assessment. *International Journal for Quality in Health Care*. Vol. 14. No. 1. pp 39-47.

Acknowledgements

To the Foundation of Nursing Studies for supporting the implementation and dissemination of this project including providing funding to enable the project to proceed.

To SEARCH for providing £5000 towards the funding of this project.

How to reference this report

Bruce, E. and Franck, L. (2004) Children's Pain Assessment: Implementing Best Nursing Practices. In Shaw, T. and Sanders, K. (Eds) *Foundation of Nursing Studies Dissemination Series*. Vol.2. No. 8.

The Foundation of Nursing Studies Dissemination Series

ISSN 1478-4106

Editors: Theresa Shaw and Kate Sanders

32 Buckingham Palace Road

London SW1W 0RE

Tel: 020 7233 5750

Fax: 020 7233 5759

www.fons.org

Reg. Charity No 1071117