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# Medical System Choice: Information That Affects the Selection of Healthcare Provider in Australia?

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**Abstract.** Many complementary and alternative medical practices (CAM) are readily assessable in Australia alongside Allopathic practitioners. Although CAM practices are prevalent, little is known about how patients seek and use information when deciding which system to consult. We report some preliminary findings of a longitudinal study, designed to solicit factors that influence the Australian public when selecting from diverse medical systems. Fifty-four general public participants, willing to provide their confidential and anonymous opinion were included. The magnitudes of importance, critical in influencing factors, were screened. Results indicated a medical system was selected for its effectiveness, safety, credentials and care (p<0.001). Consultation time, convenience, cost, empowerment and rapport were less important factors (p<0.001) influencing selection of a medical system. The level of choices by participants [ $\chi^2$  (1, N=54) = 53.445, p<0.001] follow similar trends found for those in conventional medical systems. This contrasts with findings in other locations, where cost and time were major contributing factors when selecting medical systems.

**Keywords.** Medical System, Longitudinal Study, Diverse Medical Systems, Influencing Factors, Empowerment

### 1. Introduction

Allopathic or Western Medicine (WM), Traditional Chinese Medicine (TCM), Ayurvedic Medicine (AM), Homeopathic Medicine (HM) and other medical systems are becoming increasingly accessible to patients in Australia [1]. Factors that have been posited to explain this trend include global changes in values, higher education, poorer health, and greater levels of migration [2]. Most of these factors are unlikely to reverse,

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so the current landscape of relative ubiquitous accessibility to diverse medical systems is likely to continue for some time.

An issue for governments, health insurers, patients and health care providers that arises from ubiquitous accessibility of diverse medical systems involves supporting patients to make lucid decisions regarding their medical system choices. Supporting patients to make lucid decisions is important for governments to ensure a level playing field exists amongst providers and to guarantee a high level of public health. In recent years, Australian health insurers have included a broader range of medical systems in their policies so they have a financial interest in helping patients make good decisions regarding their medical care. Australians access complementary and alternative services at rates that are among the highest in the world [3]. However, little is actually known about the decision-making process patients perform in order to determine which medical system to consult in any specific context. Associated with this is the observation that the information needs of patients when making medical system choices are not clearly known.

Astin [4] reported that the sense of empowerment and the cost of the medical services are significant factors when selecting a medical system. On the other hand, word of mouth and credential (credibility and/or reputation of the practitioner) play some vital role in the selection [5]. Selection of a medical system and/or medical services is also known to depend on gender, culture and other personal factors [3].

There are factors that influence decisions, that impact upon quality of treatment in comparison to the associated cost. This phenomenon was discussed by Williams and Brown 2014 [6]. and the proposition is forwarded as "decision of value". This value proposition associated with quality of care and the relationship between quality and cost consideration when selecting a medical system is timely. Furthermore, factors that influence these relationships and thereby improve the quality of life is important given that healthcare is taking gigantic steps toward digitalisation of healthcare processes and engagements, and enhanced assisted living.

The study presented in this paper reports results from an online pilot study of the long term longitudinal online survey designed to solicit decision making behavior of individuals. The study design is described in the next section before results and discussion are presented.

The information patients need to select a medical system and/or a practitioner depend on the type of health condition[6]. We have identified four types of health conditions:

- **Emergency**: The condition seems immediately life-threatening.
- **Palliative:** The condition is terminal and medical attention required is palliative.
- **Acute:** The condition is self-limiting in that it can either be cured, or become terminal.
- Chronic: The condition has no cure and needs to be managed for the long-term.

According to Upchurch and Rainisch [5] the use of complementary and alternative medicine is influenced by predisposing factors such as demographics, beliefs and resources; enabling resources such as income and health insurance; need, both evaluated

and perceived; personal health practices and lifestyle. In this article we incorporate these influences into criteria advanced by [2] to arrive at the categories as follows:

**Effectiveness:** The extent to which a medical system is known to be safe and effective. This includes evidence of past positive and negative experiences of self and trusted others.

**Empathy:** The extent to which the patient can establish a relationship of trust, rapport and/or empathy with practitioners working within a medical system. This refers to the notion that patients need reassurance, consolation and compassion from their health care professionals.

**Empowerment:** The extent to which engagement with the medical system results in patient empowerment. Empowerment refers to the notion that patients select a physician who can help them understand their experience and initiate their own actions toward recovery.

**Accessibility:** The extent to which the medical system is affordable, available and visible.

**Philosophy:** The extent to which the world view and assumptions of the nature of illness underpinning a medical system concur with those of the patient.

**Privacy:** The extent to which the medical practice guarantees the level of privacy expected by the patient.

Effectiveness, empathy, empowerment, accessibility and philosophy refer to characteristics intrinsic to the practice of medicine or the relationship between patient and health care professionals and the patients. The privacy need represents a concern a patient has regarding his or her ongoing relationships with the broader community.

#### 2. Materials and Methods

During 2016-17, an invitation for participation was distributed through the author's network to participate in a survey examining their choices when selecting a "medical system" and/or practitioner who is associated with medical systems. Participants were also encouraged to forward the invitation as part of a snowball recruitment strategy. As such the response rate could not be calculated as the reach of the invitation could not be determined. The aim of the study was to identify factors underpinning an individual's selection of the type of healthcare practice, to ascertain the factors influencing the "decision of value in healthcare".

Following Federation University ethical approval, an online survey was designed to capture an individual's decision making processes when selecting a healthcare provider. The survey included nine (9) Likert scale questions and an open-ended response question to capture any additional comments. The anonymous online survey took approximately 10 minutes to complete. The survey did not capture any identifying information, with the exception where a participant elected to provide an email address should they be interested in receiving the results of the study. The e-mail address provided was separated from the participants' responses.

## 3. Results

The results indicate that cost, effectiveness, safety, treatment time, empowerment, rapport with practitioner and practitioner's credentials are key factors. As expected, treatment effectiveness and safety were the most important factors however rapport, empowerment and the care the practitioner had, were also considered quite important.

Table 1. Surveyed Survey Associated with Decision of Value Factors.

Decision Factors	Decision of Value*		Health			
		Conditions**				
		E	P	Α	C	
Accurate diagnoses	The practitioner is likely to be able to accurately diagnose my condition	✓				
Diagnostic cost	The costs associated with a diagnosis	✓				
Diagnostic inconvenience	The inconvenience associated with diagnostic procedures	<b>√</b>				
Treatment success	The practitioner is likely to be able to effectively treat my condition	<b>√</b>				
Treatment quality of life	The practitioner is likely to be able to prescribe treatments that enhance my quality of life	<b>√</b>				
Treatment time	The time and effort taken for the treatment to be effective	<b>√</b>				
Empowerment	The extent to which I am empowered to take control of my own health	<b>√</b>				
Safety	The treatments offered are safe and free of side effects or adverse reactions	<b>√</b>				
Credentials	The practitioner has appropriate qualifications and credentials	<b>√</b>				
Rapport	The practitioner has great rapport with me	<b>√</b>				
Care	The extent to which the practitioner cares for me	<b>√</b>				
Location	The extent to which the practitioner or service is easy to reach	✓				
Affordability	The extent to which the practitioner or service is easily affordable to me	<b>✓</b>				
Accessibility	The extent to which the practitioner or service is easily accessible to me	<b>√</b>				
Beliefs	The extent to which I understand and accept the practice's underlying assumptions and beliefs	✓				
Evidence base	The extent to which I accept and trust the practice's evidence base	✓				

	Emergency (E)	Palliative (P)	Acute (A)	Chronic (C)
Effectiveness	60%			10%
Empathy	30%			10%
Empowerment	10%	30%	20%	40%
Accessibility		50%	40%	20%
Philosophy		10%	20%	10%
Privacy		10%	20%	10%

**Table 2.** Degrees of Influence denoted by intensity of the colour and magnitude in percentages.

**Table 3.** Factors that effect selection of a medical system.

Factors	Low	High	
Care	6	94	
Credentials	6	94	
Effectiveness	6	94	
Safety	6	94	
Rapp	10	90	
Time	10	90	
Convenience	19	81	
Empowerment	23	77	
Cost of care	27	73	

 $[\chi^2(1, N=36) = 53.445, P<0.002893; t = -19.261, df=16, P<0.00001 t_p = -13.62, df=8, P<0.00001]$ 

# 4. Discussion

While the cost, effectiveness, safety, treatment time, empowerment, rapport with practitioner and practitioner's credentials are key factors (Tables—2 & —3) when selecting a medical system, it is also significant to consider the "decision of value" the proposition associated with quality of care (Tables—1 & —3). Furthermore, it is essential to consider the relationship between quality and cost consideration when selecting a medical system. Further investigations warrant realisation of the effect of the "decision of value" that leads to understanding the treatment effectiveness, safety and the care of the practitioner.

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