Gender and everyday narratives of pain: a corpus-assisted discourse study into the language of pain in women and men

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Overview

• Pain & Language
• Gender & Language
• Pain, Gender & Language
• Aims of our Study
• Data & Methodology
• Results
• Conclusions
Pain and Language

• Pain is the most common symptom as to why people seek medical help
• The fifth vital sign alongside blood pressure, pulse, respiration and body temperature
• Pain experience is universal and ubiquitous
• Subjective experience that can only be assessed verbally through language or other semiotic signs
• Patients are asked to describe the duration, intensity, place, associated symptoms etc. (verbalise the subjective and interior experience of pain)
Pain and Language

LEGO PAIN ASSESSMENT TOOL

UNIVERSAL PAIN ASSESSMENT TOOL

McGILL PAIN QUESTIONNAIRE

RONALD MELZACK

Patient's Name ___________________________ Date ______________ Time ______________

PHI: S (10-20) A (9-10) F (11-18) E (16) M (17-20) PRI(T) (1-10) PPI (1-20)

1. Flickering
2. Quivering
3. Pulsing
4. Throbbing
5. Beating
6. Pounding
7. Jumping
8. Flashing
9. Flashing
10. Shooting
11. Tearing
12. Squeezing
13. Squeezing
14. Puncturing
15. Stabbing
16. Lancinating
17. Writhing
18. ANNOYING
19. Lacerating
20. TROUBLESOME
21. Pinching
22. Pressing
23. Pointing
24. Gnawing
25. Crushing
26.拉íNG
27. Pulling
28. Wrenching
29. BURNT
30. Burning
31. Scalding
32. Searing
33. COOL
34. Cooling
35. Itching
36. Itching
37. SMARTING
38. STINGING
39. NAGGING
40. Null
41. Sore
42. Hurt
43. Aching
44. Heavy
45. PPI
46. TENDER
47. Taut
48. RASPING
49. SPITTING
50. 0 NO PAIN
51. 1 MILD
52. 2 DISTURBING
53. 3 DISTRESSING
54. 4 HORRIBLE
55. 5 EXCRUCIATING

E = EXTERNAL
I = INTERNAL

COMMENTS:

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Pain and Language

• **McGill Pain Questionnaire (MPQ):** 78 adjectives grouped into sensory, affective, evaluative and miscellaneous (e.g. *cold, constant, tight, dull, beating, jumping, flickering, pressing, lacerating, lancinating*)

• Examined the **frequency** and **use** of the adjectives in the British National Corpus => representative corpus of British English (100 million words)

• Only **32** had associations with pain or were used to describe pain

• **Lancinating** does not occur at all in the BNC

• Cross-talk: Research shows that patients use less than 30% of the language items found in commonly used instruments of pain assessment (e.g. Duggleby 2002)
Gender and Language

• The way we talk is influenced by the social context in which we operate

• Our language indexes much more than the ability to speak e.g. English

• **Sociolinguistics** => interested in what ways social (non-linguistic) variables such as age, sex, social class, geographic region, level of education etc. impact on language use and how language use reflects the social life

• Gender – one of the most investigated variables; identify features of female vs male language
Gender and Language

Difference Perspective
– women are expected from an early age to ‘speak like a lady’: to be more conservative in expression, polite, indirect and refined than men
– distinct ‘women’s language’: a less confident, uncertain, more powerless version of male language
– confirms the inferior status of women in society => women are kept in their place (Lakoff 1975)
Gender and Language

• Difference perspective in conversations (Tannen 1991)
• Language of women and men is different but equal
• It is geared towards achieving different but equally important ends.
Gender and Language

**Female talk => rapport talk**
- to build relationships of equality and trust
- to co-operate with others to get things done
- to express feelings and emotions
- Features: mitigation devices, hedges, self-disclosure, facilitating question tags, fewer swear words, compliments etc.

**Male talk => report talk**
- to compete with others for access to ‘the floor’
- to use referential, goal-orientated language
- to say things for impact and effect
- Features: referential, informative, avoidance of emotions and self-disclosure, swearing, insults, boosting, interruptions, jokes,
Gender and Pain

• Social stereotypes going back to ancient times:

• **Women** => the weaker gender, emotional, complain a lot about pain, inferior, irrational, suffer from ‘hysteria’ and unable to perform public duties (Hippocrates)

• **Men** => superior, rational, tough warriors who endure the pain experience
Gender and Pain

- Gender: neglected area in research on pain experience and pain management (El-Shormilisy et al. 2015)

- Gender: a critical factor in the experience of pain, especially chronic pain
  - Chronic pain more prevalent in women than men (Blyth et al. 2001)
  - Conditions with chronic pain more prevalent in women: IBS, fibromyalgia (80-90%), rheumatoid arthritis, osteoarthritis, chronic pelvic pain, migraines, multiple sclerosis, bladder pain syndrome
  - Only cluster headaches occur more often in men than women (Evans 2015)
  - But the vast majority of pain research conducted on men (Evans 2015)
Gender, Language and Pain

• Research on pain and gender => major focus on anatomical and psychological factors influencing the experience of pain and symptoms (Berkley et al. 2002; Barsky et al. 2001; Robinson et al., 2000)

• Strong et al. (2009), over 1,000 (male and female) university students; retrospective writing about a past painful experience

Results:
– Women focus on pain emotions and sensations (feel, cry), and quality (sharp, dull); they also used more figurative and evocative language (similes, metaphors); their responses were longer and more detailed than those produced by men
– Men tend to focus on facts, descriptions, but also emotions (strong theme of anger and many swearwords)
– Responses might be attributed to socio-cultural factors, social gendered expectations and socially accepted forms of behaviours also in response to pain

Limitations: the young (less likely to experience chronic pain), high literacy skills, retrospective writing and not in the context of illness, no distinction made between physical and mental pain; chi-square not a good measure to detect statistical significance in language data)
Aims of the Present Study

Focus:
1) Gender differences in the description of physical pain in the context of chronic or terminal illness
2) Participants of different ages

• Research Questions
1) How do men and women talk about physical pain?
2) Are there any quantitative differences in the language they use?
3) Are there any qualitative differences in the language they use?
Data & Methodology

• secondary analysis of a large corpus of health and illness narratives collected by the Health Experiences Research Group at the University of Oxford and published by the DIPEX charity on the HealthTalk website (www.healthtalk.org, 3,500 patients have been interviewed reporting on 85 conditions)

• **18 chronic or terminal conditions** were identified in which men and women talked about their physical pain including: breast cancer, pancreatic cancer, parkinson’s disease, teenage arthritis, colorectal cancer, leukaemia, lymphoma, cervical cancer, ovarian cancer, lung cancer, gout, osteoporosis, penile cancer, rheumatoid arthritis, testicular cancer, chronic pain, pain control

• Data: Extracts from Discovery, Treatment, and Living with the Condition

• Data was divided into Male and Female
Data & Methodology

<table>
<thead>
<tr>
<th>Corpus name</th>
<th>Corpus size (words)</th>
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</thead>
<tbody>
<tr>
<td>PainM (Male data)</td>
<td>107,283</td>
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<tr>
<td>PainW (Female data)</td>
<td>135,433</td>
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</tbody>
</table>
Data & Methodology

- Tools and methods of Corpus-Assisted Discourse Study (CADS)
- CADS: uses large language data sets (corpora) and a combination of quantitative (computational) and qualitative (discourse analytical) procedures
- Analytical category (1): Frequency
- Analytical category (2): Collocations
- Tool: Sketch Engine (Kilgarriff et al. 2004)
Data & Methodology

• **Frequency**: saliency and relevance

• **Collocation**:
  – the tendency of words to attract each other (strong tea, heavy rain, utterly wrong etc.)
  
  – frequent co-occurrence of two or more words within a certain span \([-4 \text{ and } +4]\) and determined on the basis of statistical significance testing (*Mutual Information*, Loglikelihood, LogDice)

  – combinations identified in this way point to recurrent associations and salient ideas related to the studied phenomenon

  – “Collocation is [...] a way of understanding meanings and associations between words which are otherwise difficult to ascertain from a small scale analysis of a single text” (Baker 2006: 96)

  – Collocations are not simply lexical items, they “are also widely shared within a speech community” (Stubbs 2001:35) and thus reflect societal and cultural practices
Results: Frequency

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<th></th>
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<td>22.74</td>
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<tr>
<td>ache</td>
<td>12</td>
<td>1.2</td>
<td>19</td>
<td>1.40</td>
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Pain  LL= 20.37, df=1, **** p < 0.0001  
Ache  LL= 0.65, not significant
## Results

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<td>4</td>
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</table>
Results: PainM

• Intensification/metaphors of war/violence

(1) I was lying in bed and it was in the middle of the night and it was absolutely excruciating pain and I couldn't even put a sheet over my foot, it really was bad. At which point my wife called the doctor.

(2) and then the next day, it went from my arm, my left arm to my right hand and the pain was absolutely again excruciating. No way could I get any relief from it at all ....

(3) this arm's absolutely giving me excruciating pain and I was really, I was really at a low and I just burst out crying. She, she called the GP

(4) the pain actually attacked both, as soon as it hit this foot, it would hit my left foot and then the pain would be excruciating.
Results: PainM

• ‘I am in control’

(1) and generally speaking they gave me what I wanted to control the pain.

(2) I'm sure they'll give me enough morphine or whatever it is to control the pain. If I ask for it I'll get it [...] I should say that if I find there is some resistance, I mean I'm not asking anybody to overdose me or anything, but if I find that they're not controlling the pain to my satisfaction, well then I will be aggressive about it and push them.

(3) I'm taking massive amounts of morphine to control the background pain and it does sometimes...
Results: PainM

• Explanation/biomedical discourse: developing medical lay expertise

(1) Basically they, my bones have now the cage has collapsed into the bones. So basically all that work is. That’s what causes me so much pain.

(2) That causes pain because your muscles tense and that causes like I get neck pain because my muscles in my neck tighten and I get stiff.

(3) ... early signs because of the hormone imbalance that's caused by the testicles not working properly, they were the early signs, allied to the fact that the tumour had spread into my back which was causing the back pain.
Results: PainM

- **Practical Management**

  (1) because one of the great things they teach in pain management is called pacing and you, instead of ... We'll use a mountain as an example, instead of going straight to the top of the mountain you go in little stages

  (2) So it's all, pain management is very, very practical.

  (3) That is from endorphins produced by exercise. So the whole process of pain management is a series of, it's immensely, practical, straightforward stuff that anybody can understand
Specialist metaphors

(1) One thing that she did actually was explained how pain is interpreted by the brain, so they use a, one thing that sticks in my mind, they used the simple terminology of a pain gate in the lower back that opens and closes .....

(2) If you're walking down the street if you feel that you're at level five, and you're feeling particularly emotional, you're feeling down, then your pain gate is going to make it a level five.

(3) You're feeling less able to cope on a certain day then, for example, that may open the pain gate so the pain may seem worse. Which I don't want to sound like it's kind of all psychological

Results: PainW
• **Talking to specialists** (psychologist, nurse)/sharing the pain

(1) and then I'd go back to my meeting, which was once a week, with the *pain psychologist* and we'd go through the diary

(2) but I went, I see a pain psycho, *pain psychologist* and it really, I think it really helped me. *We did, we went through different things* that we had to

(3) She was the *clinical psychologist* in the *pain* management clinic and she would always help me because there is times when you're managing pain, when you get what they call a flare up and you really don't feel that you can cope with anything

(4) And once when I was in the hospital I talked to a nurse about the *pain* I was having and she suggested I got hold of the Macmillan nurse organisation who might have more idea of what to do.
Sceptical about formal pain management programmes

(1) You know and people could come and learn about it that way and practice it and talk about the issues around it. So we did a sort of, like our own mini self *Pain Management Programme* here.

(2) I chose not to apply to go on a *pain management* course but I did do a huge amount of reading. I've read a lot of the medical texts and the books written by other patients who were using those sort of strategies.

(3) and then when I went over to the *Pain Management Clinic* I felt almost like an old horse that was being farmed out to pastures, you know, we can't do anything with you so we'll put you into this.

(4) in fact I was maybe a wee bit suspicious about the *Pain Management Programme* because a lot of it was based on your thoughts and the psychology behind pain and I had initially sort of interpreted that as 'So do they think it's all in my head?' you know,
Results: PainW

• **Learning process** (with others)

(1) And I do, I get again with, working with the Macmillan team, and some drugs there we seem to have, and *learning to live with that pain*

(2) Learning to recognise when my *pain*, instead of feeling the pain when it was excruciating .... learning to recognise the *slight signal* that was going to say you're going to be in pain in an hour or twos time, so slow down ....

(3) it does mean that if were in a group where you are *learning pain* management you get a lot of support from the other patient members whereas if you are doing it by yourself, reading it from a book, you are down to your own resources
Conclusions

• Women talk significantly more often about pain than men
• Men and women talk differently about the experience of pain
• Men report pain when it is much closer to being unbearable
• Men focus on controlling and managing pain, and seek explanations/causes; they draw on biomedical information => become lay experts capable of managing pain successfully on their own
• Men are less likely to discuss drug treatments/pain killers (dependency?)
Conclusions

• Women are more likely to report pain at lower levels of threshold
• Women are more sceptical about formal pain management courses
• Women are more likely to talk and share their pain experience with health care professional (pain management as a shared goal) and involve them in the treatment
• Women report more frequently about drug treatments/pain killers
• MPQ => reflect medical jargon, but not the way how lay people talk about pain
Conclusions

• The differences are heavily influenced by social/cultural expectations of gender roles
• The stereotype of masculinity => independent, tough warriors able to endure pain and deal with it
• Pain => messenger; reporting pain is a crucial aspect in diagnosing and treating any condition
• Men need to be encouraged to disclose pain at earlier stages and to talk about drug treatments
Thank you

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