Preferential Utilization of Healthcare Systems by a Malaysian Rural Community for the Treatment of Musculoskeletal Injuries

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Summary
The preferential utilization of healthcare systems by a rural Malaysian community in Perlis for the treatment of musculoskeletal injuries was studied using focus group discussions. The objectives of the study were to explore the pattern of utilization of healthcare systems, the factors influencing the choice of a healthcare provider, rural residents' expectations of their healthcare provider and their views on integrating traditional and modern scientific healthcare systems. Most participants considered traditional and modern scientific healthcare systems as complementing each other. For musculoskeletal injuries, the traditional system was considered the primary choice of healthcare regardless of the participants' socioeconomic and educational levels. Key factors for preferring traditional care were the nature of treatment, the perceived shorter duration for recovery and inclusion of spiritual elements in the therapy. Barriers to seeking hospital treatment were the perceived longer duration for recovery, fear of surgery, use of metallic implants and casts that were culturally unacceptable and objections from elders. For perceived life-threatening situations, in children, pregnancy, and where injuries to internal organs were suspected, hospital treatment was preferred as the primary choice. Discussions on integrating traditional and modern scientific systems were inconclusive.

Key Words: Rural, Traditional healthcare, Musculoskeletal injuries

Introduction
The influence of social, cultural, spiritual and traditional belief systems on the preferential utilization of healthcare systems among Malaysian rural communities has been documented in the local medical literature. Traditional healthcare services have existed in Malaysia for centuries and comprise of a variety of systems, namely Malay, Chinese, Indian, Thai and Aboriginal systems. Despite the wide availability of modern scientific healthcare services which are accessible to Malaysia's rural and remote populations, traditional healthcare services are still utilized by Malaysian communities for a variety of health and psychosocial problems. The popularity of the services of the traditional healer particularly for the treatment of musculoskeletal problems is widely acknowledged by rural communities and conforms to the author's (a rural family physician) personal observation. However, the factors that influence the choice of modern and traditional healthcare services for these injuries particularly in rural communities, have not been documented in the local medical literature. This qualitative study conducted on a north Malaysian rural population attempts:
a) to explore the type of healthcare system rural communities in Perlis primarily utilize or prefer for the treatment of musculoskeletal injuries and the factors which influence the choice of a healthcare provider.
b) to explore the expectations of rural communities of their healthcare providers when seeking treatment for musculoskeletal injuries and,
c) to seek the views of rural community residents on the
integration of traditional and modern scientific healthcare systems for the treatment of musculoskeletal injuries. The results of this study may provide Malaysian doctors a better understanding of the health beliefs and worldview of rural patients presenting with musculoskeletal injuries.

**Materials and Methods**

The Study Design: Focus group discussions with rural communities residing in the state of Perlis in Malaysia. 'Musculoskeletal Injury' in the context of this study refers to injuries to bones, joints, ligaments, tendons and muscles. 'Rural community' refers to populations residing in areas outside the administrative limits of the town council and whose lifestyle is characterized by strong cultural and traditional values and social control based on personal relationships.

The sample consisted of six focus groups of rural residents who were purposively selected from different parts of the state of Perlis. Members of each group resided in the same geographical area and consisted of males and females of Malay, Chinese, Indian and Thai ethnicity, reflective of the target population which was the population of the state of Perlis. Members of each group were homogenous in relation to socio-economic status, educational levels and occupational status. Selection of subjects was performed with the assistance of members of village administrative committees who had prior knowledge of the residents in their area of jurisdiction and guided by the sociodemographic criteria specified above. The topic of the proposed discussion was not specified in the invitation letters extended to participants. Each village committee member who was assigned to select the participants was instructed to recruit between 8 to 10 subjects for each group. The sample consisted of 44 participants (24 males and 20 females) who were divided into 6 groups with each group comprising between 7 and 9 participants. The participants ranged in age between 25 to 65 years. Four groups consisted predominantly of farming communities, the members of which were in the age range of 45 to 65 years and who had received primary or lower secondary school education. The other two groups consisted of teachers, clerical workers and those engaged in small-scale rural business activities in the age range of 25 to 44 and had received higher secondary school or university education. The sample consisted of 70 % Malays, 15 % Chinese, 8 % Indians and 7 % Thais.

The discussions were held in a meeting room at the author's practice. Each session lasted between 1 1/2 to 2 hours and was conducted by a facilitator with experience in social science research and who was unfamiliar to the participants. The choice of an independent observer was to minimize bias, as the author was familiar to most of the community residents. The discussions were conducted in Malay in accordance with a set of pre-determined guidelines based on the study objectives stated above with deviation to explore specific issues as the discussion progressed. The participants were explained the purpose of the meeting and the topic of discussion. Discussions were audio-taped with their consent. The recordings of each discussion were transcribed by the researcher and facilitator and translated into English soon after each session. Analysis was performed by content coding by listening to the audio-tapes and transcripts and generating a list of key ideas for each topic under discussion. Quotations and ideas were then listed under the appropriate categories and combined into larger themes.

**Results**

**Health Care Services Currently Utilised by Rural Communities:**

Discussions revealed that a variety of healthcare services and systems were currently utilised by rural communities for musculoskeletal and other health problems. These include the services of traditional healers, Chinese medical shops, pharmacies, government rural health centres and hospitals, general practitioners and self-treatment. These services were utilised by all rural communities regardless of occupational status, educational levels and gender.

**Nature of Traditional Treatment for Musculoskeletal Injuries:**

Commonly used treatments by traditional healers included massage particularly for sprains and injuries to muscles and tendons and bone-setting. The healer either
massaged the injured part directly or in some instances massaged a foreign object (a twig or stick) while imagining the object to be the injured body part and recitation of holy verses. For fractures or perceived injury to joints, the usual therapy offered was reduction and immobilisation of the fractured bone or dislocated joint. Participants reported instances where the displaced bone or joint had to be 'broken' again before it was set. All these procedures were done after reading holy verses or incantations and the patient usually tolerated the discomfort. The injured area was usually covered with herbal paste and bandaged with splinting using slit pieces of bamboo. A course of therapy would require an average of three visits.

**Traditional Treatment for Musculoskeletal Injuries:**

Almost all participants considered both traditional and modern scientific healthcare systems as complementing each other for the treatment of musculoskeletal injuries. The traditional healthcare system was preferred as the primary choice of treatment. The main reasons stated for preference of the traditional system related to the nature and type of treatment rendered (see below), the perceived speed of recovery, the shorter period of immobilisation, earlier return to work, the inclusion of spiritual elements in the therapy and concordance with traditional belief systems. For musculoskeletal injuries without fractures, massage, application and ingestion of herbal remedies and spiritual therapy with incantation and recitation of divine verses was considered far superior to modern scientific medicine in relation to speed of recovery and relief of pain and swelling.

Participants expressed that in situations when they believed that the injury sustained was caused by supernatural forces (evil spirits), modern scientific treatment was undesirable. Examples of such injuries were those occurring in isolated environments, injuries for which the cause was unclear and those occurring in environments where injuries frequently occurred. The spiritual powers possessed by the traditional healer and spiritual elements in the therapy were considered vital for healing and protection from future injuries.

'The modern doctor will look at the injured part, check its

severity and extent and treat the condition. He cannot explain why the injury occurred at that time and place.'

'The clinic or hospital environment does not allow someone to discuss a supernatural cause for the injury. The doctor or nurse there will probably tell you that such things (evil spirits) don't exist'. Modern medicine does not accept these forces.

Most participants perceived that the setting of traditional care was a key factor in influencing their choice. Seeking treatment close to one's home in the informal environment of the traditional healer's residence in the presence of relatives and community members and the calm, friendly approach of the healer were perceived as comforting to the patient compared to the formal hospital setting. Traditional care for musculoskeletal injuries was also perceived as conforming to the wishes and worldview of illness of rural elders and community residents who often ascribed injuries to supernatural causes, witchcraft and the patient's misbehaviour.

**Characteristics of Traditional Healer:**

All participants agreed that in choosing a traditional healer, the main determinants were the therapeutic skills and popularity of the healer as a successful therapist. For the female participants, the gender of the traditional healers (predominantly males) was not perceived as a barrier to seeking his/her services.

**Utilisation of General Practitioners' Services:**

Many agreed that they would visit a GP mainly for treatment of superficial injuries and medication to relief pain or if pain resulting from the injury persisted after traditional treatment. Participants stated that besides pain relief, the other reason for which they would visit a GP was to ensure that there were no other injuries to internal organs. A few stated that they might seek the services of a GP to get X-ray confirmation of fractures and injury to joints. This response came mainly from participants with higher levels of education who expressed that while traditional treatment was their primary choice of care, GPs played a useful role in excluding internal injuries and confirming or ruling out the existence of fractures. However, many participants stated that in situations where the injury or injuries did not show improvement after seeking traditional
treatment, they would prefer to consult a GP or seek hospital care. Most participants with lower educational levels (primary school education/no schooling), said that they would consult more than one traditional healer before seeking the help of GPs or hospital treatment. However, the majority of those with higher educational levels (higher secondary and tertiary) expressed that they would not rely on traditional treatment for more than a week or two and would seek modern scientific care if there was no improvement. In all the groups interviewed, the general perception was that consulting a general practitioner for injury care was less stressful than seeking hospital care.

'The bomoh patah will usually advise us to seek pain relief or get an X-ray done from a GP. In any case, we usually check with him to see if his treatment is compatible with the doctor’s treatment. Modern treatment especially injections are often 'hearty' and sometimes cannot be taken together with traditional remedies'.

**Government Rural Health Centres:**

Most participants expressed that they would utilise government rural health centres primarily for emergency care after injuries or when ambulance services were required to transfer patients to hospital. All agreed that these centres were widely used by rural residents for treatment of external injuries and relief of pain either before or after seeking traditional treatment for their musculoskeletal problems. Most participants from the lower educational groups perceived that the main barrier to their utilising the services of rural centres was the possibility of being referred to hospitals which was unacceptable or inconvenient for them and family.

**Utilisation of Pharmacies and Chinese Medicine Shops:**

All participants agreed that pharmacies and Chinese medicine shops played a useful role in the provision of healthcare after injuries. Most participants agreed that medication from pharmacies and Chinese medicine shops were mainly sought for pain relief and treatment of minor superficial injuries. For minor injuries, medication from these outlets alone, were perceived as sufficient for recovery. Participants of Chinese origin highlighted on the effectiveness of Chinese herbal medication that was believed to promote healing of musculoskeletal injuries particularly fractures. These herbal remedies were often taken as an adjunct to other traditional treatments such as massage and bone-setting.

**Utilisation of Hospital Services:**

Many of the participants with lower educational levels considered hospitals as the last resort for musculoskeletal injuries. However, there was almost unanimous agreement that they would seek early hospital treatment under certain circumstances. These were, when they perceived the injury as life-threatening, suspected injuries to internal organs, when the patient was unconscious, in pregnancy, when there were associated injuries to the head, eyes or ears or if the injured person had serious wounds that needed stitching. Some participants cited instances when some of their relatives were admitted to hospital for musculoskeletal injuries for emergency treatment but after the condition improved requested discharge from hospital and sought traditional treatment. There was almost general agreement among all groups that the modern facilities in the local hospital were far superior to traditional healthcare services in diagnosing internal injuries. Among the more educated participants, particularly those employed in the public or private sectors, the reasons for seeking early hospital care were similar to those with lower educational levels, but they also expressed some compelling reasons for seeking hospital care. They included certification for sick-leave, insurance claims and workers compensation benefits. Most of them expressed that once they sought hospital care, they would be less likely to resort to traditional care and would complete the course of treatment.

**Perceived Barriers to Seeking Hospital Treatment:**

**Nature of Hospital Treatment:**

Perceived barriers to seeking modern orthopaedic treatment were the longer period of recovery, the longer period of immobilisation which often resulted in long absence from work, fear of having to undergo surgery particularly with the use of foreign bodies and implants. The primary reason stated by most participants was the
fear of having to undergo surgery.

Most participants expressed dislike for use of plaster of Paris casts commonly used in orthopaedic treatment. They considered it as culturally unacceptable, restricting mobility, heavy, and perceived its application as leading to 'thinning of muscles' and causing skin irritation. The simple splinting using bamboos and herbal paste commonly used in traditional care was generally preferred.

Many of the participants perceived that surgery and use of metallic foreign bodies, while being culturally unacceptable, had long term consequences on health. Perceived consequences of such treatment included loss of vitality, an increased tendency to other illnesses including impotence, intolerance of cold weather and an increased susceptibility to lighting strike (due to presence of metal in the body).

Perceived Skills and Characteristics of Doctor:
Participants with lower educational levels perceived that the skills of hospital doctors in treating musculoskeletal injuries could not generally match those of senior, experienced traditional healers who had been practising their art of healing since their youth. A few expressed their apprehension at the thought of being treated by relatively young doctors at hospital whom they perceived as being less experienced compared to the traditional healers in the community. However, the majority of the participants did not perceive the individual characteristics of the doctor as an important factor in influencing his/her decision to utilise hospital services.

'Ve cannot say that modern treatment is inferior. In western countries, most people use modern medicine unlike us who go for traditional treatment'. Of course, seeking traditional treatment is convenient, but it is wrong to say that doctors practising modern medicine don't know what they are doing. It is unfair.'

Family and Community Involvement In Patient Care:
Some expressed that the hospital setting provided little opportunity for the patients or family members to offer their opinion or discuss treatment options. The treatment offered was decided by the doctors and the patient was expected to comply. The limitations imposed by such rigid hospital protocols were often discouraging for rural residents to utilise hospital services.

'I have undergone traditional treatment by massage after a sprained ankle. It is comforting to have family members around during the therapy, reading the holy verses together; the environment is relaxed but of course, forget about privacy!'

Objections from Elders and Community Residents to Seeking Modern Orthopaedic Treatment:
There was almost unanimous agreement on the fact that rural elders and community residents generally objected strongly to modern orthopaedic treatment. This view was also expressed by younger participants with higher educational levels who would have preferred modern orthopaedic care, but were often compelled by the elders in the family and community to seek traditional treatment. They expressed fear that going against the wishes of elders and community members by seeking hospital treatment would result in their being blamed if the results of the treatment were perceived as unsatisfactory. This did not occur with traditional treatment, the outcome of which was generally accepted as the will of God.

'It is so difficult to seek modern scientific treatment and return home with a plaster ('cement') cast when you have a bone-setter as your immediate neighbour. It leads to so much of unpleasantness and can even ruin family relations.'

'As long as you have given a try of traditional treatment, the elders would not object if you seek hospital care. Otherwise, they will blame you forever if something goes wrong'.

'It can be difficult to take your own wife to the orthopaedic doctor when you don't have the consent of her father.'

Children with Musculoskeletal Injuries:
Opinion was divided as regards injuries to children.
Most of the participants recognised the need for caution where children were concerned. Most participants expressed that they would seek GP or hospital treatment early after a musculoskeletal injury to a child. A few participants with lower educational levels were of the opinion that for injuries such as sprains and suspected dislocations and fractures where the child was otherwise well, they would still prefer a trial of traditional treatment before seeking orthopaedic consultation at the hospital. No specific reasons for preferring early hospital or GP treatment for children could be obtained from the discussions.

The Influence of Cost in the Choice of Healthcare Provider:
Most participants agreed that cost was not perceived as an important factor influencing the choice of a healthcare provider among the other currently available services in the community. They expressed that what mattered to them was the ultimate recovery of the patient and satisfaction with treatment. There was general agreement that most traditional healers in the community did not charge a specified fee for treatment and the patient usually made a donation to the healer.

'I can cite several instances of people in the kampong (village) who opted for expensive orthopedic treatment for their fractures and ultimately recovered with kampong treatment. Some of the 'bomoh patah' (bone-setters) are really good. After all healing comes from God and that is what the bomoh asks for'.

'It is not that I cannot afford to pay but to me the treatment must be satisfactory, convenient and produce fast recovery'.

Distance and Access to Healthcare Provider:
Most participants did not consider distance and access to the healthcare provider as factors influencing their choice. They would seek the services of a skill-full and experienced traditional healer even if it involved travelling long distances.

'Some of our people (community dwellers) travel long distances to seek traditional treatment if we have faith in the healer. Many town folks also come to the village to seek traditional treatment'.

Integration of Traditional Medical and Scientific Medical Systems:
This discussion focused on the possible role for traditional healers specialising in musculoskeletal injuries ('bomoh patah'), to practice in a hospital setting. This issue was not well discussed and most participants were unable to offer their comments. Some respondents with higher educational levels expressed that it was not practical as traditional treatment for injuries was not compatible with modern scientific care. The presence of spiritual elements in traditional therapy, the performance of certain rituals and prescription of herbal remedies may not be possible in a hospital setting.

'Traditional healthcare is not one system. Though the predominant traditional healthcare system is the Malay system, we have other systems such as the Chinese, Indian and Thai systems. Which system are we going to integrate with hospital care? I don't think that that will work in actual practice'.

Discussion
This study reports on the preferential utilization of healthcare systems by a rural Malaysian community for musculoskeletal injuries using focus group discussions. Focus group discussions were the preferred research method as they are known to generate greater insight about attitudes and beliefs compared to quantitative study designs. The group dynamics involved in such discussions were perceived by the author as an advantage particularly on controversial issues such as those involved in this study.

The study shows that traditional healthcare systems are utilized by a wide spectrum of the rural community for musculoskeletal injuries regardless of the educational levels and socioeconomic status. The services of traditional healers as primary healthcare provider for musculoskeletal injuries are being utilized despite the fact that Peninsular Malaysia has a widespread and easily accessible network of modern scientific rural healthcare services.

Sharma who studied patients who used complementary
medical therapies in the United Kingdom noted that a common reason for using these therapies was that orthodox medicine treated symptoms rather than causes. Her study suggested that the language in which patients who visited complementary practitioners described their illnesses was not addressed by their orthodox physicians, and this language was more coherent with that used by complementary medical practitioners. Moore and Phipps found that patients who believed in complementary medicine and perceived high expectations of the treatment were more likely to report benefits from the therapy.

The observation that respondents with higher educational levels would not rely on traditional therapy for longer than a week or two is understandable considering the possibility that they are more likely to be aware of the benefits of modern scientific therapy compared to lesser educated rural residents. Studies on Chinese residents in Hong Kong have shown that for rheumatism, sprains and fractures, most people thought that Chinese medicine was more effective than western methods.

The inclusion of spiritual elements in traditional therapy seems to be a key factor particularly for rural Malay communities who have a cautious respect for the unseen supernatural forces of nature and their concept of the universe.

Earlier studies by PCY Chen have suggested that other factors that discourage rural residents from resorting to modern scientific medical care is its mechanistic, individualistic and impersonal orientation that tends to exclude the role of families and friends in the therapeutic process. This study has also noted the preference of rural residents for family members to be present during the therapy.

The dominant role and influence of elders in rural communities is reflected in this study. Elders in the family have a major decision making role in the choice of the healthcare system and the authors personal observations have shown that objections from elders are often a barrier to referring patients for orthopaedic evaluation in hospital.

Rural residents perceived the possibility of surgical intervention as a major barrier to seeking hospital care. In the author's practice, the possibility of having to undergo surgery is often stated a reason for seeking hospital care. On the issue of integrating traditional and modern scientific medical care, there was limited discussion. Malaysia has limited experience in this area and it is beyond the scope of this report to discuss this issue further.

How can rural residents be educated on the benefits and advances in modern orthopaedic care? The author's experience of having lived and worked with rural communities will tell that faith, belief and perceived successful outcome of traditional medicine for musculoskeletal injuries is deeply-rooted in rural minds. However, some reflection on issues discussed above may assist scientific medical practitioners identify strategies to enhance the acceptance of scientific medicine. It has been suggested that regardless of the spiritual inclination and belief of the physician, one can ask questions in a non-dogmatic manner on how our patients find meaning in their lives, that are respectful of their religious and cultural background. A patient-centred approach to healing with tactful explanation of surgical procedures (where appropriate) and their known benefits to patients and involvement of their families in decision making may be rewarding.

The results of this study on a predominantly Malay rural community focussing primarily on Malay traditional medicine may be generalizable to other rural Malaysian communities with similar cultural characteristics and worldview of health and illness. As the respondents in each group were not homogenous in relation to ethnicity, the influence of ethnicity on healthcare utilisation patterns could not be determined in this study. However, further studies using qualitative and quantitative designs on other traditional medical systems (Chinese, Indian, Thai and Aboriginal) may provide a better insight in this important aspect of rural health.


