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## An Overview of Traditional Malay Medicine in the Malaysian Healthcare System

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### ABSTRACT

This study shall provide an overview of Traditional Malay Medicine in the Malaysian Healthcare System. A literature review was done from journal databases, identify miscellaneous books, publications and organisation websites that provide services related to traditional Malay medicine. The search generated 32 results from over 2000 articles screened using the inclusion criteria. Articles reviewed can be divided into a few characteristics including case study of usage of TMM herbs on clinical diseases, role of traditional Malay healers in society, society perception and acceptance towards Malay medicine and regulation requirements for complementary medicine. The results have been summarised and categorised according to the parameters of two models, the healthcare system framework and doctor patient consultation framework. Formal training of practitioners and future recommendations of the Traditional Malay Medicine industry is also discussed.

**Key words:** Malay medicine, traditional medicine, healthcare system

### INTRODUCTION

Traditional and Complementary Medicine (T and CM) has been gaining acknowledgment and acceptance all over the world. Traditional and complementary medicine is an invaluable treasure and has been developed over the course of thousands of years in the quest for human well-being. It is a form of health-related practice designed to prevent, treat or manage illness and preserve the mental and physical well-being of individuals. This practice includes traditional Malay medicine, traditional Chinese medicine, traditional Indian medicine, homeopathy and complementary therapies and excludes medical or dental practices by registered medical or dental practitioner (Health, 2007).

#### Traditional and complementary medicine in Malaysia:

There are nine integrated public hospitals which practice T and CM in Malaysia. They are Kepala Batas Hospital in Pulau Pinang, Putrajaya Hospital in Putrajaya, Sultan Ismail Hospital in Johor Bharu, Duchess of Kent in Sabah, Sultanah Nur Zahirah Hospital in Kuala Terengganu, Sarawak General Hospital, Port Dickson Hospital in Negeri Sembilan, Sultanah Bahiyah Hospital in Alor Setar Kedah and Cameron Highlands Hospital (Abuduli and Aljunid, 2011). These hospitals practice

traditional Malay massage, acupuncture, herbal oncology and postnatal massage (Health, 2007). Traditional Malay massage and acupuncture are used for chronic pain and stroke; herbal oncology is used for complement treatment with allopathy therapy whereas postnatal massage is used to relieve muscle cramps and fatigue after labour (Abuduli and Aljunid, 2011).

Even though Traditional Malay Medicine is practiced in nine hospitals, majority of the TMM practice is limited to Traditional Malay massage. However, the Traditional and Complementary Medicine (T and CM) Unit of Putrajaya Hospital and Johor Baru's Sultan Ismail Hospital midwifery care practices hot compress or bertungku and herbal body wrap or bengkung and Malay postnatal massage (Barakbah, 2007). Traditional Malay massage is part of the processes involved in Malay Confinement. Malay Confinement is essentially an all-encompassing process that aims to preserve the health and femininity of Malay women. According to Datin Sharifah Anisah, founder of Nona Roguy (now NR) and author of "Ensiklopedia Perbidanan Melayu" (Encyclopedia of Malay Midwifery) (Barakbah, 2007), confinement practices stem from the belief that the womb is a woman's life force and affects her overall health (Barakbah, 2007). There are also many Malay Confinement centres for mothers to rehabilitate and rest after childbirth, including confinement lady services

providing Malay Confinement services from home. Today, many urban new mothers in the Malay community find themselves unable to fully observe the practices of the traditional Confinement, mainly because they lack the family and community support that made Malay Confinement possible. However, some practices are still observed by many Malay women. Some have been adapted to suit more urban lifestyles.

Traditional Malay healers are still accepted as one of the main providers of traditional Malay medicine even though majority of Malay community are not interested to learn the knowledge from these traditional healers (Tohar *et al.*, 2011). Another blooming industry in Malaysia is Malay postnatal wellness centres, where new born and their mothers can rehabilitate in these centres. The mother shall be treated with Malay postnatal treatment such as herbal bath, Malay massage, warm compress, tummy wrap. Newborn babies shall be treated with baby bath, warm compress and baby massage. Malay postnatal treatment is also available in two public hospitals in Malaysia as a pilot project implementation. However, its treatment is limited to mothers of newborn babies only. There are also services that provide home nursing for postnatal care.

This study shall provide an overview of the Traditional Malay Medicine in Malaysian Healthcare System and an analysis of its comparison with modern medicine.

**Healthcare system framework:** According to Dogramatzis, a healthcare system consists of primary providers, secondary providers, healthcare professionals, regulatory bodies and patients (Dogramatzis, 2001a). Other factors that also influence a healthcare system of a country is the media and public (Dogramatzis, 2001a). All of these elements are considered stakeholders in a healthcare system as they not only are unidirectionally related with the patient but also interacts with each other through collaboration, competition, conflict and collision (Dogramatzis, 2001a). Government and private healthcare compete for the same customers, the media influences the coverage of insurance companies and regulatory bodies impose restrictions on medical services and prescriptions. This model shall be used to identify the similarities with the healthcare system for Traditional Malay Medicine.

**Doctor patient consultation framework in traditional Malay medicine:** The SOAP model for clinical and community health assessment is a model that provides a structural method used by healthcare providers to document a patients chart (NM-IBIS., 2014). NM-IBIS (2014) during doctor patient consultation. A summary of this S.O.A.P. model is referred in Table 1. This model shall be used as a standard model to compare elements of doctor patient consultation between Traditional Malay Medicine and modern medicine system. The S.O.A.P. model consists of four parts that are subjective, objective, assessment and plan (NM-IBIS., 2014). Subjective is the evaluation of patient condition or describes the reasons they visited the physician. This includes onset, chronology of symptoms, severity, factors aggravating or

Table 1: The S.O.A.P model for clinical health assessment

Clinical assessment	
Subjective	Presenting complaint, symptoms, pain, medical interview
Objective	Physical examination, Heart rate, BP, Blood test, X-ray
Assessment	What is the diagnosis?
Plan	What treatment will be most effective?

Source (NM-IBIS., 2014)

Table 2: Inclusion criteria

Inclusion criteria
English or Malay language publications
Research contribute to the findings of at least one of the elements in the healthcare system framework or doctor patient consultation model
Organisation websites supporting implementation of traditional Malay medicine treatment services
Journals dated from 1990

reducing and previous treatments. Objective is the documentation of patient condition through physical examinations, vital signs, results from laboratories which usually involves results of measurable data. Assessment is the analyses of subjective and objective information of the physicians diagnosis. Plan is the treatment of the patient which may include referrals, procedures, prescriptions.

This review shall examine the following research questions:

- What are the healthcare system framework elements in a Traditional Malay Medicine system?
- What is the doctor consultation framework in Traditional Malay Medicine and how different is it compared to modern medicine system?

## METHODOLOGY

**Search strategy:** The literature was sourced from four databases: Ebsco Host, IEEE Explore, Proquest and Scopus. The search term used was “Traditional Malay medicine”, “Malay medicine”, “Health informatics in Malaysia”, “Health information systems” and “Medical informatics”. A search was also conducted in google to identify miscellaneous books, publications and organisation websites that provide services related to traditional Malay medicine. The search term used was “Malay medicine” and “Perubatan melayu” which means Malay medicine in Malay language.

**Article selection:** Titles, abstracts and full articles were screened by applying the inclusion criteria as per Table 2. In addition, references of the included articles were checked for other articles eligible for this review. Journals or book publications of Malay and English language was included in this review due to the nature of this field which is closely related to Malay culture and its people, thus some of the reliable resources obtained were in Malay language as this language is much closer and easier to understand by most practitioners. Books published included in the review was obtained through online bookstores. Other criteria for literature selection include literature from the 1990s as many literature that discussed the fundamentals of Traditional Malay Medicine are still relevant and practiced until today.

**RESULTS AND DISCUSSION**

The search generated 39 results from over 2000 articles screened using the inclusion criteria. Articles reviewed can be divided into a few characteristics including case study of usage of TMM herbs on clinical diseases, role of traditional Malay healers in society, society perception and acceptance towards Malay medicine and regulation requirements for complementary medicine. The results have been summarised and categorised according to the parameters of three models-the healthcare system framework, S.O.A.P. model and healthcare informatics in Malaysia.

**Traditional Malay medicine healthcare system:** The healthcare system framework below categorises the elements that are required to establish a national healthcare system. The comparison between TMM and modern medicine via the healthcare system framework can be summarised in Table 3.

Results show that the healthcare professionals in TMM consists of traditional Malay healers and practitioners. Traditional Malay Healers are often referred to as bomoh (Mohd Riji, 2005), dukun (Nourse, 2013) or pawing (Sevea, 2013) and is believed to have mystical powers or knowledge when providing healing services (Farrer, 2008; Nourse, 2013). However, the training they received are not certified by any professional bodies and claim to be either mainly genetically inherited from previous descendants (Anuar *et al.*, 2012) or received informal education from previous traditional Malay healers or practitioners (Mohd Riji, 2005). Modern medicine practitioners undergo proper training and is required to be licensed before practising.

The regulatory bodies involved in providing TMM healthcare services are the Ministry of Health which oversees the provision of TMM services in integrated hospitals in Malaysia and enforcements related to the development of TMM pharmaceutical products (Jayaraj, 2010). Other divisions in the Ministry of Health, Malaysia that assists this cause is the National Pharmaceutical Control Bureau (NPCB) and Drug Control Authority (DCA). However, the scope of

regulation involves drugs processed for sale over the counter and in pharmacies and services provided in hospitals and certified traditional practitioners. Traditional Malay treatment provided in traditional Malay healers homes or wellness centres are not subject regulation. In contrast, modern medicine is highly regulated from drug processing and dispensing to doctor patient consultation.

Primary providers of TMM are the homes or centres of the Traditional Malay healers and hospitals. However, the scope of TMM services in government integrated hospitals are limited to Malay Massage and Malay Postnatal Treatment (Hamid *et al.*, 2011). The scope of services by traditional Malay healers in their homes or individual centres however are more holistic, involving mystical, non-mystical and clinically diagnosed illness (Alshagga *et al.*, 2011; Anuar *et al.*, 2012; Shahrudin *et al.*, 2011; Mohd Riji, 2005).

The secondary providers of TMM are the pharmaceutical companies and insurance companies. Pharmaceutical companies are regulated by the National Pharmaceutical Control Bureau (Jayaraj, 2010). Insurance companies in Malaysia provide coverage for traditional medicine including traditional malay medicine although the amount covered for traditional medicine treatment is very limited. It is also worth to note that Insurance coverage only cover services by certified traditional medical practitioners and centres only.

**Traditional Malay medicine doctor patient consultation framework:** However, this study shall utilise the S.O.A.P. model to provide a systematic comparison between TMM and modern medicine based on the SOAP model parameters-subjective, objective, assessment and plan. The S.O.A.P. model is originally used as a standard format to guide health practitioners to document their findings during doctor patient consultation. The results of this comparison can be found in Table 4.

The subjective stage is the phase where patients report their symptoms and disorders to the physician. Both modern medicine and TMM physician listens to their patients complains before any examination is done. However, the

Table 3: Comparison between TMM and modern medicine using the healthcare system framework

Healthcare system	Modern medicine (Dogramatzis, 2001b)	Traditional Malay medicine	Key issue
Healthcare professional	Nurse, pharmacists, psychologists, social service workers	Traditional Malay healers or practitioners (Ariff and Beng, 2006; Farrer, 2008; Jamal <i>et al.</i> , 2011; Laderman, 1997; Low <i>et al.</i> , 2002; Mohd Riji, 2005; Nourse, 2013; Razali and Yassin, 2008; Sevea, 2013)	Traditional malay healers are an integral part of TMM. However, their training and accreditation has yet to be established (Mohd Riji, 2005)
Regulatory bodies	Government policies and political parties	Ministry of Health (Anuar <i>et al.</i> , 2010) National Pharmaceutical Control Bureau (NPCB) (Jayaraj, 2010), Drug Control Authority (DCA) (Jayaraj, 2010)	Both modern medicine and TMM are regulated by government policies. However, the scope of TMM regulation is limited
Primary provider	Hospital, clinics, nursing home and physician	Home or centre of Traditional Malay Healers (bomoh) (Mohd Riji, 2005), (Low <i>et al.</i> , 2002) Hospitals (Anuar <i>et al.</i> , 2010, 2012; Fadzil <i>et al.</i> , 2012) wellness centres	Modern medicine services are provided in established medical centres under government regulation, however TMM may be provided in homes and wellness centres without proper regulation
Secondary providers	Reimbursement fund, insurance companies, employers, pharmaceuticals companies, medical devices companies	Insurance companies Pharmaceutical companies (Jayaraj, 2010)	TMM services coverage insurance companies are available but limited

Table 4: Comparison between TMM and modern medicine for doctor patient consultation using the SOAP model

SOAP	Modern medicine (Murphy, 1991; NM-IBIS., 2014)	TMM	Key issue
Subjective	Patient complain on their symptoms and conditions	Symptoms include pain and weak inner strength (Mohd Riji, 2005) Clinically diagnosed disease i.e., asthma, breast cancer and Epilepsy (Alshagga <i>et al.</i> , 2011; Anuar <i>et al.</i> , 2012)	Complaints for TMM includes clinically diagnosed diseases. Patients with clinically diagnosed disease usually seek for alternative medicine such as TMM when not satisfied with modern medicine treatment (Bishop, 1998)
Objective	Findings and observation from the physician-Physical examination, Heart rate, BP, Blood test, X-ray	Physical examination-temperature, inner heat, pulse, biological symptoms and behaviour (Mohd Riji, 2005)	Findings of TMM are generally based on physical examination without the use of medical technology and the results are not always measurable
Assessment	Physician assessment on complaints observation and diagnosis	Mystical illness, i.e., human evil, spirit (Laderman, 1997), non-mystical illness, non stable elements of soil, heat, water and air in the body, outer illness. Inner illness, seasonal, delusional, spiritual, mental, revenge and jin (Mohd Riji, 2005)	TMM assessment is more holistic and include mystical and spiritual illness
Plan	Physician plan for current and future treatments -What treatment will be most effective?	Physical, herbal or spiritual, traditional Malay massage (Ariff and Beng, 2006; Dhillon <i>et al.</i> , 2007; Low <i>et al.</i> , 2002; Mohd Riji, 2005) Incantation or “rukayah” (Low <i>et al.</i> , 2002), Herbal or natural medicine (Abd Jalil <i>et al.</i> , 2012; Ariff and Beng, 2006; Barakhbah <i>et al.</i> , 2007; Shaharudin <i>et al.</i> , 2011; Jamal <i>et al.</i> , 2011; Keat and Boon, 2007) Prevention i.e., avoid exposure to cold and wind during postpartum, nourishment to maintain body in heated state (Ariff and Beng, 2006) and talisman (Farrer, 2008)	TMM treatment include spiritual practices that are not clinically proven

nature of complaints by patients of TMM healers may include spiritually related symptoms i.e., weak inner strength to clinically related diseases (Alshagga *et al.*, 2011; Anuar *et al.*, 2012; Shaharudin *et al.*, 2011). Some patients with clinically related diseases seek treatment from TMM practitioners because they may be dissatisfied with modern medicine treatment (Bishop, 1998). However, Malay medicine treatment is perceived to be most effective for non-serious conditions and conditions not caused by virus (Bishop, 1998).

During the objective stage, examination is done by the physician to provide indicators for assessment. Examination done by modern medicine practitioners yields measurable results and utilise the use of medical devices. However, examination done by TMM practitioners do not always produce measurable results and does not utilise the use of medical technology.

During the assessment stage, Modern medicine derive their observation based on clinical and measurable findings (Broome and Broome, 2007). The assessment of illnesses via Traditional Malay Medicine uses a holistic approach, involving physical, spiritual, mental, emotional and behavioural factors. Often the diagnosis of a particular disease is made based on an examination of physical conditions and a determination of spiritual influences such as “bad spirits” and ghosts (Jamal, 2006). The physical examination results are not always measurable.

When planning for treatment, modern medicine physicians may recommend clinical prescriptions, further medical tests, follow up appointments etc. TMM practitioners would recommend unprocessed herbal medications, proper food consumption and prescribe spiritual treatment that are not clinically proven such as talisman and incantation. In addition,

traditional malay massage is also prescribed by TMM practitioners. This massage has a proper established method and its knowledge is usually inherited (Mohd Riji, 2005) and not acquired by formal education.

**Training of malay medicine practitioners:** It is still unclear the formal training required by traditional Malay practitioners even though its treatment has been implemented in the public healthcare. According to Ministry of Health Malaysia Traditional and Complementary Medicine Handbook (Hamid *et al.*, 2011), list of certified institutions that provide training for traditional medicine are related to Traditional Chinese medicine, homeopathy, chiropractic and natural medicine. No training providers for TMM is listed in the official handbook (Hamid *et al.*, 2011). Haliza also adds that the education received by these practitioners are informal and not certified. In contrast, modern medicine is highly regulated and all its practitioners require formal training before practicing (Mohd Riji, 2005).

## CONCLUSION

Efforts to integrate Traditional Malay Medicine in the public healthcare system has to be commended though it is still in the early stage. More efforts can be done to fully regulate this alternative medicine especially with regards to training of its practitioners, licensed providers and standard procedures of conduct before it can be at par with modern medicine. There also exist a huge technology gap in the TMM domain. Other opportunities for further research include to provide technology enablers that can assist in standardizing, monitoring and enforcement in this field.

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