

Using Transtheoretical Model to Improve the Chronic Patient's Engagement in Chinese Therapeutic Massage

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Abstract – *The prevalence of chronic diseases in Taiwan is growing, so as the death cause by this chronic disease. Chronic diseases cause serious acute and chronic complications. Despite the Chronic diseases is troublesome, good control on the patients' blood glucose can greatly help reducing complications and having good quality of life. Chinese Therapeutic Massage, healthy diet as well as medication are said to be good measures to assure the chronic patients' health and quality life. This paper argues that effective assistance in changing a patient's health improve behavior can do good help to improve the case's health. Based on the transtheoretical model, this paper suggests a five-step approach with relevant strategies and health instructors' intervention in varied stages. This paper concludes that a massage program should be customized in accordance with the individual stage of changes and the demographic factors as well.*

Keywords-*Chronic diseases, transtheoretical model, Chinese Therapeutic Massage.*

INTRODUCTION

The prevalence of chronic diseases has reached a level of 5.8% for adults aged between 20 and 79 years, around one million cases in Taiwan. Chronic disease has become common along with updated healthcare technology and service quality. The death rates that caused by chronic diseases are even growing year after year from 19.57 per 100,000 population in 1990 to the current 44.38. The fastest one among the top ten death causes.

A plethora of studies supported that proper health improve benefits to physical and psychological function (Inzucchi et al., 2014). Chronic disease, no matter how it was caused, will degenerate body function, of which in turn reduce the willingness and capability of performing quality

life style.

Chronic diseases patients were in general advised taking proper health improve other than medication and diet to control the deterioration and potential combination. In addition, some studies had also confirmed that Chinese Therapeutic Massage (CTM) is one of major contributor to the revitalize the sensitivity of insulin, along with better glucose control. All these together can help reduce the probability of mortality.

To help the citizens, particularly the seniors, to control this chronic disease, the public health agencies had done plenty of measures, including numerous health education programs, to literate citizens how chronic diseases could be avoided. Despite these tremendous efforts had provided useful knowledge and skills to the public, behavioral changes from the sedentary toward the healthy were few (Huang et al., 2006). In the past, health education programs were designed aiming to provide health knowledge specific for chronic disease. From what is the disease to how to identify and to prevent from suffer a disease. Improvement in the cognition helps people to know more about the disease, but not to enhance the patient's health status.

Gains from learning vary from one to another, so as behavioral performance. Training or instructions to a particular patient may not be customized, yet should include the patient's change stage into consideration while designing a health improve program. Ideally, if healthcare providers or health instructors can evaluate each case's behavior stage and accordingly apply different strategies of health education, the outcomes can be expected to be more efficient and effective.

The transtheoretical model (TTM) of behavior change was just the theory that representing this incremental and case-specific measure. TTM advocates that to change a case's behavior toward a favorable one, e.g. smoke cessation for smokers or regular CTM for chronic diseases patients, healthcare professionals shall provide information or assistance based on the patient's change stage. To change a habit is unquestionably a challenge to health care professionals. The TTM provides a useful framework for healthcare providers to develop feasible start.

Literature Review

The Chronic diseases and Its Effects

To remain vital, the chronic diseases patients need to rely on certain medications as well as other measures. Patients of this type are found in any age, whilst some were identified before 30 years old, and always cause more medical treatments, and worse life quality. Ignoring the symptoms and leaving no treatment will cause serious health problem or death.

A longitudinal study in Taiwan had shown that the prevalence of obesity for children at ages between 12 and 15-year-old were 12.4%, 14.8% and 15.6% for boys, and 10.1%, 11.1% and 12.9% for girls in the year of 1980, 1986, and 1996 respectively (Huang et al., 2006). And another 11.6% of boys and 10.2% of girls are not obesity but overweight. The problem is that studies generally agreed obese

children are more likely to remain so when they become adults, and are more likely to expose to the risk of coronary heart disease, high uric acid, hyperinsulinemia, high blood pressure, hyperlipidemia, high blood glucose, fatty liver, sleep apnea syndrome, and other metabolic diseases or so called the chronic diseases.

Lifestyles Matters

Medication to chronic disease can be very effective as long as the patient follows a healthy life style. For those individuals featured with obesity, metabolic syndrome, it is needed to provide regular treatment in a serious manner to prevent troublesome complications. Alternating unhealthy lifestyles into a healthy one, such as changes in dieting habits or changes in health improve habits, is generally good advice to these particular groups of people. Healthy dieting may include taking foods that prepared with low calorie, low fat, and high fiber in a regular manner. Policies to put this healthy diet into force may include such as taking food at home as often as possible, avoiding soft drinks, chewing thoroughly and swallowing slowly, and taking more fresh fruits and vegetables etc.

Regular CTM help maintain good operation of internal organs by consuming substantial calories, enhancing skeleton muscle endurance, and increasing physical strength and psychological confidence. Life to this people would positively be optimistic.

In 2001, the Bureau of Health Promotion reported an investigation in the "2001 National Health Interview" that child aged 7 to 12, spend 2 hours a day to watch TV, 30 minutes to use computers, 40 minutes to see comic books. These recreation activities are sharply increased to be more than 3 hours for TV watching, 50 minutes for computer, and only a fraction of leisure time was allocated for outdoor activities. Sedentary life style is harmful to one's health and so as the life quality.

The Transtheoretical Model

Transtheoretical model (TTM) is a kind of behavior change model, the transtheoretical model of behavior change is better than many of the traditional behavior intervention model, the mainly distinction between objects of study and different stages, and execute required facilities of intervention (Huang & Chi, 2003), to increase effects of behavior change. The transtheoretical model was developed by Prochaska and DiClemente in 1982 (Prochaska & DiClemente, 1982), it came with the stages of change and integrated the methods that used in behavior change theories, including the five stages of change, ten processes of change, as well as the constructs of decisional balance and the self-efficacy.

The five stages of change of the transtheoretical model, include: (1) precontemplation: also known as pre-motivation, no movement currently, and there is no intention of health improve in the next six months; (2) contemplation: also known as motivation, no movement currently, but intent to start to health improve in the next six months; (3) preparation: doing health improve but not regular currently,

is between the intention and practical action, will seek for the resources and start to health improve, but intermittence; (4) action: start to engage in regular health improve in the past six months, but less than six months; (5) maintenance: doing regular health improve more than six months, behavior has changed, and become a part of life (Prochaska&DiClemente,1982; Cho, 2005).

As suggested by behavior scientists (Marcus et al, 1992), the behavior change strategies that could be adopted to promote health behavior are listed as follow. These are (1) consciousness raising: to perceive benefits of health improve, and provide relevant information; (2) dramatic relief: the health danger warnings of not health improve, to vacillate emotion, let the individual think that taking the healthy behaviors to reduce danger warnings; (3) environmental re-evaluation: to create an environment favorable for health improve; (4) self-liberation: decide to health improve, the individual's choice and commitment in the behavior change, promise to health improve; (5) social liberation: bring the active of the body into work, use availability of resources in the society; (6) self re-evaluation: self re-evaluation of the unhealthy behaviors, values of health improve and clarification of attitudes, health improve image; (7) contingency management: to provide feedback to the movement, and reward themselves when revise their behavior; (8) helping relationships: refers to availability of resources in the community, when there are some questions, someone will trust and support him; (9) counter conditioning: to increase the routine activity, engaged in sports activities to replace not health improve and unhealthy behaviors; (10) stimulus control: to control the environment that will cause unhealthy, to create and increase the positive reminders or conducive cues in the living environment to against the sitting stimulation (Marcus et al, 1992).

These measures are also categorized as two distinctive but related categories, the first five as cognitive change, of which relates to personal knowledge or experiences; and the later five as the behavioral aspect, of which relates to individual's actions or environmental factors.

In general, the cognitive processes of change is more effective in advancing one's behavior change in the early stage of the course, whereas the behavioral processes of change gains better progress in the advanced course (Prochaska&Marcus, 1992). A plethora of studies on changing a patient's health improve behavior reported that once a patient get involved in the behavior changing course that guiding with proper strategies, the patient will be highly possible to do more regular health improve activities, and becomes a so-called "self-regulatory physical activity" (Gorely&Gordon,1995; Grodesky, 2006; Omar-Fauzee et al., 2009).

There are two more important factors in the model that may mediate the effectiveness of changing patients' CTM behavior. These are the decisional balance and the self-efficacy.

Decisional balance. Decisional balance refers to the individual's decision making in the consideration of pros and cons. Pros and cons are adversely appearing in the context of health improve decisions. Decisional balance is an outcome of pros and cons. Pros represents the positive aspect or factor of inclination toward doing health improve, and the cons represents the negative aspect that

blocks or resists doing health improve. When pros are increasing, cons are decreasing in the opposition. Then a junction, the decisional balance, appears accordingly to balance pros and cons, and the decision-maker perceives a comfortable mood in that. A health improvement action will be taken when pros is stronger (Prochaska&Marcus, 1992).

It is common to find the cons possess major share of the objects' decision pattern than the pros in the precontemplation stage, and after an effective intervention, a mechanism of decisional balance may activate more pros to result in actual behavior change in the preparation and beyond stages (Grodesky, 2006; Tseng, 2000).

Self-efficacy. Self-efficacy refers to a belief that makes one confident with accomplishing an act. Gorely and Gordon (1995) find that old people's self-efficacy will increase with the progress of movement stages (Gorely&Gordon,1995). Tseng (2000) uses path analysis to confirm the process of movement change, decisional balance, and self-efficacy and to change the relationship between stages, to increase the process of change is finding that can enhance old people's self-efficacy (Tseng, 2000).

APPLICATION

Applying TTM in Changing Health Improve Behavior

Circumscribed by the physiological disease factors, chronic diseases patients were prevented from engaging in major sports activities, especially for those patients in serious status. Improper health improve may sometimes result in more stubborn, self-centered, anxiety, anxiety, and cause a defective psychological mood.

The TTM model had been proofed providing a clear direction for effective intervention to transform one's behavior from one stage to another stage. Practicing the TTM model in health improve behavior, the consciousness raising method is more acceptable and would gain better results for the objects in the stage of between precontemplation and contemplation stages, the dramatic relief and self-re-evaluation methods for the contemplation and preparation stages, emotional self-liberation strategy for the preparation to action stages, and contingency management, environmental re-evaluation, helping relationships and stimulus control measures in the action and maintenance stages (Prochaska&Marcus, 1992; Grodesky, 2006; Omar-Fauzee et al., 2009).

Here are the strategies that could be duly applied in changing the chronic patients' CTM as part of prescription for disease control, as shown in table 1. Although the progress of behavior change could be slow in the first two phases, no achievement could be gained without these foundations. Health instructors certainly shall well manage the entire course of health improvement program, yet special attention must be given to the first two stages.

Table 1 Five Stages of Behavior Change

N	Stage	Measures to take	Intervention
I	Precontemplation	Consciousness raising	***
		Dramatic relief	**
		Environment reevaluation	*
II	Contemplation	Consciousness raising,	**
		Self-reevaluation	***
		Social liberation	**
		Self-liberation	**
		Reinforcement management	***
		Benefits of health improve	**
III	Preparation	Self-liberation,	***
		Reinforcement management,	**
		Counterconditioning,	**
		Helping relationship	***
		Reduce defects of health improve	**
IV	Action	Reinforcement management,	***
		Helping relationship	**
		Stimulus control.	*
V	Maintenance	Reinforcement Management	***
		Helping relationship,	**
		Counterconditioning	*

*** Heavy, ** Moderate, * Light

CONCLUSION

Accompany with medication, healthy diet, the proper CTM is suggested to be a part of measure for the chronic diseases. Plenty of evidence had shown that regular and appropriate health improve activities is highly helpful in controlling a chronic disease, and consequently, help improving the patient's quality of life. A health education strategy that can effectively promote building and maintaining a regular health improve behavior is thus becoming an urgent need for health care professionals. Based on the transtheoretical model, this research suggested a five-step approach with different approaches and levels of intervention. Worthy to be noted are the mediating effects of a patient's decisional balance and self-efficacy could have on the course of behavior change. Taking these two important mediators into the entire health education program may make the intervention more applicable and gain better outcomes. Moreover, a customized program for an individual patient by appreciating the variation of each patient's demographic factors and life experiences is one of major criteria of a successful program.

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