First of Two Parts

Nurse's Role in Pain Management

PRIYADARSHINI JOHNSON

PAIN is a widely discussed, but least understood problem. It is a subjective and highly individualised experience. No two persons experience pain in the same way and no two painful events elicit similar responses. Pain is a most common reason for seeking medical help.

Usually the Nurse is the one most consistently available during the time the patient experiences pain and therefore has the opportunity to make a significant contribution towards relieving the patient's pain.

The Nurse, by virtue of her role, has the opportunity to provide pain relief. She has the opportunity to initiate, implement and evaluate the effects of a significant number of Nursing activities for pain relief independently, apart from collaborating with the Physician in his goal of establishing the cause of a patient's pain and treating it. The most common problems the Nurse encounters, in the course of playing her role is pain. Pain presents one of the challenging Nursing situations.

Most of the Medical Surgical problems are associated with pain resulting either from the disease process, diagnostic tests or therapeutic procedures (Brunner, 1922).

Pain is a complex phenomenon. It is not merely a physiological experience. It is affected by psychological, socio-cultural and environmental factors. The experience of pain is unique to each person. Because of all these aforementioned characteristics of pain, it is difficult to define it. There are several definitions of pain, but the one most commonly quoted is the one developed by McCaffery (1979), a Nurse who has worked extensively in this area of patient care. McCaffery defines pain as: "Pain is whatever the experiencing person says it is existing whenever he says it does".

In 1979, the International Association for the Study of Pain defined pain as an unpleasant sensory and emotional experience associated with actual or potential tissue damage. Effective management of pain requires an understanding of the characteristics and components of pain.

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Pain Characteristics

Pain Threshold: The point at which a person becomes aware of pain. The pain threshold is reacted when a stimulus is intense enough to create a nerve impulse (Potter and Perry, 1993).

Pain Tolerance: Duration of intensity of pain the person is willing to endure. Point at which the person feels he can no longer take any more pain. A person's tolerance of pain is the point at which there is an unwillingness to accept pain of greater severity (Potter and Perry, 1993).

Pain Components

Reception: Pain is experienced when noticeptors (nerve endings) are stimulated by mechanical, chemical or thermal factors. These receptors are found in the skin, muscle, bone and mucous membranes. There are very few pain receptors in the visceral organs.

The impulse is transmitted from the nerve endings to the spinal cord along either A-delta fibres or C fibres. A-delta fibres are larger and myelinated, conduct impulses rapidly and these impulses are perceived as sharp, localised pain. The C fibres which are smaller and unmylienated conduct impulses slowly. These impulses are perceived as diffuse, dull aching pain.

The fibres enter the spinal cord through the dorsal horn and ascent to the thalamus and cortex where pain is perceived. At Thalamus, reception and integration take place and in cortex perception and interpretation.

Perception: Involves interpretation of the pain experience, beginning when a patient first becomes aware of pain. What the cortex interprets as pain will depend upon several factors which will be considered.

Reaction: Response of a person to a painful stimulus. The responses are varied and have wide variations between individuals and in the same individual from time to time. The reaction may be verbal (reporting, crying), non-verbal (facial expression), physical (body posture), physiological (sweating, pallor), psychological (anger, depression).

Pain Theories

There are many theories about the neuro-physiologic mechanism of pain. The common theories are:

The specificity Theory: Earliest of pain theories; proposed by Descrates in the 17th century. This theory states that there are specific receptors for pain and these transmit information

to pain centres in the brain.

Pattern Theory: It states that there are no specific nerve endings for pain but nerve endings are stimulated by other sensory modalities as well. It is only the pattern of activity in the neurons that determine if sensations are perceived as painful or not.

The Gate Control Theory: Melzack and Wall proposed this theory in 1965 and Wall revised it in 1978. The theory proposes that stimulation of fibres that transmit non-painful sensations are able to block the transmission of pain impulses through an inhibitory gating mechanism which is thought to be substantia gelatinosa, an area on the dorsal horn of the spinal cord.

Sensory impulses such as those from the pressure of backrub or warm compress will close the gate to pain impulses. The transmission of pain impulses from the spinal cord to cerebral cortex can be inhibited or facilitated, thus altering pain perception.

This theory offers a conceptual basis for various pain relief measures.

Factors Affecting Pain

An understanding of the factors influencing pain response is required to help in the assessment of pain and to select appropriate pain relief modality.

1. Sex: Differences in pain response between men and women have been demonstrated in studies of pain. Women seem to be more sensitive to the threat of pain, while men tend to show a greater tolerance to painful stimuli. This may be a factor which influences the ways in which men and women patients communicate information about their pain to Nurses.

2. Age: Findings are not unanimous in the following areas: age altering capacity to detect pain, age affecting the capacity to tolerate pain, frequency of complaint of pain by the

Need for Meaningful Collaboration Between Nurses' Service Organisations

The Trained Nurses' Association of India, as the National Nurses' Association, has always worked for the professional development and the welfare of Nurses as well as the welfare of the public at large. It is high time now that Nurses' bodies organised under different banners strengthen the TNAI as the parent organisation and also work for a meaningful collaboration that would help the Nursing profession to achieve its goals unitedly and pursue its just causes.

For members' information we reproduce below a letter received from General Secretary, Delhi Nurses' Union, acknowledging TNAI's support during the recent Delhi Nurses' strike. Let us hope that we continue to strengthen our links and channelise our collaborative efforts for the larger interest of the profession and the Nurses.

Secy.-Gen., TNAI

Text of the Letter:

18th May, 1998
To,
Secretary,
TNAI
L-17 Green Park
New Delhi

Respected Sir/Madam

I, on behalf of the Delhi Nurses and on my own behalf express my deep gratitude for your wholehearted support and solidarity during the most critical period of their recent struggle.

Though the strike is over and the Delhi Nurses got some of the demands accepted which includes the following (*sic*):

(1) Nursing Allowance (in lieu of NPA) to be paid @ Rs. 1600 p.m. (LS) instead of Rs. 300.

(2) Cadre Review: Selection Grade has been given to 33% of the present strength.

(3) Setting up of Nursing Directorate within one year from September, 1997, in the Ministry of Health & Family Welfare.

(4) Construction of Separate Nursing Colony.

(5) Pay scale shall be improved through anomaly committee.

We are a bit satisfied of the present settlement with the Government but still far away from our cherished goal. The struggle is not yet over and we will continue till the Nurses are given the status and recognition as per their qualification and work.

The pay scales and working conditions are to be improved as per the recommendation of the High Power Committee. It is hoped that we shall continue to seek your support and solidarity in future also.

Time has come when all the Nurses in the country must unite together under one umbrella. Unite yourself, hospital-wise, then state-wise. Affiliate your Union/Association, though small or big, to the All India Govt. Nurses Federation of which I am also the Secretary General. Kindly send your complete address and telephone Nos. Bring this information further to the notice of all your Nurses Unions/Associations at all levels in your state.

Thanking you once again,
With warm regards,

Yours Sincerely,
Sd/-
(Mrs. G.K. Khurana)
General Secretary
Delhi Nurses' Union
RML Hospital, New Delhi-110001

older patients. Some studies have found that pain tolerance appears to increase with age.

3. Cultural Factors: Cultural differences affect reactions to pain. The child learns what those around him expect with respect to painful experiences. He learns what behavioural responses he is expected to make to different kinds of painful stimuli. Two different individuals belonging to two different cultures may respond very differently to similar kind of pain experience. "Recognising the values of one's own culture and learning how these values differ from those of other cultures help the Nurses avoid evaluating the patient's behaviour on the basis of her own cultural expectation and values" (Brunner, 1992). An understanding of the influence a specific culture has on a client will help the Nurse to accurately assess pain, its meaning for the client and to select measures that will be effective in providing relief.

4. Meaning of Pain: What pain means to a person will affect his response to pain. Coping strategies will vary depending upon the meaning the person attaches to pain. For example, pain may be viewed as a threat, punishment, loss, reward. A woman in labour will perceive pain differently from a person experiencing pain from a recent surgical procedure.

(To Be Continued in Next Issue)

Attention, TNAI Executive and Council Members!

Members of the TNAI Executive Committee and the Council are requested to submit the Agenda Items for the forthcoming meetings to be held in Bangalore, November 23-25, 1998. Please include only those items which require National level discussion and division alongwith necessary explanatory notes. The preferred last date for receiving Agenda Items is August 31 and not later than September 20, 1998.

Secretary-General, TNAI

Breastfeeding

The Best Investment

Mother's milk is the first and the most precious gift to her offspring. Nothing else is comparable to this first offering during the lifetime of a person and very rightly it has been accorded great importance in religious teachings, literature and folklore. It is therefore appropriate that stress is laid on this noble offering of a mother to her child by observing Breastfeeding Week on a global scale.

The World Breastfeeding Week 1998 is to be observed during August 1-7, as usual. The Theme for this year's Breastfeeding Week is 'Breastfeeding: The Best Investment'.

According to the figures circulated by Breastfeeding Promotion Network of India (BPNI), the Economic value of breastmilk in India has been calculated to be Rs. 5916 or 11832 crores when priced at animal or tinned milk respectively. It can be compared with outlays of various developmental sectors in Central Plan outlay of Government of India. (1998-99).

The value of breastmilk produced in India is, according to these figures, equal to the plan outlay of Department of Industry and Department of Power, more than the allocation for Railways and three times that of Education and Department of Health and Family Welfare. It is almost 10 times the allocation for Department of Women and Child Welfare. "This makes it a perfect case for a planned investment to be made for the promotion of breastfeeding and the provision of the support system required to augment this activity", asserts the BPNI. "Investments made on the cause of breastfeeding and the related activities are bound to reduce the expenditures in the other health care sectors and provide better returns."

Aims of the Week

World Breastfeeding Week 1998 aims to initiate actions to protect, promote and support breastfeeding as one of the best investments in the health of a nation. The year's goals are to:

** Raise public awareness on the economic value of breastfeeding and the high cost of bottle-feeding.*

** Provide concrete data on the economic advantages of breastfeeding for public advocacy.*

** Help Governments to appreciate the full economic value of breastfeeding and recognise the need to include support for breastfeeding promotion programmes in the national health budget.*

The Trained Nurses' Association of India has always promoted Breastfeeding and appeals to its members individually and the Branches and Units organizationally to put in their endeavours towards the promotion of this cause at all levels and extend their support to organisations working for this cause, even after the World Breastfeeding Week is passed out.

Those requiring detailed information about this campaign may contact:

BPNI, BP-33, Pitampura, New Delhi 110 034; Ph: 7443445; Fax: 7219606; Email: ritarun@nda.vsnl.net.in; *or*

World Alliance for Breastfeeding Action (WABA), PO Box number 1299, 10850, Penang, Malaysia; *or*

UNICEF, 73, Lodhi Estate, New Delhi 110 003