

Vol II Issue VI Dec 2012

Impact Factor : 0.1870

ISSN No :2231-5063

Monthly Multidisciplinary
Research Journal

Golden Research

Thoughts

Chief Editor
Dr.Tukaram Narayan Shinde

Publisher
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor
Dr.Rajani Dalvi

Honorary
Mr.Ashok Yakkaldevi

IMPACT FACTOR : 0.2105

Welcome to ISRJ

RNI MAHMUL/2011/38595

ISSN No.2230-7850

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial Board readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

International Advisory Board

Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken, Aiken SC 29801	Hasan Baktir English Language and Literature Department, Kayseri
Kamani Perera Regional Centre For Strategic Studies, Sri Lanka	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Department of Chemistry, Lahore University of Management Sciences [PK]
Janaki Sinnasamy Librarian, University of Malaya [Malaysia]	Catalina Neculai University of Coventry, UK	Anna Maria Constantinovici AL. I. Cuza University, Romania
Romona Mihaila Spiru Haret University, Romania	Ecaterina Patrascu Spiru Haret University, Bucharest	Horia Patrascu Spiru Haret University, Bucharest, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pintea, Spiru Haret University, Romania
Anurag Misra DBS College, Kanpur	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Titus Pop	George - Calin SERITAN Postdoctoral Researcher	Nawab Ali Khan College of Business Administration

Editorial Board

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University, Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yaliker Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU, Nashik
Salve R. N. Department of Sociology, Shivaji University, Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary, Play India Play (Trust),Meerut	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	S.KANNAN Ph.D , Annamalai University,TN
	S.Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra
	Sonal Singh	

**Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.net**



PAIN MANAGEMENT IN CHILDREN

CICY JOSEPH

Vice Principal,
Mar Gregorious Memorial Muthoot Medical Centre College Of Nursing,
Ring Road,pathanamthitta,

Abstract:

Pain is a subjective experience, infants and children respond to pain with behavioral reactions that depend upon their age and cognitive processes. Implementation of a standardized pain assessment protocol improves pain management for children .Pharmacologic agents are often required to alleviate the pain. The nurses must be vigilant to make pain visible by incorporating pain assessment in routine care by using standardized terms and including discussion of pain issues in to medical and nursing rounds.

KEY WORDS:

Management , Standardized , Pharmacologic , Environmental.

INTRODUCTION:

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage This definition explains the subjective nature of pain and avoid linking it to specific stimulus. The subjective experience of pain describes sensory discrimination, cognitive, evaluative and affective motivational dimensions.

Pain is a complex experience that is shaped by gender, cultural, environmental and social factors as well as prior pain experience. Thus the experience of pain is unique to the individual. It is important to remember that the pain a child experience can not be objectively validated in the same way as other vital signs. Several studies have shown that there is a poor correlation between the patient pain rating and that of the health professionals, with the latter often underestimating the patient pain.

Barriers to the treatment of pain in children include the following: 1) the myth that children, especially infants, do not feel pain the way adults do, or if they do, there is no untoward consequence; 2) lack of assessment and reassessment for the presence of pain; 3) misunderstanding of how to conceptualize and quantify a subjective experience; 4) lack of knowledge of pain treatment; 5) the notion that addressing pain in children takes too much time and effort; and 6) fears of adverse effects of analgesic medications, including respiratory depression and addiction. Personal values and beliefs of health care professionals about the meaning and value of pain in the development of the child (eg, the belief that pain builds character) and about the treatment of pain cannot stand in the way of the optimal recognition and treatment of pain for all children.

PHYSIOLOGY OF PAIN.

Pain assessment tools are useful for measuring pain in children as young as 3-4 years of age. Some use a variety of technique to assess pain .But these are useful in verbal children. In non verbal children and neonate behavioral observations are made.. The common behaviors that are assessed include cry, change in facial expressions, pal mar sweating and so on and so forth.. Measurement of neonates physiologic response to painful stimuli include changes in heart rate, blood pressure, transcutaneous oxygen and

Title:PAIN MANAGEMENT IN CHILDREN
Source:Golden Research Thoughts [2231-5063] CICY JOSEPH yr:2012 vol:2 iss:6

carbondioxide levels, oxygen saturation, intracranial pressure ,cardiac vagal tone and palmar sweat. Heart rate variability has been established as a promising physiologic measure of pain in infants that measure the amplitude of beat to beat change in heart rate.

Age appropriate post operative pain assessment tool (APAT)

Box 1

SL NO	Criteria	score		
		0	1	2
1	Respiratory rate	Normal	> 5/min	>10/min
2	Respiratory secretion	Normal	Slight increase	Marked increase
3	Pulse rate	Normal	>10/min	>15/min
4	Temperature	Normal	>1-2degree centigrade	>2degree centigrade
5	Diaphoresis	No increase	Minimal increase	Marked increase
6	Lacrimation/tearing/cry	No tearing/no cry	Tearing inside the cantus/moaning	Tears come out/crying continuously
7	Rigidity	No rigidity	Rigidity in extremities	Whole body rigidity
8	Facial expression	Face composed	Face distorted	Facial Grimace
9	Sleep disturbances	Normal sleep	Wake up easily	Not able to sleep
10	Touching painful area/pulling the site	No touching/no pulling	Touching/pulling	Guarding and crying when approached
	Total score	0	10	20

This tool can be used for any children with post operative pain .But self report or vocalization about pain can be included for older children who can verbalize their pain . PQRST system given the opportunity to describe and rate his or her pain using a self rating scale.

PQRST PAINASSESSMENT

P–presence of pain
 Q-quality
 R radiation or location
 S-severity
 T-timing

DEVELOPMENTAL STAGES AND PAIN RESPONSE – BOX 2

S no	Phase	Developmental task	Unique pain response
1	Infancy	Trust vs Mistrust	Cry, Withdraw
2	Toddler	Autonomy vs shame and doubt Sensori motor- Preoperational thought	Cry, scream ,protest ,withdraw
3	Pre-schooler	Initiative vs guilt Pre operational thought	Cry ,localize body part Anticipate painful procedure

NURSING MANANAGEMENT OF INFANTS AND CHILDREN WITH PAIN

The major goals of pain management are as follows

- 1 Minimize intensity, duration and physiologic cost of the pain.
- 2 Maximize the child's ability to cope with and recover pain experience

The two fold management regiments are pharmacologic and non pharmacologic management . The non pharmacologic management is age dependent .In neonate the major non pharmacologic intervention include minimal handling and minimize the physiologic cost of pain with various intervention .Minimal handling can be achieved by the following nursing intervention

- Protect from noise
- Protect from over stimulation
- Provide boundaries

NON PHARMACOLOGIC INTERVENTION

Parents play a very important role in assessing and providing pain management for children .They are a resource for determining what methods of pain relief was effective in the past. They can help the nurse to assess their child's current pain status and need for intervention. Repositioning, holding ,touching ,massage ,warm or cold compresses breathing techniques ,distraction ,guided imagery and muscle relaxation are all techniques that can be used by the person ,the child trust the most usually a parent.

BREATHING TECHNIQUE

Regulated breathing technique can produce relaxation to the child .The child is instructed about it and assisted to achieve a rhythmic pattern of breathing Parents can demonstrate and participate in the breathing technique themselves.

DISTRACTION

Distraction can be one of the most effective way to relieve pain. Distraction works by refocusing the child from the pain to something else. Children may distract themselves to forget their pain .

Distraction may be accomplished with blowing bubbles, music, stories., games or even doing multiplication of tables or spelling words.

Guided imagery

Guided Imagery is a process involving relaxation and focused concentration on mental images

.The child can be encouraged to think of a favorite places and imagine the sounds, sights and smells of that.

Biofeed back

Bio feed back provides visual or auditory evidence that physiologic changes are taking place .Bio feed back gives the child a response that can be seen instantly and can keep the child interested.

Progressive muscle relaxation

Children can achieve, relaxation, decrease anxiety and decrease pain by identifying and decreasing body tension that can accompany pain .This involves tensing and relaxing specific muscles usually beginning with the arms and moving down the body.

Hypnosis

Hypnosis is a form of focused and narrowed attention, an altered state of consciousness or a trance often accompanied by relaxation .Hypnosis is effective in relieving pain and symptoms in children undergoing painful procedures associated with cancer, burns, sickle cell diseases.

Transcutaneous Electrical nerve stimulation-In transcutaneous electrical nerve stimulation,a unit with electrodes deliver small amount of electrical energy to the skin .The stimulation interfere with the transmission of pain signals and helps to suppress the sensation of pain in that area.

PHARMACOLOGIC MANAGEMENT

The common narcotic analgesics that are commonly used are as following

Morphine
Meperidine
Fentanyl
Sufentanil
Methadone

Epidural
Local anesthetics
Topical applications
Nerve blocks

CONCLUSION

Effective management of pain decreases suffering , speed up recovery and shorten hospital stay .Children's pain experiences have long been of concern to nurses, who assume primary responsibility for assessing and managing children's pain when they are hospitalized .Systematic pain assessment should become part of the post operative routine as measuring other physiological variables. The nurse must become familiar with the physiological changes and behavioral observations that may indicate pain in infants and children.

RECOMMENDATION

- 1Expand knowledge about pediatric pain and pediatric pain management principles and techniques.
- 2Provide a calm environment for procedures that reduces distress-producing stimulation.
- 3Use appropriate pain assessment tools and techniques.
- 4Involve families and tailor interventions to the individual child.
- 5Advocate for child-specific research in pain management and Food and Drug administration evaluation of analgesics for children.
- 6Advocate for the effective use of pain medication for children to ensure compassionate and competent management of their pain.

REFERENCES

1. Agency for health care policy and research(1992) .*Acute pain management in infants, children and adolescents: Operative and medical procedures.* Washington, DC: DHHS
2. Hester N.O & Barcus, C.S (1986). *Assessment and management of pain children : Paediatric nursing update, 1(14), 2.*
3. Anand K, & Hickey P (1987) .*Pain and its effect on the human fetus and neonate.* *New England journal of medicine, 317, 1321-1329*
4. Benitz. W.E & Tatro. D.S (1995). *The paediatric drug hand book, St. louis: Mosby.*
5. Abu-Saad (1984) *Assessing children's response to pain.* 19(3), pp 163-171.
6. Assuma Beevi T M (2004) *Development of a tool to assess post operative pain in children and assess parental coping towards post operative pain in children. Un published thesis.*
7. Assuma Beevi T M (2010) *Text book of paediatric nursing. Pain management in children.* Elsevier, New Delhi, p-405-409.
8. Susain Rowen James (2002), *Nursing care of children : Pain management for children, saunders second edition, Philadelphia, p-420-434.*
9. Solomon P, *Congruence between health professionals and patients pain rating; a review of the literature , Scandinavian journal of caring sciences. 2001; 15(2); 174-180.*
10. Committee on Psychosocial Aspect of Child and Family Health (2000-2001); *Assessment and management of acute pain in infants, children and adolescents. American academy of paediatrics . Vol 108, No 3, September 1 (2001) pp 793-797.*

Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished research paper.Summary of Research Project,Theses,Books and Books Review of publication,you will be pleased to know that our journals are

Associated and Indexed,India

- * International Scientific Journal Consortium Scientific
- * OPEN J-GATE

Associated and Indexed,USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database

Golden Research Thoughts
258/34 Raviwar Peth Solapur-413005,Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.isrj.net