## Study on the effects of the biopsychosocial model



Typical of health models which existing in health care field has been applied since mid-nineteenth century. Commonly they referred as biopsychosocial and biomedical model which discussed rapidly in the medical field. The biomedical model is known as dominant modern models of particular disease, which look at biological factors when assessing and treating patients whereas biopsychosocial more concerned about psychological and sociological factors.

Biopsychosocial model is initially introduced by George Engel in the year of 1977. This model briefly describes the biology, psychology and sociology aspects which performed and used in the medical world. Biopsychosocial provide a principle for understanding the disease and achieving treatments and patterns of health care in rational way. A medical model must take into account the patient, the social context in which he lives, and the complementary system devised by society to deal with the disruptive effects of the illness (Campbell, Rohrbaugh, 2006).

In contrast, biomedical model focuses on the physical ways as pathology, biochemistry and physiology of a disease. It is not include the role of a person's mind or society in the specific causes and treatments. Its focus is on curing the disease, not the whole person and generally consists of seeking very specific causes for illness and responding with specific treatments such as antibiotics for infection (Jones, 1994).

Physiotherapist known as a health care profession cared with the human functional mobility. Other than that, physiotherapists always lend their hand to help and cure people with physical problem either caused by disease,

aging problem or accident. They also identify and increase the movement potential through health preferment, rehabilitation, treatment and healthcare prevention.

It uses physical approaches to promote, maintain and restore physical, psychological and social well-being, taking account of variations in health status (CSP curriculum framework, 2002). These facts are strongly related to the biopsychosocial model which introduced at first by George Engel.

Overall, physiotherapy is an independent profession which able to diagnose disease and do their own clinical judgments and treatment. Moreover, they also reviewing their own behavior and achievement and taking action as wise solution to solve and recognize the problems which referred to biopsychosocial model.

Biopsychosocial was well performed in reality life of human, especially in medical field. During a clinical placement, Mdm. L, a 54 years old woman who was accompanied by her husband went into the electrotherapy room in physiotherapy department by the support of wheel chair. The physiotherapist that in charge on the day, Mr. A, responsible to assess and treat the out-station patients. He begins with introduced himself and followed by greetings to her. Mr. A used biopsychosocial aspects to approach and close to Mdm. L. He did in a very friendly, polite and intelligent ways. These can avoid her from getting fear and try to ignore the treatment in future.

According her medical report, it stated that she was having a bilateral knee pain, which diagnose as Osteoarthritis (OA). OA defined as morphologic, biochemical and molecular changes of both cells and matrixes which lead to softening, fibrillation, ulceration and loss of articular cartilage, sclerosis and eburnation of subchondral bone, osteophytes and subchondral cysts (Porter, 2003). Thus, Mr. A adjudicates to give subjective and objective assessment to Mdm. L. The purpose of the assessments is to understand the patient's problem followed by the symptoms that lead to the patient's complains.

The objective assessment comes after subjective assessment. Throughout the objective assessment, Mdm. L complained about tingling pain and numbness occurs on the both knees while doing daily activities such walking up the stairs and squatting. Besides, she also has joint stiffness in the early morning, which unable her to do flexion and extension of her both knee joints, and aching on left knee while sleeping on the night. Hence, these serious conditions lead her to inconvenience in doing every single movement of the lower limb. Thus, excessive pain of the knee joint makes Mdm. L decides to use wheel chair to make her move easily from a place to another place. Her husband was prepared to lend a hand to help and support her. Concomitant with these signs and symptoms is a decreased quality of life associated with a reduced capacity to perform activities of daily living (Hunt, 2008, p. 54).

Mr. A also gives a good interaction and impression to Mdm. L on the good communication among each other. Mr. A keep eyes contact and speak confidently to her, this make Mdm. L felt comfortable and stay away from any anxiety. They able to communicate effectively and thus help on the assessments. In medical field, they emphasized that it is especially

important to discuss the body in connection with implicit communication (Thornguist, 1990, p. 133).

Next, Mr. A begins with objective assessment. He observed the normal gait of how Mdm. L walks without wheel chair and any other supported equipment. In this way, Mr. A felt the nervousness and unwillingness occurs on Mdm. L. She able to able to stand in stable condition but when she tries to step forward, then she having unbalance condition. Every time she tries to bend her knee, there are limited flexion of her knee, and facing difficulties on standing up from a sit. By the way, Mr. A gives minor and major resistant to the knee according to the 0-5 grade. This can help Mr. A to give the wisest and appropriate treatment. After that, Mr. A did test for superior glide of patella of bilateral side to ensure that there is not stiffness occur between the patella and knee joint.

Mr. A explained clearly about the plan and approximate time to achieve the target of the treatment. Indirectly these will give confident and hope to Mdm. L on improving and maintaining the functional and performance of her daily life. Mdm. L needs to avoid the negative minded and able to accept the treatment with open minded. According to Bates, 2004, embracing this grief and learning to understand and accept that feelings of denial, angle and fear are normal is the healthiest way to a positive outcome.

Mr. A then gives Infra-red rays (IRR) to Mdm. L. She was positioned to a close pack room with the equipment of IRR. Both knees were exposed under electromagnetic waves. Throughout this session, heat obtained from the rays was used to relief the knee pain. There was contraindication which should

avoid on burned skin, skin irritation, and low blood pressure, area of defective blood flow and eyes damage. The treatment was done approximately 15-20 minutes as the most effective effect of IRR.

After the IRR treatment, Mdm. L then asked to exercise by using the equipment named motormed. Mdm. L did the cycling exercise for 20 minutes. She positions herself in a comfortable way in order to support and make herself in relax condition during treatment. This wills adherence the treatment indirectly. Patient's comfort during treatment session is supreme importance to their belief in the medical professionals, treatment and their capability to relax when they undergo treatment (Petty, 2004, p. 341).

Then, Mr. A gives comment about the good achievement of Mdm. L although she felt pain throughout the treatment. The treatment followed by the active exercise. For example, Mdm. L is given the exercise which sit on a chair, then use both knee to seize a physio-ball and do the movement of flexion and extension by repeated action. Mr. A should use proper and general language to communicate with Mdm. L in order to keep the good understanding throughout the treatment. (SUPPORT)??

Not only psychological and biological aspects were concerned, as well as sociological of the patient. Mdm. L lives with her husband in the second floor of the condominium which located 12km away from hospital. She got 3 children who currently work and stay far away from her house. These lead to lack of moral support which required by Mdm. L in order to deal with the disruptive effects of sickness. 3 of her children should give social support

instead of moral support. This can help to promote healthy behaviours and attitudes. (SUPPORT)

In conclusion, overall goals of pain relief and return to function may be similar between patients; the treatment plan must be tailored to meet each patient's unique set of circumstances.