



Malay Traditional Treatment (MTT) and General Health Quality (GHQ) Among Lower Back Pain (LBP) Patients in Malaysia

Che Noriah Othman, Maryam Farooqui, Roz Azinur Che Lamin

.Faculty of Pharmacy,
Universiti Teknologi MARA, Pulau Pinang, 13200, Bertam, Pulau Pinang,
Malaysia.

chenoriah.othman@ppinang.uitm.edu.my

Abstract

Introduction: Malay Traditional Therapy (MTT) claimed to reduce pain, improve the physical power and overall quality of life. **Objective:** This study aims to examine the effectiveness of MTT and its potential role in improving the general health quality (GHQ) of LBP patients using Visual Analogue Scale (VAS) and Self Leg Raised (SLR). **Methodology:** Self-administered questionnaire, patients' record files, VAS and SLR score sheets were used as study tools. **Result:** patients showed improvement in VAS and SLR scores thus the quality of life. **Conclusion:** MTT provided is benefited by LBP patients and complement to patients' general health quality.

Keywords: Malay Traditional Therapy, SLR score, GHQ, VAS score.

eISSN 2514-7528 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., UK. This is an open-access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.
DOI: <https://doi.org/10.21834/jabs.v4i15.60>

1.0 Introduction

Traditional and complementary medicine (T & CM) in Malaysia is gaining popularity even though there are still lack of evidence on the safety and efficacy of these practices. The practices and the use of these traditional therapies have raised significant public health policy issues. However, currently only limited baseline data on such usage by the Malaysian community is available. Malay Traditional Treatment (MTT) is one of the therapies grouped under T&CM. MTT is one of the T&CM types used for various chronic diseases including lower back pain (LBP). Traditional therapies are preferable for some group of patients. These may be due to their comfort with their own values, belief and philosophies toward health and life. At the same time easy access to these therapies at an affordable cost attracts many of the patients.

This research conducted at one Malay Traditional Therapy Center situated in a small town in Northern part of Malaysia. This center visited by many patients with various types of chronic diseases including LBP. Qualified practitioners who registered under the Ministry of Health Malaysia (MOH) run the center.

Even though this center offers treatment for various types of chronic diseases, the main focus for this research was only LBP. Normally patients visit this center with LBP diagnosed from MRI from government or private hospital. Most of them know the diagnosis result from MRI interpretations by their doctors. However they refused to continue their treatment at these hospitals maybe due to their scariness of having to undergo surgery later on. Most of them brought MRI report when visiting the center. MRI report would help the practitioners to make better diagnosis on the disease state.

Objectives of the study:

The objectives of this study were

- To evaluate the prevalence of LBP patients seeking MTT.
- To assess the pain and physical power progress of the patients after the treatment by SLR and VAS scores.
- To measure the general health quality status of the patients after the treatment by GHQ 12.

2.0 Literature Review.

LBP is a common health problem worldwide. Individuals who suffer from LBP tend to face major physical, social, mental, and occupational disruptions in their life (<http://www.ninds.nih.gov/>). It will affect patients' Health Related Quality of Life (HRQoL). The lack of physical and social functions may lead to an increased in the incidence of stress and loss of jobs. In certain cases often manifested with insomnia, irritability, anxiety, depression and somatic complaints (Patrick DL & Erickson, P (1993); Claiborne et al, 2002). LBP may be due to muscle strain or ligament tear of the back. More serious cases are disc herniation due to accident or aging. Most cases may lead to spondylolisthesis which eventually progress to pain (Deyo et al, 2009). LBP tends to reduce overall quality of life of the patients. Treatment

strategies are often aims to optimize patient's quality of life in term of lesser pain, and better physical and psychological functioning (Kleeman, et al,2001).

Standard diagnosis for LBP includes X-rays, Computerized Tomography (CT) and Magnetic Resonance Imaging (MRI). These diagnostic tests performed if the pain persists for a long period of time (Chou et al, (2009). Surgery is often indicated as solutions for LBP patients. However it is normally associated with high risk (Chou et al, 2011) and not to improve outcomes. Benefits of spinal surgery are limited when dealing with degenerative discs (Mirza & Deyo 2007). It was also found that use of surgical implants increases the risk of nerve injury, blood loss, overall complications, operating times and repeat surgery while it only slightly improved solid bone fusion rates. There was no added improvement in pain levels or function (Deyo et al, 2009).

MTT involves a combination of few treatment methods such as full body alignment, elbow jabbing, point finger massage and cupping. Spiritual healing is also applied together with some quranic recitation in certain treatment modalities. MTT is widely offered to patients with LBP at different centers throughout the country. MTT is registered and recognized by Ministry of Health Malaysia. The practitioners are licensed to practice their treatment. Patients and the traditional practitioners at these centers claimed that this method of treatment manages to reduce back pain, improves physical condition and reconstructs body system back to normal thus improve their overall quality of life for those suffering with LBP. However there is no scientific evidence to proof their claims. This study was conducted to evaluate the effectiveness of MTT in contributing to the General Health Quality (GHQ) of the LBP patients.

The quality of our lives has many dimensions including our families, our jobs, our financial situation, and as we age, our health (Robert W. Marans 2012). In this study the health quality was the main focus of interest. The quality of life was measured by the treatment progress achieved in pain (VAS) and power (SLR) scores. The GHQ 12 adopted from Goldberg was used for the measurement of the general health quality of the patients.

Study conducted involved a cohort of LBP patients seeking treatment at Malay Traditional Treatment Center in Northern part of Malaysia from January to December 2011. The selected patients received treatment scheduled for one year. Treatment given includes spine alignment, jabbing and point massage. The treatment effectiveness measured before, during and after the treatment. Patients reported with other types of chronic diseases noted to see the disease prevalence.

The Visual Analogue Scale (VAS) is the standard tool for rating of pain, either patients' own rating or rated by the health care worker. The VAS methodology can also be used for rating of other soft variables such as skill, confidence, quality of team work etc. The VAS frame measures exactly 10 cm. The distance from zero to the marking in cm is result indicators to be processed as continuous variables for statistical analysis (Ulf-Dietrich & Frederik (2008).

The Straight Leg Raise (SLR) is a test performed on the patients during the physical examination. It is a method used to determine whether a patient with LBP has an underlying herniated disk. Herniated disc mostly located at L5 (fifth lumbar spinal nerve), S1 (the first sacral spinal nerve) or S2 (the second sacral spinal nerve).With the patient lying down on his/her back on an examination table/or exam floor, the examiner lifts the patient's leg while

the knee is straight.(Felicity et al, 2011)

Magnetic Resonance Imaging (MRI) is a non-invasive medical imaging technique used in radiology to visualize internal structure of the body.

3.0 Methodology

All patients self-reported with Lower back Pain and with MRI evidences selected for this study. Patients' consent form and patients' information record were reviewed. The diagnosis confirmed again by the traditional practitioners at the MTT centre. For the first visit patients subjected to Pre Visual Analogue Score (Pre VAS) and Pre Self Leg Raised Score (Pre SLR). Score of 0 indicated no pain and progress until the most severe pain is 10. Patients continued to fill up the score whenever the pain felt through out the study period. SLR conducted by the researcher. The scores recorded as Pre SLR. Patients lied on the floor with both legs raised up to the maximum able. The degree of leg raised measured and recorded. Likert 1 to 5 used for SLR score. The score of 1 indicates the least power and the score 10 the best power. The same measurements repeated during and after the treatment.

Patient underwent three regimes of treatments. The first regime involved three days of treatment modalities. This involved a one hour session. With the patients lying on the floor, the whole body was aligned using a special technique known as jabbing applied at certain part of the body using elbow. Point massage using fingers were also applied at certain part of the body. This was repeated for the following 3 days. The second regime started two weeks after the first regime. The same method was applied but only for one day. The third regime continued after 1 month of the second regime. All regimes involve a complete spine alignment therapy, jabbing technique and point massage. Quranic recitation was also applied in all treatments regime. Patients who did not show any progress or slow progress continued the treatment for additional regime. Those without any progress after the fourth regime of treatment withdraw from the center on their own choice.

After the treatment completed the GHQ 12 sheets given to all patients to access their general health quality state. Patients assisted on questions that they did not understand. Treatment modalities scheduled for these patients were full spine alignments, elbow jabbing and point massages. Result obtained analyzed and tabulated as mean and percentages.

4.0 Results and Discussion

There were 195 patients with the complaint of LBP were recruited in this study. Out of this number, 55.9% (n=109) were females and 44.1% (n=86) were males (Table 1.5.1).

Besides having lower back pain most of the patients were suffering from other co morbid chronic diseases such as osteoporosis, cardiovascular, diabetes and others. The disease co morbidity is shown in table 1.5.1. The highest percentages were patients with two other diseases, followed by with one disease. Very small percentage of patients reported with no disease. Most of the LBP patients are elderly patients whom prone to get various chronic diseases due to their age.

Table 1.5.1

Variables	Patients
Gender	
Females	55.9% (n=109)
Males	44.1% (n=86)
Age	
< 18 years old	2.6%
18 to < 20 years old	5.6 %
20 to < 30 years old	9.7%
30 to < 40 years old	23.1%
40 to < 50 years old	28.2%
50 to < 60 years old	19%
60 to < 70 years old	9.7%
70 to < 80 years old.	2.1 %
Co morbid diseases	
Patients with no other disease	2.56% (n=5)
Patients with one other disease	21.54% (n=42)
Patients with two other diseases	52.31% (n=102)
Patients with three other diseases	9.23% (n=18)
Patients with four other diseases	10.77% (n=21)
Patients with more than four other diseases	3.59 % (n=7)

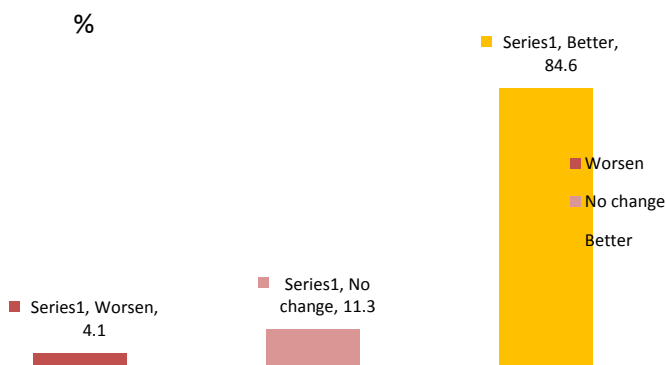


Figure 1.5.1: Total Treatment progress

After a series of treatment (Figure 1.5.1) most of the patients reported to have positive progress in term of pain score and leg power relatively. Since we were only measuring the perception before and after the treatment, no exact values were recorded. However all the scores recorded was positive.

According to gender (Figure 1.5.2), females showed better progress compared to males. This is may be due to the treatment compliance which was better among females compared to men. This is consistent with the study conducted where they found out that treatment

compliance is closely related to patients' behavior and how positive they were toward treatment (Alexandre et al, 2002).

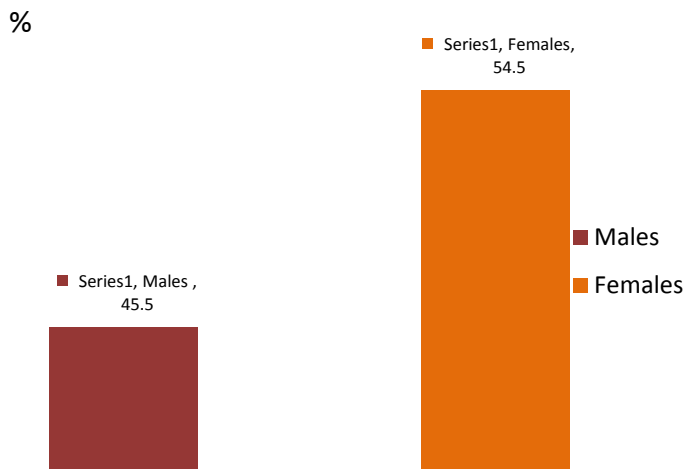
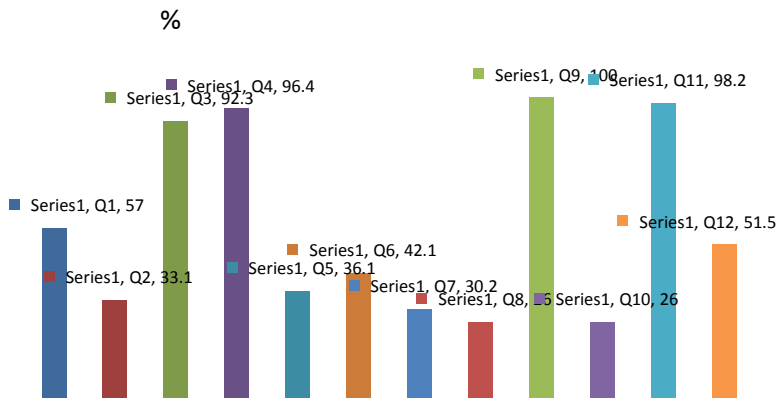
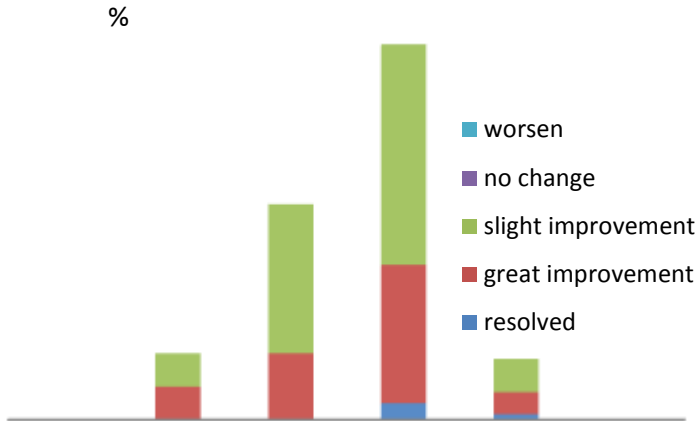


Figure 1.5.2: Treatment progress vs Gender

In term of number of visits, most of the patients who showed a great progress were those who constantly visited the center according to the schedules. Figure 1.5.3 shows the number of visits and treatment progress. Those who visited the center 4th time showed a great progress. However there were cases where the conditions worsen after repeated visits. Maybe this was due to other co morbid diseases which limit them to do vigorous exercises on their own and their lack of capability to comply to the treatment instruction physically and psychologically.

We accessed the effectiveness of the treatment on patients general health quality of life (Figure 1.5.4). From the results obtained it was shown that most of the patients claimed that they have gained back their health quality. They could sleep better (57.4%), feeling less strain (33.1%), and be able to concentrate on works they were doing (92.3%). They also felt that they were playing a useful part in things (96.4%) and be able to face up with problems (36.1%). They were more positive about decision making (42.1%) and no more felt that they could not overcome difficulties (30.2%), beside feeling reasonably happy with all things considered (26.0%). They were more able to enjoy day activities (100%), not being unhappy or depress anymore (26%) and were not feeling worthless (98.2 %) or less confident person (51.5%).



Q1=Lost much sleep over worries.
 Q2=Felt constantly Under strain
 Q3=been able to concentrate on whatever things you are doing.
 Q4=Felt that you are playing a useful part in things.
 Q5=Been able to face up to your problems.
 Q6= Feel capable of making decision about things.
 Q7= Felt you couldn't overcome your difficulties.
 Q8=Been feeling reasonably happy. All things considered.
 Q9= Been able to enjoy your normal day to day activities.
 Q10= been feeling unhappy or depressed.
 Q11=Been losing confidence in yourself.
 Q12=Been thinking of yourself as a worthless person.

Figure 1.5.4: general Health Quality
 As a summary there were differences in females and males compliances towards

treatment. This is consistent with the report stated that patients with stronger internal beliefs gained more from the treatment. Females may have stronger believes in effectiveness of these therapies compared to males. Another report stated that patients with psychological problems were poorly accomplished with exercises (Papageorgiou et al, 1995). Patients also have gained their life quality and were physically and psychologically improved. However this assessment was only conducted and valid for the evaluation of their general health status for the pass two weeks of the time of study.

Most of the patients who visited this center are those of elderly. This is maybe due to their fear of hospital, their bad experiences with the hospital procedures, or their belief of traditional treatment especially with the quranic recitation approaches used may enhance their confident level on the treatment. After all this treatment will not give any side effect and they can withdraw from the treatment anytime they like. Most of the treatment for LBP ends up with surgical procedures. This is another strong reason why MTT is their choice of treatment. From this study It is proven that MTT manages to improve the physical power, reduce pain and thus will improve their overall quality of life. The use of quranic versus strengthen their psychological power especially those who have strong belief in religion.

5.0 Conclusion

MTT can be one of the modalities for the treatment of LBP. Even though the mechanism of action is not well documented the results of the treatment have benefited most of the patients. The patients were more comfortable with the traditional treatment procedures which could be due to lesser side effect and free from any surgical interventions. The patients' quality of life which has improved, proven that MTT is effective to treat LBP patients. Beside the low side effects and cost, easy access drive peoples to seek for these kinds of treatments.

Acknowledgement

Research Management Institute, Universiti Teknologi MARA, Shah Alam for funding this research through UiTM Excellent Fund.

References

- Alexandre, N.M., Nordin, M., Hiebert, R., & Campello M. (2002). Predictors of compliance with short-term treatment among patients with back pain. *Rev Panam Salud Publica*. 2002 Aug; 12(2):86-94.
- Chou, R., Fu, R., Carrino, JA., & Deyo, RA (2009 Feb 7). "Imaging strategies for low-back pain: systematic review and meta-analysis.". *Lancet* 373 (9662): 463–72. doi:10.1016/S0140-6736(09)60172-0. PMID 19200918.
- Chou, R., Qaseem, A., Owens, DK., & Shekelle, P. Clinical Guidelines Committee of the American College of Physicians (2011). "Diagnostic imaging for low back pain: advice for high-value health care from the American College of Physicians". *Annals of internal medicine* 154 (3): 181–9. doi:10.1059/0003-4819-154-3-201102010-00008. PMID 21282698.

Claiborne, N., Vandenburgh, H., Krause, TM., & Leung P (2002): Measuring quality of life changes in individuals with chronic low back conditions: a back education programme evaluation. *Evaluation and Programme Planning*. **25**:61-70. Publisher Full Text .

Deyo, RA., Mirza, SK., Turner, JA., and Martin, BI (2009). "Overtreating Chronic Back Pain: Time to Back Off?". *Journal of the American Board of Family Medicine : JABFM* 22 (1): 62–8. doi:10.3122/jabfm.2009.01.080102. [PMC 2729142](#). PMID 19124635.

Felicity, L., Bishop , Shipu Zaman & George T. Lewith (2011). Acupuncture for low back pain: A survey of clinical practice in the UK. *Complementary Therapies in Medicine*. Elsevier.

Goldberg, DP., & Hillier, VF (1979). A scaled version of the General Health Questionnaire. *Psychol Med*. Feb;9(1):139-45.

Kleeman, F., Ahn, UJ., & Kleeman, AT (2001). Laparoscopic anterior lumbar interbody fusion with rhbmp-2. A prospective study of clinical and radiographic outcomes. *Spine* 26, 2751–2756.

Kristin,a H., Alia, J., Guy, M., Heikki, H, & Jarmo, L. (1991). Health locus of control beliefs and psychological distress as predictors for treatment outcome in low-back pain patients: results of a 3-month follow-up of a controlled intervention study. *Pain*. Volume 46, Issue 1, July 1991, Pages 35–41

Lower Back Pain Fact Sheet. nih.gov" http://www.ninds.nih.gov/disorders/backpain/detail_backpain.htm. Retrieved 08-06-16.

Mirza, SK., & Deyo, RA (2007). "Systematic review of randomized trials comparing lumbar fusion surgery to nonoperative care for treatment of chronic back pain". *Spine* 32 (7): 816–23. doi:10.1097/01.brs.0000259225.37454.38. PMID 17414918.

Papageorgiou, AC., Croft, PR., Ferry, S., Jayson, MI., & Silman, AJ (1995). Estimating the prevalence of low back pain in the general population. Evidence from the South Manchester Back Pain Survey. *Spine* [1995, 20(17):1889-1894]

References Patrick DL & Erickson, P (1993): Health status and health policy: quality of Life in health care evaluation and resource allocation. *New York: Oxford University Press*..

Robert W. Marans (2012). Quality of Urban Life Studies: An Overview and Implications for Environment-Behaviour Research. *Procedia - Social and Behavioral Sciences* 35 (2012) 9 – 22.

Ulf-Dietrich Reips & Frederik Funke (2008). Interval-level measurement with visual analogue scales in Internet-based research: VAS Generator. *Behavior Research Methods*. Vol 40 Issue 3 pp669-704.