

Biopsychosocial model of health case study



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Case Based Essay

The biopsychosocial model of health (Engel, 1977) claims that health and illness are: the product of a combination of factors including biological characteristics (e. g. genetic predisposition), behavioural factors (e. g. lifestyle, stress, health beliefs), and social conditions (e. g. cultural influences, family relationships, social support). (Marks et al, 2005). The biopsychosocial model takes into account that each patient is completely different and as a result they are affected differently by each biological, psychological and social happening. (Atkinson et al, 2005). The biomedical model of health however sees the patient as a biological entity which has developed a fault; this model leads people to believe that all patients with the same injury/pathology will respond the same to treatment and in the same amount of time. (Atkinson et al, 2005). The main difference between these two models is the role of the patient and practitioner in each. The biomedical model see's the patient as person who has to take orders from the practitioner. The biopsychosocial model sees the treatment as a negotiation between the practitioner and patient. (Annandale, 1998) The type of model a practitioner uses will greatly impact on the eventual outcome of the patient. In the case of Mrs. Chatsworth the biopsychosocial model of health would be the best approach to take when coming up with an effective treatment plan for her as there are many biological, psychological and social factors that a practitioner will have to contend with. This essay will explore these different biological, psychological and social factors that will face Mrs. Chatsworth throughout her treatment as well as the implications for her practitioner.

There are a number of biological factors affecting Mrs. Chatsworth, some resulting from the total joint replacement in her right hip six weeks ago and others stemming from osteoarthritic changes which have been occurring for a number of years. According to (Moskowitz et al, 2007) osteoarthritis diseases are a result of both mechanical and biological events that destabilize the normal coupling of degeneration and synthesis of articular cartilage chondrocytes and extracellular matrix, and subchondral bone. Mrs. Chatsworth experiences osteoarthritis in her knees, hips and shoulders. It was these changes in her hip joint that led to her having a total hip arthroplasty. Daily activities such as shopping would be difficult for Mrs. Chatsworth as the osteoarthritis in her shoulders will make it difficult for her to carry shopping bags. Another biological factor to be concerned with, when dealing with Mrs. Chatsworth is the residual knee and thigh swelling as a result of the hip replacement. “ Wounds that fail to heal in the expected time range are generally referred to as chronic.”(Shamely, 2005). Swelling present at this stage post-operatively would indicate chronic inflammation in the knee and thigh region. “ Chronic inflammation must be replaced by acute inflammation for healing to occur” (Shamely, 2005 pg 4). This swelling has decreased the range of motion in her knee as it will be painful to move it. Mrs. Chatsworth is only partially weight bearing, with her knee slightly flexed and as a result requires elbow crutches to get around. This will affect Mrs. Chatsworth ability to climb stairs, which she has to do daily as her apartment is on the first floor of a building which has no lift. Her right hip is still very stiff after the operation; this again will affect her ability to get around. Also the therapist will have to be aware of the post operative guidelines when forming a plan, adduction and internal rotation of the hip are limited by

these. Another issue facing Mrs. Chatsworth is weakened muscles in the thigh region; her right and left quadriceps have very little definition or bulk, also in her right leg there is a significant reduction in her gluteal muscle group, which are very important muscles involved with the movement of the hip and knee joint, her practitioner will have to prescribe strengthening exercises for these. According to (Schult et al, 2005 pg420) “ the hip and gluteal muscles have evolved into massive and powerful movers and stabilizers of the femur counteracting the loads imposed by support of the whole body weight on two limbs and maintain balance and stability during bipedal locomotion.” This means that Mrs. Chatsworth’s balance is decreased as a result of this muscle atrophy and her practitioner will have to plan for this. Mrs. Chatsworth is also taking Atenalol for high blood pressure; this will affect her as over exertion may cause further injury. The practitioner will have to ensure that he/she makes a treatment plan that is effective but at the same time not too physically demanding on Mrs. Chatsworth.

When dealing with Mrs. Chatsworth case the practitioner will have to look closely at the psychological and social factors which will have a bearing on her treatment e. g. treatment time and the eventual outcome of this treatment. Mrs. Chatsworth may be depressed or stressed over the death of her husband six months ago; this may have an adverse effect on her rehabilitation. The practitioner will have to realise that because Mrs. Chatsworth is lonely her motivation to follow a recovery plan may be somewhat limited. On the other hand Mrs. Chatsworth is worried about being a burden on her daughter who will have less time on her hands soon as her children will be on holidays from school, so this may give her added drive to

recover quicker; this may lead to Mrs. Chatsworth causing further injury to herself by over working to recover. This issue will may lead to Mrs. Chatsworth trying to perform daily tasks which she was not able to do post-operatively. Another obstacle for the practitioner to overcome is Mrs. Chatsworth's fear of weight bearing on her right leg. Her therapist will have to encourage and reassure her, walking behind a while there taking their first fully weight bearing steps can be a great form of reassurance to a patient. (Stein-Parbury, pg209) highlights this- " the presence of another human being is reassuring in itself, especially during times of disquiet." Mrs. Chatsworth also has two cats which she may be overly attached to; a problem may arise as looking after them may put extra pressure on her during her recovery. As well as these psychological factors there are also a number of social factors that the therapist will have to incorporate into his/her plan for Mrs. Chatsworth. The fact that Mrs. Chatsworth is recently retired will give her more time to focus on her recovery plan; also there will be no pressure on her to be fit to go back to work. As her daughter lives close by, only five miles away, this will alleviate some of the pressures on Mrs. Chatsworth such as shopping, cleaning and other common daily activities. Also her living conditions as mentioned earlier, living on the first floor and having to use stairs to go to and from her apartment will affect her recovery as it may be an incentive to follow her recovery plan.

To conclude, this essay identified the different biological factors that affected Mrs. Chatsworth such as loss of range of movement, swelling and osteoarthritis. Also this essay highlighted the different psychological factors affecting her such as stress, the fear of being a burden to her family and the

fear of weight bearing on her right leg. This essay also highlighted the different social issues that will affect her recovery. All these factors were related to the therapist will manage Mrs. Chatsworth's case and what the eventual outcome will be.