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Citation for final published version:

Parsons, Gareth 2024. The social side of pain: the social in the biopsychosocial model. Pain News 22 (1) , pp. 8-10.

Publishers page: https://www.britishpainsociety.org/british-pain-so...

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The Social Side of Pain

The Social in the Biopsychosocial Model.

The biopsychosocial conceptual model of pain offers a useful and convenient way to think about pain[1]. It allows the integration of different ideas about what pain is and can help in the consideration of how people experience pain, how they present pain to the world and how the world treats people in pain. This approach to considering pain has value for all types of pain but has particular utility when applied to persistent or chronic pains as it can provide interesting perspectives on the world in which people who have persistent pain are living.

The biopsychosocial model was conceived in response to perceived inadequacies in the existing biomedical model to explaining pathology and developing treatments by George Engel[2] a psychiatrist who realised that his medical training did not fully explain the clinical features presented by his clients. In the 1980's this model was adapted separately by Loeser and Waddell and applied to low back pain as an explanation as to why spinal surgery was often unsuccessful[1]. These approaches offer a hierarchical systems-based model, built up from the basic building blocks of life, from molecules and genes through organ structures and the nervous system, which forms the substrate for psychological systems and then out from the person to the society that person lives in and placing them in their environmental context[3]. The different levels of this hierarchy dynamically interact with each other, thus explaining the complex nature of pain, where psychological and social factors contribute to pain behaviours, experiences and expressions and adding to understanding of the role that biomedicine plays in pain.

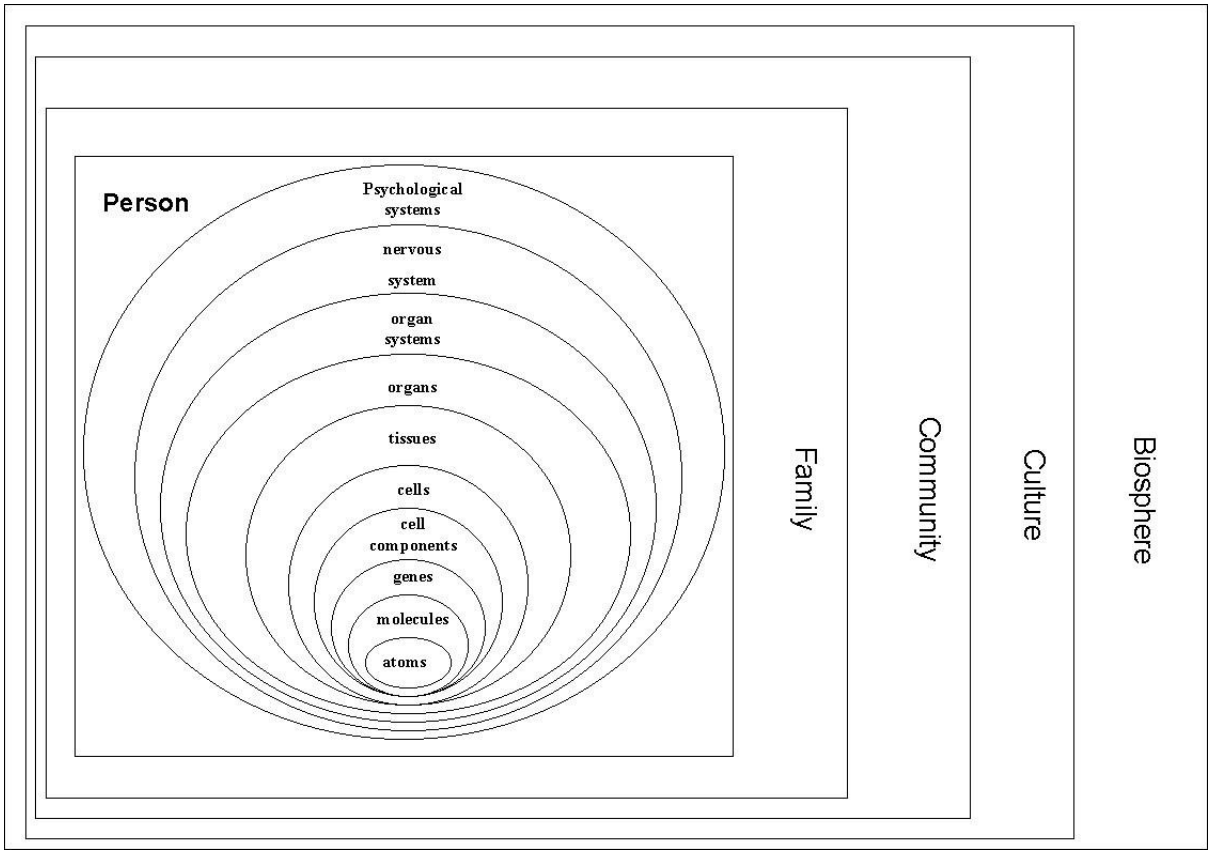

Figure 1 Hierarchy of systems in the biopsychosocial model (from Parsons and Preece 2010)

The biopsychosocial model was developed as an integrated systems approach, It represented a paradigm shift in the way, first mental illness and then chronic conditions and now most health

issues are considered. This model is often more commonly represented by a Venn diagram with three overlapping circles, usually representing Biological, Psychological and Social domains, with the overlap purporting to represent an individual's overall pain. This simplified biopsychosocial pain model has great value in emphasizing that appropriate attention needs to be paid to these different domains. Moreover, the imagery of the model suggests that these three domains should be equally important to understanding pain. Conversely in such a simplified model the interaction between different aspects of pain can be lost, and this simplification can also contribute to misunderstandings about pain.

The reality is that when it comes to pain the effort to understand pain does not reflect this paradigm view. In practice there often is a lack of balance between the different domains. This is not to say that there should be equal effort in understanding each domain but that there should be proportionality. Currently we focus an awful lot on physical aspects of pain, and by this I mean the 'bio', we do some work on the psychological and we hardly ever pay attention to the social aspects of pain, unless they relate to the individual's social situation.

This paper is partly an attempt to address proportionality and trigger some thoughts and responses around social aspects of pain.

So just to look a bit deeper into what is mean by this. From the biological side of things we often focus upon biomechanical and neurological aspects of pain. Now this is of course very useful work, our human bodies that experience pain are physical entities made up of matter that is organised organically into structures and systems. Knowing about these allow us to have better and earlier identification, develop physical and pharmacological therapies and make diagnoses and predictions of how pathologies will progress. This enables us to focus upon analysing functions and to understand persistent pains better through developing ideas around for example neurobiology[4] or genetics[5]. These fit very well into the systematic hierarchical approach to the biopsychosocial model when looking at in person aspects. But these ideas can only take us so far. The need for the biopsychosocial model arose because, focusing purely on the biological has not provided all the answers and unfortunately in some cases has created problems.

An understanding of psychological aspects of pain has provided insights into risk factors, underlying cognitive and behavioural mechanisms and these in turn have led to better assessment of pain interventions that can help people with persistent pain such as cognitive behavioural therapy[6] or acceptance and commitment therapy[7]. Indeed our better understanding of psychological aspects of pain have shaped how pain has come to be described, so that pain experience is at the core of the revised International Association for the Study of Pain's definition[8].

> "An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage"

However, when it comes to the social aspect of pain the application of the biopsychosocial model needs some attention.

The social domain often focuses upon personal aspects of an individual, and this can lead to it being conflated with psychological aspects which dominate. As an illustration, run a query on your favourite search engine and you will see the phrase "psychosocial pain" dominates over "sociopsychological". Additionally, people who work in the area of pain tend to focus on individual effects of pain, such as the existence and nature of social relationships[9] and rarely if ever pay attention to group or societal effects of pain, with the largest social groups that merit consideration

being the family or workplace. This is not to say that social determinants of pain have not been studied.

As pain is an ubiquitous experience it has meaning to everyone, as we all have the potential to experience pain, but the likelihood of any one person actually experiencing the significant negative effects of pain is shaped by society because pain is unevenly distributed based upon ingrained structural disparities[10]. The most commonly studied include gender[11], socioeconomic status[12], educational attainment[13] or organisational aspects such as provision of services[14] or access to help and support[15]. More recently ideas around classism have begun to be studied[16], classism involves making detrimental judgments about people based upon placing them within a particular social grouping and has great potential for leading to discrimination and further harms[17]. This can lead to oppressive practices such as dehumanising or through implicit biases effect decisions that are made about care [17, 18]. Such situations arise when people with chronic pain lack power in their relationships with others and this is often compounded when there is more than one factor in play[19].

The prevalence of pain in society reflects the state of a nation. It has been identified as increasing during economic downturns, particularly in western nations[20], even though people are incentivised to work harder and for longer hours in prosperous times. Additionally at a societal level the prevalence and management of chronic pain can act as an indicator of the wellbeing[21], health and happiness of a population[10].

Having an understanding of these social aspects of persistent pain can protect people in pain from internalising their problems and blaming themselves or others for their pain. It can prevent health carers from perpetuating inequities in the way they interact with people in pain. Moreover, it can help identify gaps in knowledge and unmet needs and improve the distribution and allocation of resources for people who are in pain.

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