CHAPTER 1

INTRODUCTION

Pain is the most important problem that leading the patient to the health service system for pain relieve. For pain cure, someone have complete improvement but someone have not. In this condition, as the duration of the pain is extended continuously for 3 months (IASP: International Association for Study of Pain) or for longer than 6 months (APA: American Psychiatric Association), chronic pain is developed. And there is often an alteration to the state of mind, which can emerge in variety of different forms, including depression (Dworkin & Gitlin, 1991; France, Krishnan, Trainor, & Pelton, Jan 1987). The impact of the above problem is the decrement of human potential of daily living, working, social living and the increase of health care payment (figure 1.1) (Currie & Wang, 2004; Munir et al., 2007; Von Korff, Dworkin, & Resche, 1990).

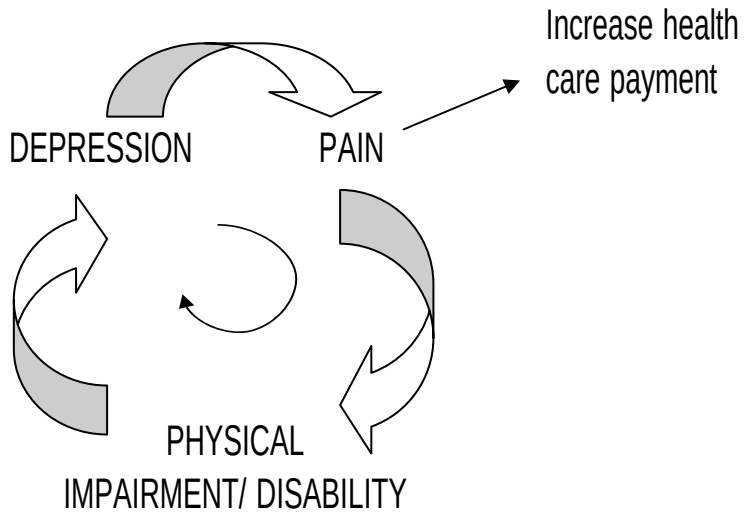

Figure 1.1
The relation between pain and depression

The chronic condition from communicable and non-communicable disease results in the high burden of health care. World Health Organization reported that 59% of death rate and 46% of burden of disease resulted from non-communicable disease and mental problem in the year of 2000. By the projection for 2020, these burdens of disease will increase up to 60%. Heart disease, vascular disease, cancer and depression are the important cause. In the developing country, 78% of the burden of disease results from the accident that causes the physical disability and mental disorder (WHO, 2004). Unipolar major depression will be the 2nd rank cause (5.7%) of disease burden.

In Thailand; Social security office, Ministry of Labour reported that 14% of the workers registering with the office had the injury from working posture and object moving. It caused the joint strain and muscle injury. Ninety nine percent of injured workers had the temporally disability. This resulted in the worker had to stop work and economic loss (Ministry of Labour, 2005). Bureau of strategies and policy, Ministry of Public Health reported that the 3rd rank cause of morbidity of out-patient health problem in Health Service Unit during 2001-2004 and 4th rank cause in 2005 was the disease of musculoskeletal system and connective tissue (Bureau of strategies and policy, 2004, 2007). The rate of illness per 1,000 populations since 2003-2005 was 176.16, 172.83 and 177.63 respectively. The tendency of rate of illness is higher. Such as the health problem of Ayutthaya province during 2003-2005, the disease of musculoskeletal system and connective tissue was the 4th rank problem and it increase continuously ever year (Bureau of Public Health, ; Bureau of strategies and policy, 2007) .

According to health expenditure, there was the report that 75% of population in USA had the experience of back pain. Of back pain patients, 5-10% developed chronic back pain. The expenditure for direct treatment and indirect health care was about four thousand baht per year (de Girolamo, 1991). For Thailand, Ayutthaya is the example that had the high health expenditure. It was found that the health expenditure per visit for out-patient of central hospital, general hospital, community hospital and primary care unit were 256, 276, 156 and 63 baht respectively. And the average number of visit in each service unit per person per year was 2.23, 3.06,

2.70 and 3.39 respectively. So if it was calculated for all population, the expenditure for health care will be so high.

The importance problem of health system is how to delay and prevent the chronic condition, especially chronic pain. The effect from chronic pain may cause the alteration of state of mind. In foreign countries, there are many researches about the relationship between chronic pain and mental disorder. It tries to explain that which one, pain or depression is coincidence or consequence. Either chronic pain is the cause and risk factor of depression or depression is the cause and risk factor of pain. Although it is the controversy about this but many researches concluded that chronic pain is the comorbidity of mental disorder (Chaturvedi, May 1987; France et al., Jan 1987; G. Magni, Caldieron, Rigatti-Luchini, & Merskey, 1990).

Although it has been widely recognized the relationship between chronic pain and depression. But little attention has been paid to the relationship between chronic musculoskeletal pain and depression despite there are the reports show that musculoskeletal system is the one of common source of pain (Gunilla, Marti, & Mats.Thorsluna., June 1997).

The aims of this study were the determination on the association of potential risk factors and depression in chronic musculoskeletal pain, the occurrence of depression in chronic musculoskeletal pain, and the effect of self-help technique as treatment of chronic musculoskeletal pain and depression. The community health center was chosen for this study based on 3 reasons. Firstly, the patients could be seen at the onset of pain and depression and there would be the ideally relationship with the patients that can give context to the complaint. Secondly, the technique or knowledge could be implemented directly to the target population. And lastly, early detection and early intervention to stop the underlying problem can be critical to preventing the chronic condition.

Definition

Musculoskeletal pain (MSP)

The symptom of pain occurs from the degenerative change and injury of body. There are the damage of the structure of musculoskeletal system such as periosteum, cartilage, neural tissue, muscle, tendon, joint capsule and ligament. The damage can occur in any area of body: neck, back, shoulder, elbow, wrist, hand, finger, hip, knee, ankle, foot and toe. This does not include the pain from systemic disease of musculoskeletal such as neoplasm, congenital anomalies and metabolic disease.

Chronic pain

Pain continues longer than 6 months. There is no the new injury or new disease during that time.

Chronic Musculoskeletal pain (CMSP)

The chronic musculoskeletal pain was the musculoskeletal pain screened by doctor as the degenerative or injury of body which continues longer than 6 months. And There is no the new injury or new disease during that time. The severity of the chronic musculoskeletal pain was measured by Thai graded chronic pain questionnaire (appendix A)

Depression

The following symptom have been presented during 2 week period: feel sad, empty, irritable mood, markedly diminished interest or pleasure in all, weight loss or weight gain, change in appetite, insomnia or hypersomnia, feeling worthlessness or excessive or inappropriate guilt, diminish ability to think or concentrate or indecisiveness, fatigue or loss of energy, psychomotor agitation or retardation and recurrent thoughts of death or suicidal ideation without specific plan.

The depression was measured by Heath-Related Self Report: HRSR, The diagnostic screening test for depression in Thai population (appendix E). Four cut off point of D score were used in this study. Firstly, D score < 20 (low risk depression) was used to select the subjects for the follow-up study of the occurrence of depression in

phase 2. Secondly, D score ≥ 20 (high risk depression) was used to select the subjects for the study of the effect of self-help technique as treatment of chronic musculoskeletal pain and depression in phase 3. The other 2 cut off point used to study the association of factors (demographic, socioeconomic, and family status), depression and chronic musculoskeletal pain were D score < 25 (risk depression) and D score ≥ 25 (probable depression).