THE BIOPSYCHOSOCIAL MODEL IN CLINICAL PHYSIOTHERAPY PRACTICE IN KUWAIT

Thesis

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Chronic pain is increasingly recognized as a major health issue in Kuwait and a well-known consequence of everyday trauma, surgical procedures, and workplace accidents. A local survey back in 2004 reported a prevalence of 36% for musculoskeletal pain in females and 20% in males with Functional disability was reported in 39.1% of the sufferers. The age-sex population adjusted prevalence rate for musculoskeletal pain was 35.7% in females and 20.2% in males. The most common sources for advice on treatment were physicians in hospitals (68.8%) and general practitioners (30.4%). 82% had prescriptions for their medications, while 19.4% had self-prescribed tablets. Musculoskeletal pain is a major health problem among Kuwaitis and deserves intense attention.

We always believed about this quote “Don’t treat the disease, treat the patient”. The concept of health has seemed to become complex in definition over the centuries as science improves. “Health is a complete state of physical, mental and social well-being and not merely the absence of disease and infirmity.”-World Health Definition of Health (1948) In the same context, Pain Management has become one of the richest and most demanding parts of clinical life. Pain Treatment modalities issues have become a challenging topic due to the complications that result when dealing with pain. These issues can be difficult to both the patient and the Health practitioner and refer to the inevitable outcomes that a patient may have to face in such situation. These outcomes include pain, depression, coping, frustration, and the need for control. In a medical environment, these outcomes are added to the stressors that may affect the attending medical practitioner. These include inadequate training, insufficient compensation, and personal discomfort with the continuity of pain.
There are two very important approaches to medicine that a medical practitioner can carry out. The First one is The Biomedical model of medicine which is a Health provider-centered model that assumes disease/illness/pain is caused by any deviation from the norm of measurable biological/somatic variables and believes the only effective treatment for pain is via medical approaches (“Biopsychosocial Versus Biomedical Model”, 2015). The Second Approach is The Biopsychosocial model of medicine which is a patient-centered model that understands that pain can be a dynamic entity that changes over time and is affected by a person's internal and external environment (“Biopsychosocial Versus Biomedical Model”, 2015). In Pain management planning, advanced directives can make a patient’s Goals clear to their family and health provider. This takes into consideration the goals of care. The medical interview in both the biomedical and biopsychosocial model present with quite different outcomes; they demonstrate how the latter model is of far more significance in such an investing issue.

The biomedical model is the basis of healthcare. It is relevant for many disease-based illnesses and is supported by a wealth of biological findings, but this model has deemed insufficient since it is effective in acute Pain that have predictable outcomes and suitable to healthcare practitioners who must focus on one part of an individual's health. This doctor-centered model and interview is appropriate in acute pain situations when there is clear trauma or manifestations of illness or pathology. Even though this model has been successful in the treatment of pain, it still does not explain why pain can continue when tissue damage is no longer present. It leaves no room within its framework for the social, psychological, and behavioral dimensions of illness (“Biopsychosocial Versus Biomedical Model”, 2015).
In the biomedical model concerning Chronic pain management issues a major topic has emerged. In other words, if the medical interview is not efficient or complete, and biomedical model is limited to only to the treatment of biological findings, patients will be more prone to choose alternative options to treat his/her pain. developing better postgraduate medical training and improve the quality of care and life of the patient. George Engel, an American Psychiatrist, felt it necessary to widen the approach to disease to include the psychosocial factor without sacrificing the huge advantages of the biomedical approach in 1977 (“Biopsychosocial Versus Biomedical Model”, 2015).
George Engel’s biopsychosocial model was unique as it was the first time that healthcare providers were challenged to view service users within their wider context and not just as diagnostic and therapeutic challenges (Hackett, 2016) and Add to that the biopsychosocial model encourages patients to contribute to their treatment and empower them in self-managing their pain.

The clinical goals begin by working toward controlling pain and other physical symptoms because the physical aspects of care are a prerequisite for everything that follows. Other goals include: Involvement of people important to the patient, obtaining a degree of acceptance by the patient, acquire a complete medical understanding of the patient's pain, and undergo a process of care that guides the patient understanding and decision making by also taking in consideration the patients current psychological, spiritual, and existential issues which all can be affected by pain (Back, 2009). Though the Biomedical and Biopsychosocial models each have different approaches, both still have significant roles and function in healthcare.

The Biomedical model which focuses on the control and mastery of diseases has undeniably been beneficial in the study of several diseases but also has its liabilities. It is reductionist because it reduces illness to low-level processes such as chemical imbalances, pathogens, genetic predispositions, and disorders. According to this model, individuals are not responsible for illnesses caused by factors beyond their control and treatment should include vaccination, surgery and the like which all aim to remove the cause of the illness. In this model of practice, an individual can either be healthy or ill because there is no continuum. That a psychological disorder can lead to an illness but there is no in-between. The biomedical view thus identifies treatment of various parts with the goal of a cure. If success in this model is defined as a cure, death is defined as ultimate failure, to be avoided at all cost. Patients whose diseases cannot be “cured” are deemed as “incurable”.

The Biopsychosocial (BPS) model greatly differs because while the biomedical answers the main question “why do people get sick?” the BPS also answers the question “why else do people get sick?” [According to the BPS model, the human being is complex and must be understood and That there is a relationship between body, mind and environment and that one aspect affects the others (figure.1). Health and illness are caused by multiple factors and have multiple effects, from the biological or cellular level to the psychological and social levels. This model maintains that individuals are also responsible for their illness, contribution to treatment as well as the healthcare system and their recovery. It also maintains that recommendations for treatment must involve all three aspects of the model. By doing so, a unique treatment can be planned for individual patients to achieve optimum results. This view has increasingly impacted on health delivery and holds a more comprehensive perspective of healthcare responsibilities, going beyond the roles of mere treatment and cure. It seeks to deal with the patient’s total experience of illness, including those aspects that are not responsive to medical intervention.

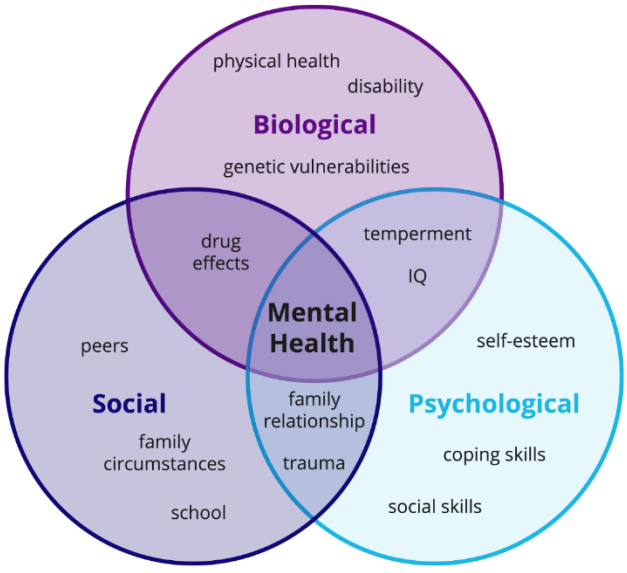

Figure 1. Biopsychosocial Model

The first time the Biopsychosocial Model brought to my attention in my 18 years of clinical practice in Kuwait was at my private physiotherapy clinic back in 2013 when Ms. Z a young 32 yr. female with Chronic LBP for 7 years during which she been treated by different modalities such tablets interventional radiotherapy, chiropractic and physical therapies ending with Lumbar laminotomy and all came out without success. During my assessment I could not find any positive sign of neuropathic disorder /pathology that could cause her pain nor there is any Musculoskeletal dysfunction, yet she is functionally disabled as she cannot manage her Daily activities due to pain and weakness in addition to her inability to sleep more than 3-4hrs a day. If we go back with the beginning of her chronic pain story it all started at the time when she was in london with her Stage 4 cancer mother during this tough time she started to have discomfort in her low back but the turning point was when she was in the plane going back home while her passed away mother coffin in the plane cargo as it was so emotional for her the LBP flared up and we already know the rest of the story about her treatment journey. If we look carefully at Ms. Z story you will notice that it is clearly traumatized, and her psychological and social factors never been covered in her treatment journey Since that time I started my whole assessment and treatment approaches differently and while doing such I came across hundreds of patients like Ms. Z. Physiotherapy management and direction of treatment of such cases have to be dynamic using Various approaches of rehabilitation based on scientific models to cope with disabilities, impairments, diseases (Lorenzo, M, 1999, p.1) Among those approaches is the Biopsychosocial model approach which is used during the clinical placement for Ms. Z. We started first assessing Ms. Z subjectively and whole-heartedly, questioning her about her background, her career, social life, daily habitual routines. Petty and Moore (2007, p. 130) states that "physiotherapist to investigate more about the initial cause of the deformity as well as to treat her effectively in achieving the short-term and permanent goal in rehabilitation". As Physiotherapist we should practice active listening while listen with heart of compassion, patience and without any judgmental view. In addition, we should also choose words carefully and meaningfully without stepping into patient's borderline by using open-ended questions to search for information until full understanding is achieved. Sensitive verbal and non-verbal communication are witnessed throughout the session (Petty and Moore, 2007, p.130). My attempt to enquire more about Ms. Z was successful as Ms. became more comfortable in exposing and describing more about her complains of pain. This indirectly allowed me to gather more information for a better rehabilitation outcome at ease. Engel (1977, p.130) states that 'more information needs to be gathered during consultation as physiotherapists need to find out about the patient's biological signs, psychological state, their feelings and beliefs about the illness, and social factors such as their relationship with families and larger community'. I started the objective assessment with the examination of posture of Ms. Z in sitting and standing, noting the posture of the shoulders, head and neck, thoracic spine, upper limbs and lower limbs accompanied by other tests and after all been carried out had drafted out the treatment plan for Ms. Z. in which I carefully and slowly explained the treatment to Ms. Z and set a short-term goal for her as it would not be a burden for Activities of daily living in short duration also she benefits from getting a better idea of her conditions, treatment alternatives, and expected improvements regarding this approach Sullivan (2007, p.11) states that "anticipated goal and expected outcome can address in predicted change in overall health, risk reduction, and prevention and optimization of patient satisfaction." He also states that this would further encourage faster recovery. I started the treatment session by teaching Ms. Z simple exercises to facilitate her restricted movements. Before starting the treatment, I demonstrated the exercise slowly and gave short, clear and easy to understand instructions and explanations about the treatment without using scientific terminologies and labels to enhance her understanding as wells as to minimize the emotional distress (' Sullivan and Precin, 2007, p.56).

During her treatment session there was plenty of psychological monitor since she is experiencing difficulties and discomfort while doing the exercises and I would act as a motivator to motivate her to continue her efforts by encouraging and supportive words like, “Don’t stop, you’re almost there”, “Keep going, you’re doing very well”, “You can do it, it’s easy”, “Hang in there, just a while more”, “You’re doing very good, come let’s finish it together”, this indirectly would comfort the patient’s psychological discomforts and motivate her to be on the right track. Ms. Z is comfortable with the given exercises and knows what she is doing and why is she feeling this way, and how does she cope with it if she feels like giving up due to tiredness. These covered the psychological aspects (Petty and Moore, 2007, p. 131). After 5 sessions with great Functional improvement, I noticed her husband always accompanied her which caught my attention to add some social aspect to my treatment and ask him to come join the session and see how she improved physically and can-do things he may not be able to do as healthy man which made him interact and cheers for her and with this, I made the family involved. Sullivan, (2007, p. 52) states that ‘Social support helps the increased of self-esteem, adjusting and adapting oneself with disability.’ After 3 months of treatment Ms. went from someone Physically dysfunction to someone able to squat pain free with 30Kg and deadlift her body weight (60KG). This story inspired me to implement the Biopsychosocial Model with most of my chronic pain patients and proved to be an important aspect in physiotherapy practice and can cover aspects that the biomedical model can’t cover as The most obvious dissimilarity of Biopsychosocial model than Biomedical model is that Biopsychosocial model encourages patient’s active participation whilst Biomedical model is not much a model which promotes patient-centered care in terms of appreciating the individual needs and right of patients, understanding patients’ illness and health care experiences, and embracing them within effective relationships which enable patients to participate in clinical reasoning more (Ersser, 2008, p.68). Biopsychosocial model takes into consideration of patient’s involvement in treatment, patient’s needs, and patient’s relationship with clinician during a clinical practice as this model comprises the biological, psychological, sociological aspects of a patient. To conclude, biopsychosocial model is practical, applicable, and agreeable as it brings enormous improvements on patient’s condition. Health systems sometimes act like there is a clear separation between physical and mental health problems, ignoring evidence that a person’s emotional state always influences their body function and physical presenting symptoms. Physicians/Physiotherapists are trained to investigate and treat so they do. That is what they are good at Although this model has been extraordinarily productive for medicine, its reductionist character prevents it from adequately accounting for all relevant medical aspects of health and illness. Information here seems to be limited to that which can be entered into a database field. Fortunately, Dr. George l. Engel continues to remind us that it is the dyad of patient and professional that forms the basis whereby meaningful data can be observed and obtained from a suffering individual. In general, the two models of healthcare practice have been summarized, highlighting the differences between the biomedical model which focuses on the control and mastery of diseases, and the biopsychosocial model which focuses on total care of a person..

Conventionally, neither physiologists, psychologists, nor sociologists consider the entire human being, but instead each exclusively applies the method, ideas, and principles of his specific field, and so observing different things and speaking a different language to that of his colleagues.

Understanding a systematic BPS model in each patient with an agreed-upon, evidence-based patient-centered interviewing method can produce a significant leap ahead in both research and training to enlighten better practices. Nothing will change until those who control resources in Kuwait are able to peer off the defeated path of sole dependency on biomedicine as the only approach to healthcare.

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