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CME LECTURES

PAIN AND CULTURE

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Pain is considered as a bio-psycho-social experience and is given meaning both by the sufferer and society. Culture is a framework in which a human being lives that directs their behaviour. Culture gives people a sense of belonging and identity; meaning and purpose to their life. It is not religion, ethnic group, social class, gender, age, place of birth job or place of residence but it may involve some or all of these. Not everyone in a particular culture conforms to the behaviors and beliefs of that culture. But knowledge of a culture may help to understand the behaviour of the individual.
Knowing about our own culture helps us to understand our own attitude to pain. An individual may belong to more than one culture.

Pain is expressed in a range of behaviours from stoic to expressive. Do we as a medical/nursing culture treat stoical people differently to those who are expressive? Culture includes gender, religion, tribe, age and beliefs.

Gender

2008 was the IASP year of pain in women (1,2). Little research has been done on this subject. Seventy nine percent of pain studies involve only male animals and male subjects (3). In the central nervous system Mu receptor activation is dependent on estrogen. In low and rapidly changing estrogen states endogenous opioid tone is reduced with a hyperalgesic response (4,5). This might explain the high incident of pain states in women (6). Oestrogen increases Mu receptor activity, bone deposition and muscle mass following disuse. Progesterone causes sedation, analgesia, anti-inflammation, smooth muscle relaxation and vasodilatation. Testosterone produces analgesia, and modulates the endogenous opioids.

14-24% of women suffer from pelvic pain. Possible causes are endometriosis, chronic infection, interstitial cystitis and pudendal neuralgia, but many have an unknown cause. Men also have specific pains from prostate, testes, and post vasectomy. Hispanic women in the USA endure pain because of gender roles. Their family is given a higher priority than their pain. They are under-medicated for their pain. They endure pain and poor treatment (7). Greek women experience a lack of self worth with the menopause and are affected by a link between relationships and the menopause (8). They use many non-medical theories about their bodies and rely on traditional therapies without telling their doctor. Irritable bowel syndrome is more common in western than non-western women. Women think that body functions are something to be kept private and bowel function is a source of shame (9). Somali women consider that they should not complain of pain and Somali men are expected to be more stoical than their women (10).

Religion

Many Ugandan victims of war became born again Christians. This orientated them towards the future and away from the past. The church became a space to express suffering and not remain silent. A sense of trust was restored. There were many

similarities between this church based "therapy" and western post trauma therapies (11). After hurricane Floyd in the USA both somatic and stress related symptoms were identified. European-Americans made a distinction between the two but got little benefit from support groups for their stress related symptoms. Afro-Americans sought and got help for both types of symptoms from the Baptist clergy (12).

Tribe

The "bles" only affects Creole-speaking Caribbean island children (13). It can be caused by a fall, shock or exertion. Only a medicine man can detect it and can cure it.

Age

Many older people are resigned to their condition and reluctant to express themselves for fear of being a burden (14). In the elderly, brain changes make them less able to cope with stress. Drug elimination is delayed due to reduced renal and hepatic function. Disability is driven by fear avoidance beliefs and depression.

Children

Children are given very little analgesia due to the idea that children do not feel pain, there are dangers in giving analgesics to children and assessment is based more on behaviour than on scores.

A detailed evidence base and guidance on pain relief in children is available at www.anzca.edu.ac and www.rcoa.ac.uk/apagbi

Medical culture affects attitudes to treatments and expectation of recovery. Our medical culture accepts what drug companies tell us. We do not examine critically if there is any clinical basis for a difference between COX inhibitors or between different opioid drugs. We do not question how antidepressants compare with a placebo. Each county seems to have a culture for their preferred treatment; USA an injection; UK tablets, Europe suppositories

Cultural attitude can be changed. Buckbinder co-coordinated a public health campaign to reduce the time of work due to back pain in Australia (15, 16). Up to ten years ago it was considered desirable to operate on most back pain. Evidence has shown that the results of an operation were the same as no operation at fours years later. The public campaign reduced the number of days lost off work due to back pain.

I would suggest that we should consider pain as a bio-psycho-cultural experience.

References

1. Baranowski AP, Raphael JH. Sex, gender and pain. Reviews in Pain. British Pain Society. 2008:2;3-31.
2. IASP Sex, gender and pain special interest group. Pain 132 suppl 1:S26-45,2007.
3. Mogil JS, Chandra ML. The case for the inclusion of female subjects in basic science studies of pain. Pain 2005;117:1-5
4. Smith YR, Stohler CS, Nichols TE, Bueller JA et al. Pro-nociceptive and anti-nociceptive effects of estradiol through endogenous opioid neurotransmission in women. Journal of Neuroscience 2006;326:577-582.
5. Craft RM. Modulation of pain by estrogens Pain 2007; 132(supplement1):S3-S12.
6. LeResche L., Maud L. Sherman JJ., Gaudra B et al. Changes in temperomandibular pain and other symptoms across the menstrual cycle. Pain 2003;106:253-261.
7. Im EO., Guevara E., Chee W. The pain experience of Hispanic patients with cancer in the United States. Oncology nursing forum. Online 2007;34:861-8.
8. Komesaroff PA, Kafarelis B, Blake C, Cable V. et al. Experience at menopause of women in non-English speaking communities. Climacteric 2002;5:78
9. Chang L., Toner BB., Fukudo S., Guthrie E. Gender, age, society, culture and the patients' perspective in the functional gastro-intestinaldisorders. Gastroenterology 2006;130:1435-1446.
10. Finnstrom B. Soderhamn O, Conceptions of pain among Somali women. Journal of advanced nursing 2006;54:418-25.
11. Tankink M. The moment I became born again. Transcultural psychiatry 2007;44:203-31.
12. Aderibighe TA, Bloch RM, Pandurangi A. Emotional and somatic disorders in eastern North Carolina. International Journal of Social Psychiatry 2003;49:126-41.
13. Vilayleck E. The blés, a Caribbean Creole disease. Bulletin de la Société de Pathologie Exotique. 1996; 89:57-67.

14. Yates P, Dewar A, Fentiman B. Pain: the views of elderly people living in long-term residential care settings. Journal of advanced nursing 1995:21:667-74.
15. Buchbinder R, Jolley D, Wyatt M. Population based intervention to changed back pain beliefs and disability. British Medical Journal 2001;322:1516-1520
16. Buchbinder R, Gross DP., Werner EL, Hayden JA. Understanding the characteristics of a mass media campaign for back pain and the methodological challenges in evaluating their effect. Spine 2008;33:74-80.

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