

**A study on exploration of the reasons why Traditional Chinese
Medicine (TCM) is used in Maldives**

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Abstract

Background: WHO Traditional Medicine Policy 2014-2023, states that Traditional Medicine (TM) and Alternative Medicine (AM) is an important and often underestimated part of health system and encourages to integrate TM and AM into health system through health policy. For a health policy, knowledge based information is required and WHO Traditional Medicine Policy 2014-2023 has proposed questions. Among these questions, questions that are relevant to Maldivian context are taken as research questions in this study; as for the reasons why Traditional Chinese Medicine (TCM) is used in Maldives.

Method: This is an empirical study that will use deductive reasoning for exploration. Focus group discussion and individual interviews was used for patients, aged 18 and above, from Natural Care Clinic and Chinese Health Care. A thematic, descriptive approach was applied to analyze the data.

Result: The motivating factors for patients to use TCM are effectiveness of TCM, the inefficiency of conventional medicine (CM) and other forms of health care (AM, 'Dhivehi Beys'), TCM remaining as an option when there is no cure for their illnesses, increasing dissatisfaction with current health care services, whole patient care, patients' belief that TCM have no side effects and CM not being ideal. TCM and Chinese Health Care Facilities (CHCFs) are mostly recommended by friends and family. Patients are using TCM when they have chronic and acute conditions and other minor ailments. Out of 23 patients 7 patients are using TCM along with CM. TCM is taken as a complementary to CM to restore health. They believe it could be beneficial and experienced that it is safe to use, which is a concerning discovery that relevant government sectors or authorities must take notice of. The rest of the 16 patients took only TCM. The reasons for only taking TCM were its effectiveness, no side effects and use of herbal medicines. The benefits of using TCM from CHCFs are receiving good services, easy to get services, getting patient oriented care and cost saving. Therefore, findings from this study indicate the role TCM playing in primary health care and importance of acquiring knowledge-based information for policy. Hence, the result of the study can be transferable to a wider the population of the similar context on the reasons why TCM is used from CHCF.

Key words: Alternative Medicine, use of Traditional Chinese Medicine, reason, need and benefit.

Declaration

I, Aishath Ibrahim, declare that the Master by Public Health thesis entitled 'A Study on Exploration of the reasons why Traditional Chinese Medicine (TCM) is used in Maldives' is no more than 40,000 words in length including quotes and exclusive tables, appendices and reference. This contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Signature: _____

Date: ~~26th March 2016~~

25/05/2016

Principal Supervisor Statement

I, Mohamed Zaid, have read this thesis and that, in my opinion, it is fully adequate in scope and quality as a thesis for the Master of Public Health.

Signature:

Mohamed Zaid

Principal Supervisor

Date:

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Abbreviations and Acronyms

AM	Alternative Medicine
CAM	Complementary and Alternative Medicine
CM	Conventional Medicine
CHCF	Chinese Health Care Facilities
HCF	Health Care Facilities
MFDA	Maldives Food and Drug Authority
NCM	Non-conventional medicine
RBC	Regulatory Boards and Councils
TCM	Traditional Chinese Medicine
TM	Traditional Medicine
WHO	World Health Organization
GD	Group Discussion
II	Individual Interview
P1,P2...P23	Patient Identification Number

Definitions of terms

Traditional Chinese Medicine (TCM)

“TCM is an ancient and still very vital holistic system of health and healing, based on the notion of harmony and balance, and employing the ideas of moderation and prevention.

TCM is a complete system of health care with its own unique theories of anatomy, health, and treatment. It emphasizes diet and prevention and using acupuncture, herbal medicine, massage, and exercise; and focuses on stimulating the body's natural curative powers” (Traditional Chinese Medicine , 2015, para.2).

Conventional Medicine (CM)

Conventional medicine is “a system in which medical doctors and other healthcare professionals (such as nurses, pharmacists, and therapists) treat symptoms and diseases using drugs, radiation, or surgery. Also called allopathic medicine, biomedicine, mainstream medicine, orthodox medicine, and Western medicine” (NCI Dictionary of Cancer Terms, para. 1).

Non-conventional medicine (NCM)

Together, the Alternative and Traditional Medicinal systems mean non-conventional medicine.

Alternative Medicine (AM)

“A broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system” (Qi, 2015, para 3).

Traditional Medicine (TM)

“Traditional medicine is the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness” (Qi, 2015, para. 2).

Dhivehi Beys

‘Dhivehi Beys’ is Maldivian Traditional Medicine

Dhivehi Language

Local language; ‘Dhivehi Bas’.

‘Doctory beys’, European Medicine

Conventional Medicine.

‘Thaveedhu’

Religious or spiritual inscriptions.

‘Use of TCM’

This is measured by the information of the following questions from WHO Traditional Medicine Strategy 2014- 2023. The questions are “: why are people using it, when are people using it, what are the benefits, who is delivering it and what are their qualifications?” (WHO, 2013, p. 26)

In this study reasons and needs are meant as in the context of WHO Traditional Medicine Strategy 2014- 2023.

Reason

Reason is meant as the motivating factor why patients use TCM.

Need

Need is meant as whether patients are using TCM for chronic diseases or for simple diseases (WHO, 2013).

Benefit

Benefit is meant as benefits of using TCM from CHCFs.

CHAPTER ONE: INTRODUCTION

1.1 Statement of the problem

WHO's Traditional Medicine Policy 2014-2023, states that Traditional Medicine (TM) and Alternative Medicine (AM) are an important but often underestimated part of the health system. The WHO's policy encourages the integration of TM and AM into the national health system through the respective health policy (World Health Organization [WHO], 2013). In Maldives there is no policy for TM and AM. A policy is much required to integrate TM and AM with the national health care system, in order to improve overall health of the population (WHO, 2013). For such a policy, the topic; why Maldivian community uses TM and AM is one of the fundamental areas that is needed to be understood because till date no research has been done on TM and AM and there is limited statistical information on the topic. Due to these reasons doing this research study to find reasons why patients use AM; in this case, Traditional Chinese Medicine (TCM), is important.

This chapter will shed light on the historical background of accepting AM and background of TCM in Maldives. Apart from this, the chapter further highlights on TCM in Maldives, an introduction to what TCM is, how much TCM is accepted in other countries and the importance of formulating a Knowledge-based National Policy. Furthermore, the chapter will specify on the purpose of the study, its significance and limitations.

1.1.1 Acceptance of Alternative Medicine in the History of Maldives

According to Ahmed Didi, AM was present in Maldives even in 1936, which point out the fact that the concept of AM is very old among the Maldivian culture (Didi, 1936). As time went by some of the AM influenced traditional Maldivian medicine or ‘Dhivehi Beys’ (Fulhu, 2010). After the Second World War the focus on ‘Dhivehi Beys’ reduced among the Maldivians with the introduction of conventional medicine (CM) (Fulhu, 2010). Since then, there has been CM and non-conventional medicine (NCM) in the Maldives. The current medicinal system in Maldives primarily consist of CM, NCM includes ‘Dhivehi Beys’ (which is our TM) and all the other medical systems (such as TCM) are AM. . On 23rd October 2003, the first Chinese Health Care Facility (CHCF) was registered in the Ministry of Health (Ministry of Health, 2015d).

1.1.2 TCM in Maldives

TCM is an established clinical practice in Maldives. Through standard operating procedures laid down by the Regulatory Boards and Councils (RBC) and the Maldives Food and Drug Authority (MFDA), the government of Maldives has laid down mechanisms to monitor and regulate TCM practices. The registration of ‘Dhivehi Beys’ clinics and AM facilities, which also includes qualification and licensing of medicine practitioners, are monitored by RBC. The registration of ‘Dhivehi Beys’ and AM and Traditional and Alternative Medicinal pharmacies are conducted by MFDA (WHO Congress on Traditional Medicine, 2008).

There are two CHCFs registered, which is located in the capital city, Male’. They are the ‘Natural Care Clinic’ and the ‘Chinese Health Care’ (Ministry of Health,

2015d). Also there are three Chinese Medicine Practitioners registered (Ministry of Health, 2015c) and twenty eight TCM registered (Ministry of Health, 2015a). These medicines are sold from the registered pharmacies of Natural Care Clinic and Chinese Health Care (Ministry of Health, 2015b).

1.1.3 Traditional Chinese Medicine; what is TCM and how much is TCM accepted in other countries?

TCM is two thousand year old ancient medical practice based on multiple theories like Yin and Yang, five element theories, the qi and the diagnosis of syndromes (WHO, 2010). Chinese herbal medicine, moxibustion, acupuncture and Tuina are some of the modalities in TCM. The Chinese herbal medicines which comprises of herbs are documented in classical and modern literatures (WHO, 2010). The differential diagnosis for syndromes are done by laboratory tests, diagnostic imaging and with traditional diagnostic methods (WHO, 2010).

TCM has influenced other traditional medicines like Kampo Medicine; the Japanese Traditional Medicines. TCM is an accepted form of AM in countries like United States of America, Canada, Australia and Japan. (WHO, 2001). In Europe there are more than 1300 herbal products registered as herbal products with traditional use and “among all the European member states, United Kingdom, Denmark and Poland ranked in the top three countries with traditional use registered herbal products” (Wu, Yang, Hou, & Guo, 2015, p. 3). The government of China has well set their mind on improving the safety, quality and efficacy of TCM so that it could gain an equal status as CM in terms of globalization (Wu et al., 2015).

1.1.4 Importance of formulating a Knowledge-based National Policy:

“Maldives have not adopted Traditional and Alternative medicine in the health delivery system”, (Al-Naggar, Bobryshev, Abdulghani, Rammohan, & Al-Jashamy, 2012, p. 3842) though it is an accepted major area in the nation’s primary health care system. The regulatory and monitoring work of ‘Dhivehi Beys’ and AM are being carried out. But to formulate a policy to integrate ‘Dhivehi Beys’ and AM into primary health care, first it should be understood, why people use ‘Dhivehi Beys’ and AM (WHO, 2013). The Beijing Declaration 2008 (WHO Congress on Traditional Medicine, 2008), the Sixty- seventh World Health Assembly in resolution WHA67.18 (Sixty- Seventh World Health Assembly, 2014), WHO Traditional Medicine Strategy 2014- 2023 (WHO, 2013) and Maldives Health Profile 2014 have emphasized on developing “a culture of evidence based decision making within the health system” (Ministry of Health, 2014, p. 2).

To further understand the current situation, the Deputy Director General/ Pharmaceuticals of Maldives Food and Drug Authority, Ms. Aishath Mohamed was interviewed for this study. She stated that Maldives was on a path where there was a need for a Traditional and Alternative Medicine Policy. Such a policy is needed to increase and to improve access to good quality healthcare based on primary health care approach which enforces high priority on protective and promotional health (Ministry of Health, 2014).

1.5 WHO Traditional Medicine Strategy 2014-2023

The WHO Traditional Medicine Strategy 2014-2023 is the foundation used for this study. According to the strategy to build a knowledge-based TM and AM policy, “the following information must be obtained and analyzed: why are people using it, when are people using it, what are the benefits, who is delivering it and what are their qualifications?” (WHO, 2013, p. 26). Based on the Maldivian context, what is important to study here is; ‘why are people using it?’ and ‘when are people using it?’.

Why are people using TCM?

WHO Traditional Medicine Strategy focuses on patterns of use and motivating reasons for use of TM and AM (WHO, 2013). Maldives uses TCM as an AM because there is ‘Dhivehi Beys’ and CM in its health care system. But there is no study done to understand the reasons why people use different forms of AM in Maldives. Since TCM was formally accepted in 2013, it will hardly have a cultural or historical influence in the pattern of its use.

When are people using TCM?

According to the Traditional Medicine Strategy this question has highlighted more on its use in chronic conditions (WHO, 2013). Hence, it is important to have a glance at the current health status of Maldives. Significant improvements have been made in Infant and Maternal mortality rate, increased life expectancy and the eradication or control of communicable diseases (Ministry of Health, 2014). Yet, with the increase of age and technology, non- communicable diseases have become the emerging cause of

mortality and morbidity in Maldives. Hence, “more work is required to strengthen this area, in legislature as well as health promotion” (Ministry of Health, 2014, p. 9).

What are the benefits?

Cost saving is a potential benefit of seeking TCM (WHO, 2013) although in the Maldivian context this cannot be applied. “Maldives health funds are primarily spent on curative care and little goes towards preventive care. The majority of total health expenditure in the Maldives (66.8%) is spent on inpatient and outpatient curative” (WHO and Ministry of Health, 2013, p. 6) care means that Aasandha is only available for CM. Total health care expenditure for traditional healers and other health practitioners’ amounts for MVR 8,072,736, which amounts to approximately US\$2 per capita (WHO and Ministry of Health, 2013). It is also noteworthy that all patients who seek TCM from CHCFs spend mostly from their own pockets. If they want to save these expenses, they have to choose CM. In which case, the option of choosing TCM is definitely not for cost saving. Therefore, the question; “what are the benefits?” was not viewed as monetary value (WHO, 2013).

Who is delivering TCM and what are their qualifications?

The two other questions that will not be focused in this study are; “who is delivering TCM and what are their qualifications?” (WHO, 2013, p. 26). The reason is, CHCFs are registered and it is run by registered Chinese medicine practitioners. Therefore, RBC has verified their qualifications.

1.2 Purpose of the Study and Objectives

1.2.1 Statement of purpose

The purpose of the study is to create a framework using WHO Traditional Medicine Strategy 2014-2023 to provide knowledge-based information on why patients seek AM and to use the framework to understand why patients use TCM.

1.2.2 Objectives:

1.2.2.1 To develop a framework to provide knowledge-based information on why patients use AM.

1.2.2.2 To understand why patients use TCM from CHCFs.

1.3 Research questions

1.3.1 General Pillar Questions

Pillar Question 1: -Reasons which motivate people to use AM- What are the motivating factors to use AM?

Pillar Question 2: -Individual needs - Does individual needs often determine when people use AM?

Pillar Question 3: - Benefits- Are there benefits of using Alternative Medicine from Health Care Facilities (HCFs)?

1.3.2 Specific Pillar Questions

PQ 1 a) why are people using TCM?

PQ 2 a) when are people using TCM?

PQ 3 a) what are the benefits of using TCM from CHCFs?

Table 1: Operationalization- Linking Pillar Questions and Open Ended Questions to Conceptual Framework

Pillar Question	Open ended Research Questions
Pillar Question 1: -Reasons which motivate people to <i>use</i> Alternative Medicine- What are the motivating factors to use Alternative Medicine?	
PQ 1 a) Why are people using TCM? (WHO, 2013)	<ol style="list-style-type: none"> 1. How did you know about CHCF? 2. Who recommend you to use TCM? 3. Why are you taking TCM?
Pillar Question 2: -Individual needs - Does Individual needs often determine when people use Alternative Medicine?	
PQ 2 a) When are people using TCM? (WHO, 2013)	<ol style="list-style-type: none"> 1. For which illness are you taking TCM treatment? 2. If you are taking conventional medicine along with TCM for this illness, what are the benefits of taking both medicinal therapies? 3. If you are taking only TCM for this illness, why are you taking only TCM?
PQ 3: - benefits- Are there benefits of using Alternative Medicine from Health Care Facilities (HCFs)?	
PQ 3 a) What are the benefits of using TCM from CHCFs?	<ol style="list-style-type: none"> 1. What are the benefits of using TCM from CHCFs?

The above framework is developed by using WHO Traditional Medicine Strategy 2014-2023 to provide knowledge-based information on why patients seek AM

1.5 Significance of the study:

From the knowledge I acquired after doing my literature review it is my understanding that this is the first research study conducted on AM in Maldives. The reason why AM was chosen, instead of 'Dhivehi Beys' was because WHO has given assistance to carry out studies on public awareness of, attitude towards and practices in TM systems of Maldives, although it has not yet been initiated (WHO, 2013). The research study focused on the reasons why TCM is used in Maldives and got a general knowledge on the topic, which in turn can be useful information for policymakers and as a whole benefit the Maldivian community.

TCM has been selected because there are only two facilities which provide the services and since they are located in Male'. Hence, this medical system can be covered within the time frame and within the estimated budget with easy access to the Maldivian patients who are above the age of 18 years.

1.5.1 Importance of the Conceptual Framework

There are different forms of AM such as TCM, Ayurveda, Unani, Siddha, Homeopathy, etc., being used in Maldives. The benefits to a policy can only be identified once all these are covered. Hence, keeping this in mind, the first objective of the study was accomplished before conducting the research. Table 1 lays down framework (refer Table 1).

The framework can be used to study all the AM systems to find the reasons why AM is used in Maldives. The same pillar questions can be used. Further questions can be added to 'Open ended Research Questions' column, depending on the situation. In

addition, the benefit is that all the findings of different AM systems will be in the same format, and therefore, it will be easy to compile and understand.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1 Related Literature

The literature evidence is presented according to the Pillar Questions Conceptual Framework Table 2. In order to achieve this goal, each of the pillar questions will be viewed separately. The reason why pillar questions are used in the framework is because there are few relevant scholarly literatures for the use of AM in Maldives (Shields & Rangarajan, 2013). Hence, pillar questions will not have an anticipated answer and these have assisted in prioritizing and delimiting the information in the literature.

Table 2: Conceptual Framework Linking Explanatory Pillar Questions to Literature

Pillar Question	Supporting Literature
PQ 1: - <i>Reasons</i> which motivate people to <i>use</i> Alternative Medicine- What are the motivating factors to use Alternative Medicine?	
PQ 1 a) Why are people using TCM? (WHO, 2013)	(WHO, 2013), (Carmady & Smith, 2011), (Lam, Y.-c., Cheng, C.-w., Peng, H., Law, C.-k., Huang, X., & Bian, Z, 2009), (Gau, Yang, Huang, & Lou, 2012), (Hung, Chiou, & Chang, 2012), (Liao, C.-C., Lin, J.-G., Tsai, C.-C., Lane, H.-L., Su, T.-C., Wang, H.-H., Shih, C.-C, 2012)
PQ 2: -Individual <i>needs</i> - Does Individual needs often determine when people use Alternative Medicine?	
PQ 2 a) When are people using TCM? (WHO, 2013)	(Placeholder1), (Carmady & Smith, 2011), (Chen, F.-P., Chen, T.-J., Kung, Y.-Y., Chen, Y.-C., Chou, L.-F., Chen, F.-J., & Hwang, S.-J, 2007), (Gau et al, 2012), (Hung et al., 2012), (Lam, et al., 2009), (Liao, et al., 2012), (Ried & Alfred, 2013),, (WHO, 2013)
PQ 3: - <i>benefits</i> - Are there benefits of using Alternative Medicine from HCFs?	
PQ 3 a) What are the benefits of using TCM from CHCFs?	(Liao et al., 2012),(Rutebemberwa, E., Lubega, M., Katureebe, S. K., Oundo, A., Kiweewa, F., & Mukanga, D,2013)

2.1.1 What are the motivating factors to use Alternative Medicine?

According to WHO Traditional Medicine Strategy 2014- 2023, there are several reasons why individuals choose Traditional and AM. The choices are due to an increased awareness of available options and due to an increasing dissatisfaction with existing health-care services. Sometimes it is because it's natural and leads to the belief that it is safe and they have experienced side effects from other previous treatments. For some, it is due to a rekindled interest in whole person care and for others, it is to prevent diseases (WHO, 2013).

There are so many reasons why patients seek TCM worldwide. Recent research shows that patients seek TCM for improvements from CM because it is not ideal and because they want to have better control over health matters (Hung et al., 2012). Also, to improve overall health, as a complimentary to CM to restore health, for psychological and spiritual support, to rebuilt confidence in overcoming the disease and to alleviate stress are some other reasons (Gau et al., 2012). Moreover, for cancer patients it is being used to relieve the symptoms (Gau et al., 2012; Lam, et al., 2009), to suppress tumor progression (Lam et al., 2009), to reduce side effects, improve quality of life (Carmady & Smith, 2011; Lam et al., 2009), due to individual prescription, empowerment with self-help, reduce adverse effects, improvement inability to function, enhance the immune system, prevent metastasis, suppress menopausal symptoms (Carmady & Smith, 2011). It is also effective in assisting cancer treatment, popular and culturally acceptable process of self-help and patients perceived that Chinese medicine to be an effective

alternative (Carmady & Smith, 2011). TCM is being used in different parts of the world because patients opt for healthy life style (Liao et al., 2012).

Friends (Gau et al., 2012), relatives (Gau et al., 2012; Lam et al., 2009), physicians, ward mates and others (Lam et al., 2009) have recommended to use TCM. In other instances, the decision to seek TCM have been patients own choice (Lam et al., 2009).

2.1.2 Does individual needs often determine when people use Alternative Medicine?

Universally, TCM is used for chronic diseases and during acute conditions (WHO, 2010, 2013). TCM has also been used in internal medicine, gynaecology, pediatrics, traumatology, external medicine, dermatology, emergency medicine and medical complications related to eye, ear, nose and throat. TCM is also used to treat the secondary manifestations (Biao) and the primary causes (Ben) of various other conditions (WHO, 2010).

A research found that in Taiwan, TCM was preferred mainly in treating diseases relating to the respiratory system, musculoskeletal system and connective tissue injury, poisoning, disease of digestive system, genitourinary system, skin and subcutaneous tissue, nervous system and sensory organs, circulatory systems, endocrine system, nutrition and metabolic diseases, immunological disorders and symptoms, signs and ill-defined conditions (Chen et al., 2007).

Apart from those mentioned, recent studies have been done for specific diseases and on the use of TCM. These include diabetes (Hung et al., 2012), traumatic brain injuries (Gau et al., 2012), stroke (Liao, et al., 2012), infertility and viable pregnancy (Ried & Alfred, 2013) and also cancer (Carmady & Smith, 2011; Lam et al., 2009).

Another survey done on the use of TCM for cancer patients of China by Carmady & Smith (2011) shows that TCM is being used for cervical cancer, breast cancer, lung cancer, liver cancer and colorectal cancer.

In diseases like cancer, diabetes, stroke and traumatic brain injury, the majority of patients preferred TCM along with CM because;

- combined TCM and CM is effective for cancer treatment (Lam, et al., 2009)
- when both these therapies are used together, patients had “significantly better glycaemic control” (Hung et al., 2012)
- combination of these two medical therapies are beneficial for overall health (Carmady & Smith, 2011; Gau et al., 2012)

Moreover, Hung et al., (2012) study shows that 42.4% of patients used only CM, 14.6 % of patients used only TCM while 43.0% of patients used both CM and TCM. There was significantly better glycaemic control in patients who used combination of CM and TCM compared with patients who use only TCM (Hung et al., 2012). Likewise, research done by Gau et al., (2012) states that Taiwanese brain injury patients felt that it was unnecessary to report the use of CAM. However, it is important to note that in this research the majority of CAM users were comprised of TCM (N= 37, 57.8%) (Gau et al., 2012).

2.1.3 Are there benefits of using Alternative Medicine from HCFs?

A study done by Liao, et al., (2012) shows that there was a weak association between shorter hospitalization with TCM use (OR = 1.14, 95% CI = 1.05– 1.24) (Liao, et al., 2012).

A research conducted by Rutebemberwa, et al. (2013) which was based on the use of TM for the treatment of diabetes in Eastern Uganda has indicated that the “reasons for taking TM included finding difficulties accessing hospitals, diabetic drugs being out of stock” (Rutebemberwa, et al., 2013, p. 1).The findings of this study is taken into consideration because it shows why Ugandan people choose to go to Health Care Facilities.

It is important to note that these studies have several limitations. The most common limitation in these studies are found to be in selecting the sample of the population, where in some studies it is conveniently selected and in other studies, sample is too small or sample selection falls to non-statistical methods. Hence, the results of these studies cannot be generalized.

CHAPTER THREE: METHODOLOGY

3.1 Research Design

This is an empirical study that has used deductive reasoning for exploration. Deductive reasoning has allowed building and refining a framework, which will guide to explore why patients use TCM in Maldives (Shields & Rangarajan, 2013).

As Babbie (2007) had described in the book; *The Practice of Social Research*, this research process will move “from (1) a conceptual framework or a pattern that might be logically or theoretically expected to (2) observations that test whether the expected pattern actually occurs” (Shields & Rangarajan, 2013, p. 148). The advantage of deductive logic was that it has a clear beginning, middle and end which reduced uncertainty and enabled to finish the research on time (Shields & Rangarajan, 2013).

This study used focus groups and individual interviews to discover the reasons, needs and benefits of patients using TCM. Focus groups have provided more data at a fast space. (Marczak & Sewell, n.d.). To overcome the disadvantages in these method individual interviews were conducted with patients who were less participative, after the group discussion.

Table 3: Operationalization- Linking Pillar Questions and Open Ended Questions to Methodology

Pillar Question	Assessment method	Open ended Research Questions
PQ 1: - <i>Reasons</i> which motivate people to <i>use</i> Alternative Medicine- What are the motivating factors to use Alternative Medicine?		
PQ 1 a) Why are people using TCM? (WHO, 2013)	Group discussion and individual interview	<ol style="list-style-type: none"> 1. How did you know about CHCF? 2. Who recommend you to use TCM? 3. Why are you taking TCM?
PQ 2: -Individual <i>needs</i> - Does Individual needs often determine when people use Alternative Medicine?		
PQ 2 a) When are people using TCM? (WHO, 2013)	Group discussion and individual interview	<ol style="list-style-type: none"> 1. For which illness are you taking TCM treatment? 2. If you are taking conventional medicine along with TCM for this illness, what are the benefits of taking both medicinal therapies? 3. If you are taking only TCM for this illness, why are you taking only TCM?
PQ 3: - <i>benefits</i> - Are there benefits of using Alternative Medicine from HCFs?		
PQ 3 a) What are the benefits of using TCM from CHCFs?	Group discussion and individual interview	<ol style="list-style-type: none"> 1. What are the benefits for you to take a treatment from CHCFs?

3.2 Population and Sample

3.2.1 Population selection

The target population was selected among Maldivians (with a good command of Dhivehi) who actively seek TCM from Natural Care Clinic and Chinese Health Care and are aged 18 and above. This age group was selected because they were more capable of

telling the reasons why they use TCM. The interviews and discussions were carried out in Dhivehi language.

3.2.2 Sampling technique

The participants were purposefully selected from the two clinics because patients that were exposed to TCM would be able to give rational reasoning to why they used TCM. 11 individuals were interviewed and two focus group discussions were conducted. As was mentioned before, the aim was to reach a saturation point during the discussions. Each group discussion had 6 patients and therefore the number of patients involved in this study was 23 (William, 2006).

Individual interviews were given by 4 males and 7 females. These interviews were taken beforehand since the number of patients arriving each day were comparatively few and among them most refused to participate due to varying personal reasons. After few days it was obvious that time will be taken for both group discussions and individual interviews. Hence, the clinics arranged appointments in such a way that many could attend in a single day for treatment. And once they arrived, the health care providers were asked to identify the most frequently visited patients. From the group the patients who were willing to participate in individual interviews consent were taken and individual interviews carried out. Among them patients who were willing to participate in the group discussion were identified and later they were called up.

The group discussions were held outside the clinic, over a cup of coffee. In the group discussion, the first group had 1 male and 5 females. The second, 6 males. The individual interviews lasted for approximately 10 to 15 minutes and group discussions were 30 to 45 minutes.

From Natural Care Clinic, 9 patients participated and from Chinese Health Care 13 patients participated. When their consent was taken, they were assured that their identity and the respective clinic they had taken their treatment would not be revealed as these information are not relevant for this study. Furthermore, it was not presented in the demographic characteristics (refer Table 5).

3.3 Data gathering methods, instruments and materials used

3.3.1 Data gathering methods

Focus group discussion and individual interviews were conducted to discuss and to ask the participants to explain their ideas in more detail. This was led through an open discussion by a skilled moderators (Eliot & Associates, 2005). A moderator and an assistant moderator were trained so they were able to assist in interviewing and transcribing. These interviews used non-directive style open-ended questions, allowing the participants the freedom to control the pace and subject matter of the interview. Additionally, a more directive style of questioning was used to require more clarification of information.

3.3.2 Instruments and materials

For the interviews, a research questionnaire was used with open ended questions. The actual questionnaire is in Appendix 8.1. The information from the interviews was gathered by making hand-written notes and using a voice recorder (Marczak & Sewell, n.d.).

3.4 Data analysis and trustworthiness

3.4.1 Data analysis

A thematic, descriptive approach was applied to analyze the data. First, all the notes taken from the interviews were read and the recorded data was listened. Then, the data collected from the interviews were transcribed to get a general sense of the whole information presented. Next, the transcripts were revisited to omit any nonessential data. Simultaneously, participant comments/quote were organized and entered to compile into codes in an excel sheet. After this, the codes were organized into themes or categories across entries for each question. An alphabet was assigned to each category once consensus was achieved regarding the best categories for organizing the data. Categories were arranged from those with highest number of entries to those with the lowest number. And this process was repeated for each group. Finally to synthesize the findings, themes and categories were put into the conceptual framework as result (refer Table 7). The summarized findings were written by noting down the similarities and differences across the groups and powerful quotes to each sub-section was added (Eliot & Associates, 2005). The table below shows a glimpse of the process of analysis (Table 4).

Table 4: View of the analysis processed

PQ3 a)	OPEN ENDED RESEARCH QUESTION	RESULT				
Themes	CATEGORIES	SUB-CATEGORIES	FINDINGS	USEFUL QUOTES	FREQUENCY	RATING OF EVIDENCE
What are the benefits of using TCM from CHCFs?	cost effectiveness (For all the other PQs, open ended research question was categorized, this question was not categorized. PQ3 was used as open ended question. Therefore, once the data was analyzed, categories were identified for the theme; benefit of using TCM from CHCFs.)	experienced effectiveness of the treatment	First they talk of effectiveness, then the guarantee of getting cred and then they gave indication of the advantage that they have in this, ie, minimizes cost.	"one of my sisters wanted to study pilot. But she had 130kg. They have informed her she has to lose her weight to 70 kg. She achieved it here and went."	2	Somewhat Strong (for the pillar question 3)
		guarantee to get cure	But this statement rejects the assumption. This statement has given a high light one the community, where people who take alternative medicines search for ways to minimize the cost. Therefore it suggests that cost is an important factor where benefit is concerned, even for Maldivian context of the reasons why Traditional Chinese Medicine is being used.	"in the community we all are not rich, so the guarantee for the treatment is important to minimize the cost"		
			less costly	This as a guaranty. Guaranty to get a cure. Money, without knowing there's wastage of money in taking conventional medicine... "		

3.4.2 Trustworthiness

Qualitative validity was determined through the use of strategies to check the accuracy of the findings. Focus group discussions and individual interview gives “uncertainty about accuracy of what participants say. Results may be biased by presence of a very dominant or opinionated member; more reserved members may be hesitant to talk” (Marczak & Sewell, para. 12). To produce valid results, focus group and individual interviews were taken till a saturation point was reached and for the situations of uncertainty; it was cleared by interviewing the patient after the group discussions (Eliot & Associates, 2005).

Trustworthiness is determined by credibility, transferability, dependability, and conformability. Credibility will be ascertained while conducting the interview by asking counter questions to confirm the given answers plus by verifying with notes and the transcript with the interviews tape records. Purposeful sampling in this case increased in-depth understanding by selecting information rich experiences from participants who have experienced TCM. Continuous checking for representativeness of data, fitting them between coding categories, maintaining the data and also obtaining suggestions from expert consultants were done (Shenton, 2004).

3.5 Limitations of the study

This study includes all the modalities in TCM because this is an early exploration in the field.

The research is based on group discussions and interviews, where the sample was less. And the first group discussion comprised of 5 females and 1 male, which could

have created disproportionate discomfort within the group that may have prevented some conveying their actual opinions freely. That's why after the GD, the male patient was interviewed to overcome and minimize this limitation. Furthermore, no statistical information has been obtained on the percentage of the population who used TCM.

In the past five years, very few research studies have been done on the subject.

3.6 Ethical considerations

After receiving permission from the ethical committee of Faculty of Health Sciences, the proposal and the questionnaire were submitted for ethical approval to the National Health Research Committee (NHRC) of the MOH; Maldives, (refer Appendix 8.4) and after receiving the approval the study was conducted.

An informed consent was taken from the participants who were willing to participate. The consent form clearly states the reason why this research was being conducted and that the participants signed it on agreement that he/she participated in the research on their own free will and that they can leave the interview at any point of time. Once participants agreed to be part of the study, the moderator developed a rapport in order to get the patients to disclose information. Furthermore, it was mentioned that their identity would not be revealed and the information shared by them will be anonymously maintained and the data would be used only for this research. They were also informed on the time frame where they can withdraw from the research and were assured that, by participating in this research study they will not be exposed to any situation in which they could be harmed (refer Appendix 8.4).

3.7 Dissemination:

The findings of the study will be disseminated as a presentation by the lecturers at the Faculty of Health Sciences of the Maldives National University. However, the final report of this study will be shared with the Ministry of Health and the research study will be published on The Maldives National Journal of Research.

CHAPTER FOUR: RESULT

This study has two objectives. The first objective is to develop a framework to provide knowledge-based information on why patients use AM. Using this framework the study explored why patients used TCM from CHCFs.

The demographic characteristics of the participants are shown in the table below (refer Table 5). There are almost equal numbers of male and female participants of age group 19-59. Most participants (8) are aged 40-49 and most are (8) educated up to O'Level. There is no much difference seen in their employment sector and in individual income per month.

Table 6 shows different forms of TCM treatments that the patients are undergoing. Most patients are undergoing acupuncture (60.9%) and Chinese herbal medicine (56.5%) treatments.

The result is narrated using specific pillar questions.

Table 5: Demographic Characteristics of Patients

Characteristics	Frequency n = 23	Percent %
Gender		
Male	11	47.8
Female	12	52.2
Age		
19-29	4	17.4
30-39	7	30.4
40-49	8	34.8
50-59	4	17.4
Educational Level		
Literate	3	13.0
Up to Grade 7	4	17.4
Up to Grade 9	3	13.0
O' Level	8	34.8
A' Level	1	4.3
Higher Tertiary	4	17.4
Employment Sector		
Government	5	21.7
Private	9	39.1
Self employed	9	39.1
Individual Income		
Less than 5000/-	4	17.4
5000- 7000/-	2	8.7
7000- 9000/-	2	8.7
9000-12000/-	5	21.7
12000- 15000/-	5	21.7
More than 15000/-	5	21.7

Table 6: Form of TCM Treatments Taking by Patients

TCM Treatments	Frequency	Percentage %
Acupuncture	14	60.9
Chinese Herbal Medicine	13	56.5
Massage	7	30.4
Weight Loosing Machine	6	26.1
Cupping	4	17.4

Patients have given multiple replies

4.1 Why are people using TCM?

Several reasons have emerged as the reasons which motivated these patients to use TCM, when the question was asked as; why are you taking TCM?;

1- Effectiveness of TCM

The strongest reason was that they have witnessed the effectiveness of TCM.

“Known this is effective. Friends have taken this treatment and I have seen the change in them.” Female-P11, individual interview (II), January 7, 2016.

“I have seen the result.” Male-P7, group discussion 2 (GD2), January 13, 2016.

And, patients have experienced the effectiveness of TCM.

“This is good, it has been effective... for losing weight” Female –P9, II, January 7, 2016.

2- For some of these patients, CM not being efficient.

“...medicines that doctors prescribe doesn’t relieve the pain. Have to take more pain killers.” Male-P19, GD2, January 13, 2016

“...got conventional medicinal treatment from India and Sri Lanka. Yet, didn't get any cure.” Male-P3, II, December 29, 2015

3- For patients who did not get cure for their illnesses, TCM is an option

"Before all these, as I said before, I have gone to other medical therapies. I didn't get a solution. That's why I have to go to Chinese Medicine." Male-P18, GD2, January 13, 2016.

4- When other forms of medication (CM, AM and 'Dhivehi Beys') was ineffective.

“...even took 'Dhivehi Beys'. When 'Dhivehi Beys' didn't give a cure I travelled here to see this doctor" Female-P4, II, December 29, 2015

"Taken conventional medicine, Ayurveda medicine, 'Dhivehi Beys'. Neurological or venturous diseases is not so easy to treat. Family has seen this as a spiritual thing and so for some time I have put on a 'thaveedhu'. I know Chinese medicine treats neurological problems. That's why I came here." Male-P21, GD2, January 13, 2016.

5- For two of them it was due to dissatisfaction with existing health-care services.

"I have gone to doctors many times, that's from hospitals. Every time what they do is, first they see for a week, then they do tests. But nothing happens." Male-P20, GD2, January 13, 2016

6- TCM was taken for support to lose weight as whole patient care.

“...always tried to lose weight (smile), but you know, couldn't, even with gym it's not achieved...” Female-P11, II, January 7, 2016.

7- CM was not ideal.

"I have a troubled knee. I have seen Doctors many times, but didn't get better for a long time. They always say to do an operation... just to see how

Chinese medicine might effect, I just went for Chinese medicine.” Male-P22, GD2, January 13, 2016.

8- Assumed that TCM does not have side effects.

“Medicine like these usually don’t have side effects. So I think Chinese medicine won’t have side effects.” Female-P14, GD1, January 11, 2016

Patients started using TCM by information through;

1- Friend (13 patients)

"A friend who has experienced Chinese medicine recommended it to me"
Male-P2, II, December 29, 2015

2- Patient own choice (5 patients)

“no one recommended it, I just check it out" Female-P5, II, January 7, 2016

3- Family (2 patients)

"What happened was two of my sisters came here, and lost their weights a lot. That’s why I came" Male-P7, II, January 7, 2016.

4- Relative (2 patients)

"We are now in our 50's. In Maldives there are very few neurologists and there are very few who have knowledge in this area. Then on the information given by one of my relative, I stated the treatment and I feel I’m getting better.” Male-P21, GD2, January 13, 2016.

5- Physician (1 patient)

"Doctor recommended to take herbal medicine because I'm having arthritis."
Male-P19, GD2, January 13, 2016.

The reasons for which motivated the patients were further explored by asking how they got to know about these CHCFs. They got information through;

1- Friends (15 patients)

"I went to Hulhudhuffaaruu and someone from Hulhudhuffaaruu told me to come to this clinic, said this clinic is very good for treating knee pain."

Female-P4, II, December 29, 2015

2- Family (2 patients)

3- Newspaper (2 patients)

4- Patient own choice (1 patient)

"I saw the clinic, before I think this place was in 'Bodu Engine Gey Magu'.

So I went in and asked." Male-P7, II, January 7, 2016

5- TV (1 patient)

6- Neighbour (1 patient)

7- Facebook (1 patient)

4.2 When are people using TCM?

The aim of asking the question; "for which illness you are taking TCM treatment?", was to understand the patients need. By the following answers it is understood that, they were treating both chronic and acute conditions and also for simple ailments.

1- Weight loss (8 patients)

2- Headache (3 patients)

3- Nerve compression (2 patients)

4- Infertility (2 patients)

- 5- Body pain (2 patients)
- 6- Back pain (2 patients)
- 7- Fractured feet (1 patient)
- 8- Knee joint sprain (1 patient)
- 9- Knee pain (1 patient)
- 10- Arthritis (1 patient)
- 11- Hair loss (1 patient)

It was found that one third of the patients (7 out of 23 patients) have used CM along with TCM and one patient among them have used CM and other forms of AM along with TCM and the reasons were:

- 1- Patients believed that combination of CM along with other medicinal treatments might be beneficial.

"I was very disappointed when I didn't get a cure for a long time. Yes, I did take other medications, not only conventional medicine. With conventional medicine I took Ayurveda medicine, thinking if I take everything together I will get a cure faster." Male-P21, GD2, January 13, 2016.

- 2- As a complimentary to CM to restore health.

"...taking conventional medicine, with it wanted to take more treatment (fractured feet; sport injury)" Male-P12, GD1, January 11, 2016.

"Just conventional medicine does not work. To recover it takes long time..., massage treatment, exercise along with medicines gives a quick recovery from body pain" Male-P2, II, December 29, 2015.

- 3- Patient experienced that it was safe to use CM along with TCM.

"No problem has occurred using both the medicinal treatment; I just use conventional medicine on the prescribed time along with this medicine."

Male-P2, II, December 29, 2015.

The other two-third were taking only TCM for the illnesses they have. The reasons were;

1- No side effects:

Patients experienced side effects from CM.

"...some conventional medicines have side effects on fertility, Chinese medicine does not have these kinds of restrictions." Male-P20, GD2, January 13, 2016.

Patient believed that different forms of TM will not have side effects, hence he promotes using of TM more than CM.

"We should avoid conventional medicine... we all know it has side effects. So I will say go for traditional medicine, not only Chinese, our local medicine also." Male-P21, GD2, January 13, 2016

2- Patients have been satisfied with the treatment.

"For me, before I have gone 3 to 4 places I still didn't get a cure. With the advice from friends and information obtained from the newspaper, I took a treatment and got satisfied when I got a cure" Male-P3, II, December 29, 2015.

3- Use of Herbal medicine in TCM Treatments.

"I hesitate to take western medicine for weight loss. Chinese medicine is herbal so I tend to go with herbal medicine." Female-P5, II, January 7, 2016.

4- When patients does not know that there is CM for weight loss.

"I don't know for weight loss there is 'Doctory beys'. That's why." Female-P9, II, January 7, 2016.

4.3 What are the benefits of using TCM from CHCFs?

This question was not categorized when the study was first initiated. It was only once the data has been analyzed, the five benefits were identified. When patients visited CHCFs for TCM treatment they received good service, the service was easy to get, and they provide patient oriented care. For patients who did not get sufficient cure for their illnesses using other treatment methods, TCM has been a successful option and it has found to be cost effective.

Good Services

1- Quick treatment was the most important factor. Patients have claimed that, after the treatment was started on the same day it led to faster recovery.

"This clinic is very good. Once I have got solution for my problem due to quick treatment which has led to fast recovery. Therefore I do not look at the cost." Male-P3, II, December 29, 2015.

"With my experience I wouldn't say European medicine is bad as it is. Treatment is quicker in here than in hospitals, gets relief and service is good...I have recommended this to one of my friend and he is able to walk now, with this experience and without being biased on only Chinese medicinal treatment, I would say that there are pains which will take more

time to heal and sometimes it may heal quickly but the important thing is to get treatment quickly, so the recovery will be faster for the patient." Male-P3, II, December 29, 2015.

The other two factors that have contributed to better services were;

- 2- The clinics were hygienic.
- 3- The privacy that they have gotten while receiving treatment.

"Clinic is very good. Very hygienic, patients separately... then rooms separately; ladies and gents separately so it's convenient.... Till now, doctor is also very good" Female-P6, II, January 7, 2016.

Easy to get services

- 1- Ease of getting appointments has created convenient environment for the patients.

"Most of the time I work in a very busy schedule. In working hours, there's no que to stand. A number, in other word an appointment is arranged when I get there. Likewise there are so many benefits...If I go to another hospital that is to a government hospital or to another clinic...here it's much easier and the way they have arranged their schedule they take it in a very patient oriented manner, not like a way that is hard for the patients or that puts a burden on them." Male-P21, GD2, January 13, 2016

- 2- All the facilities required for the treatment is available in house.

"If I go to some other place, blood test can be done from somewhere else, and X-ray should be taken from another place...from here... the

requirements can be fulfilled in-house when I come out." Male-P22, GD2,
January 13, 2016

Patient orient care

1- Doctor friendly

"Here doctors are fairly friendly, in other ways easy; rooms are kept separately, ladies and gents separated. Easy environment... Medication is also good" Female-P6, II, January 7, 2016.

2- Satisfaction from the treatment; particularly was shown from patients who has gone to receive weight losing treatments when they get fast result.

"This is the fifth class. Now lost 4kg" Female-P8, II, January 7, 2016

3- Kindness from staff

"...they give treatment immediately. This is the reason I like to go there mostly. Also, when they give treatment they show kindness, which makes me want to go there. And a little payment is enough." Male-P20, GD2,
January 13, 2016.

Cost saving

Cost saving occurs when patients experiences its effectiveness over a period of time. For example;

"One of my sister wanted to study piolet training. But she weighed 130kg. They have informed her that she have to decrease her weight up to 70 kg. She achieved it from here and went to train as a pilot." Male-P7, II, January 7, 2016.

Such experiences gave patients an assurance to get a cure,

"This as a guarantee. Guarantee to get a cure. Money, without knowing there's wastage of money in taking conventional medicine... In the community everyone is not rich, so the guarantee for the treatment is important to minimize the cost. " Male-P19, GD2, January 13, 2016.

Patients talked about cost saving together with the effectiveness of TCM and with the surety of receiving a cure from the treatment.

Table 7: Pillar Questions Conceptual Framework Summary of the Findings

Objective	Theme	Categories	Sub-categories (given numbers are frequencies, n=23)	
To understand why patients use TCM from CHCFs.	Pillar Question 1: -Reasons which motivate people to <i>use</i> Alternative Medicine- What are the motivating factors to use Alternative Medicine? PQ 1 a) Why are people using TCM? (WHO, 2013)	1. Patients got information of CHCFs from (How did you know about CHCF?):	Friend (15)	
			Family (2)	
			Newspaper (2)	
			Patient own choice (1)	
			TV (1)	
			Neighbor (1)	
			Facebook (1)	
			2. Patients started using TCM by information through (Who recommend you to use TCM?);	Friend (13)
			Patient own choice (5)	
			Family (2)	
			Relative (2)	
			Physician (1)	
			3. *Reasons which motivated patients to use TCM (Why are you taking TCM?)	TCM is effective (14)
Conventional medicine is not efficient (6)				
For patients who did not get cure for their illness, TCM is an option(5)				
Other forms of medications (CM, 'Dhivehi Beys', AM) not being effective (3)				
Due to an increasing dissatisfaction with existing health-care services (2)				
TCM is taken for a support to lose weight as whole patient care(1)				
Patients thinks that TCM won't				

		have side effects (1)
		Patient seek TCM because CM is not being ideal (1)
Pillar Question 2: -Individual <i>needs</i> - Does individual needs often determine when people use Alternative Medicine?		
PQ 2 a) When are people using TCM? (WHO, 2013)	1. Patients take TCM treatment for chronic conditions or acute conditions such as; (For which illness you are taking TCM treatment?)	Weight loss (8)
		Headache (3)
		Nerve compression (2)
		Infertility (2)
		Body pain (2)
		Back pain (2)
		Fractured feet (1)
		Knee joint sprain (1)
		Knee pain (1)
		Arthritis (1)
	Hair loss (1)	
	2. *If patients were taking conventional medicine along with TCM for the illness, the reason for taking both medicinal therapies.	Combination of CM along with other medicinal treatments might be beneficial (4)
		Complimentary to CM to restore health (2)
		Patient experienced that it is safe to use conventional medicine along with Chinese medicine (1)
3. *If patients were taking only TCM for the illness, the reason for taking only TCM.	Patient got satisfied with the treatment (12)	
	No Side effects (6)	
	Uses Herbal medicine (2)	
	Patient does not know that there is conventional medicines for weight loss (2)	
PQ 3: - <i>benefits</i> - Are there benefits of using Alternative Medicine from Health Care Facilities (HCFs)?		
*PQ 3 a) What are the benefits of using TCM from CHCFs?	1. Received good services	Quick treatment (11)
		Hygienic (3)
		Patient privacy (3)
	2. Easy to get service	Easy to get appointment (5)
		All the facilities required for the treatment is available in house (2)
	3. Patient orient care	Doctor friendly (5)
		Satisfaction from the treatment (2)
		Kindness from staff (1)
	4. Cost saving (2)	
	*indicates multiple replies to the question.	

CHAPTER FIVE: DISCUSSION

This study is a stepping stone on building knowledge based information for a much required national policy on TM and AM, to further develop the health care system of the Maldives. As early as 1963, different forms of AM were present in the country (Didi, 1936) and in 2003 the first CHCF service was started (Ministry of Health, 2015d), showing that the demand for different types of AM services were increasing. In improving individual health of population, these different forms of AM can and will play a major role (WHO, 2013).

The study is an exploration of the reasons why TCM is used in Maldives based on WHO Traditional Medicine Strategy 2014-2013. As this is a qualitative study, the study does not show the magnitude of the reasons, need and benefits for individuals. However, findings shows that the use of TCM from CHCFs is not based on a particular age group, educational qualification, employment sector or on their earnings (refer Table 5).

5.1 Why are people using TCM?

The reasons which motivated patients to use TCM include it being effective, while CM not being efficient. TCM is an option when there is no cure for their illnesses, an increased dissatisfaction with the existing health care services and ineffectiveness of other medications (CM, AM, Dhivei beys), contribute to the preference. Furthermore, TCM is taken as a support to lose weight as whole patient care while CM is not ideal and patient perception of TCM having no side effects was also important. Recent studies have shown these similar results (Carmady & Smith, 2011; Hung et al., 2012;

WHO, 2013). The one reason which attention must be given is the last reason which is stated. In other studies people have used TCM to reduce side effects from other therapies. (Carmady & Smith, 2011; Lam et al., 2009; WHO, 2013). It is not wise to conclude that TCM therapies come without any side effects. Most of these therapies are not clinically tested and its use have not been monitored effectively (WHO, 2002). However, TCM is a two thousand year old medical therapy (WHO, 2010) and it has been widely used in developed countries as well (Wu et al., 2015).

The result of the study reveals that TCM was recommended by friends, family/relative and physician. Sometimes going for TCM was the choice of the patients themselves. These results were found in Gau et al. (2012) and Lam et al. (2009) studies. Patients found out CHCFs, mainly from friends.

5.2 When are people using TCM?

The patients are taking TCM treatments for weight loss, headaches, nerve compression, infertility, pains, sports injuries, arthritis, and hair loss. Chen et al. (2007), Ried and Alfred (2013) and WHO (2013) are some of the recent studies that align with the above results of this study. Most patient who participated in the study are taking TCM for self-health care as they are proactive about their own health, like losing weight. The gathered information also showed that patients take treatment for chronic conditions, like nerve compression, arthritis and for minor ailments such as headaches and other pains. While traumatic injuries like fractures and sprains have been taken care by 'Dhivehi Beys' for long, they are now under taken through TCM. This may be because TCM uses herbal medicine and it is a 'Traditional Medicine' same as 'Dhivehi

Beys' (WHO, 2013) and most importantly, the results indicate the role TCM playing in primary health care need of individuals in Maldives.

To understand the utilization pattern of medical care, PQ 2a) 2 and 3 (refer Table1) were asked. It is found that 7 patients out of 23 are taking CM along with TCM, thinking it could be beneficial, as a complementary to CM to restore health and patients experienced that it is safe to use CM along with TCM. These results are seen in Carmady and Smith (2011), Gau et al. (2012), Hung et al. (2012), Lam, et al. (2009) and WHO (2013) studies. When this behavior is analyzed in different countries it is found that in Taiwan TCM and CM for glycemic control in diabetic goes along together and it has been promoted (Hung et al., 2012), while in Eastern Uganda, use of TMs for treatment of diabetes are considered as a bad practice (Rutebemberwa, et al., 2013). Hence, this conflict is of the rational use of TM and AM (WHO, 2002). If the country's regulatory work is well established, rational use of its TM and AM can be monitored and this will give assurance of its efficacy, safety and quality. In such situations the importance of a policy is fully comprehended. In Maldives before registration, TCM are evaluated to ensure the safety (Ministry of Health, 2015a). Therefore consumers who use medications that is not being registered should understand the risks that they are taking and relevant departments of Ministry of Health should take notice of this finding.

Among the rest of the group; 16 patients took only TCM. Before going into reason-why, it is important to understand the question. In a way you could say this is a repetitive question because some of the answers of this question is same as of PQ 1a) 3 (refer to Table 1). These are slightly similar questions asked in a different way in a different angle. Here, the aim is to understand why they are taking only TCM, but while they are giving the answer they are also telling why they chose TCM. Keeping this in

mind the question was asked and the question has given some extra information which is important. The reason includes TCM being effective, TCM having no side effects and the preference to use herbal medicine. Studies done by Carmady and Smith (2011) and Hung et al. (2012) agree that TCM have been effective. Herbal medicine is natural (WHO, 2013) but patients need to know it can be harmful in the way it is consumed. A very harmful condition may occur if it is consumed with CM (WHO, 2002). In situations where patients decided to take both TCM and CM, this must be informed to both the Chinese medicine practitioner and the conventional health care professional. Conventional health care professionals need to be aware of these information are relevant to their practice. The other point needed to highlight is that the patient who is seeking treatment for arthritis has mentioned that his physician approves opting for traditional or AM to improve his health condition. But it is not clear that all the patients who takes CM along with TCM reports this to their physicians. It is important to understand this behavior and further studies on this subject should explore this information in depth.

5.3 What are the benefits of using TCM from CHCFs?

Several themes appeared under this question. The benefits of using TCM from CHCFs are receiving good services, easy to get services, getting patient oriented care and most importantly cost saving. In a study done by Rutebemberwa et.al. (2013) study showed that patients prefer clinics due to the difficulties in accessing hospitals. This situation is present in Male' city as well. Indhira Gandhi Memorial Hospital (IGMH) is a fully health insurance covered (through Asandha) tertiary government hospital for the population of Maldives. The atoll hospitals also cover health insurance but all the

facilities present in IGMH is not present in atoll hospitals or island health centers. This creates demand and with limited resources, it leads to difficulties in providing services. For these reasons people choose to go to private health care where it is partially covered by Asandha or it is not covered at all. Because of these reasons it was assumed that choosing TCM would not be for cost saving. But the findings of this study states otherwise. Community, where people who takes TCM search for ways to minimize the financial cost and it is an important factor where benefit is concerned. “Potential cost savings are an important reason for individuals to opt for” (WHO, 2013, p. 29) TM and AM services.

For the betterment of this population, it is important to conduct more studies since the result of this study is definitely not enough to formulate a policy. Also, it is important to acknowledge the fact that health promotional activities should always be preferably on the needs of individuals, as stated in the mission of Ministry of Health. Therefore, further studies are needed to analyze the cost of AM to compare the cost difference of CM and AM in primary health care. The outcome of such a study could benefit the government in make decisions to include these services in health insurance scheme (Aasandha), which could in return benefit the population (WHO, 2013). Apart from this, there is a real challenge facing the Maldives, which is internet- based supply of products that needs to be studied in order to avoid a public health issue that may arise from the consumption of unknown quality, safety and efficacy of products.

The study was conducted to assist a policy which will not limit the access to TM and AM. The policy must focus on promoting ways to reduce cost to primary health care. This can be achieved by promoting TM and AM. Promotion should be in the

boundaries of safety, efficacy and quality practice and products. These responsibilities fall upon the shoulders of producers, health care practitioners and regulators. Consumers have to ensure rational use. The government have to make policies that enable to complete this cycle by incorporating TM and AM into the national health care system. Why? Why not? What is the point of not getting the benefit from thousands of years of experience like TCM in a systematic manner that can be acceptable to current era (WHO, 2002)?

CHAPTER SIX: CONCLUSION AND RECOMMENDATION

6.1 Conclusion

To improve the quality of health among Maldivians, health care system should integrate TM and AM through the health policy (WHO, 2013) in order to put a high priority on protective and promotional health (Ministry of Health, 2014). This will in return increase and improve access to primary health care (Ministry of Health, 2014). The very basic that needs to be understood is, why AM is being used (WHO, 2013). To understand this framework has been developed to explore the reasons why AM is being used. The framework is used to understand the reasons why TCM is being used. The motivating factors for patients to use TCM are effectiveness of TCM, the inefficiency of CM and other forms of health care (AM, 'Dhivehi Beys'), TCM remaining as an option when there is no cure for their illnesses, increasing dissatisfaction with current health care services, whole patient care, patients' belief that TCM have no side effects and CM not being ideal. TCM and CHCFs are mostly recommended by friends and family. Patients are using TCM when they have chronic and acute conditions and other minor ailments. Out of 23 patients 7 patients are using TCM along with CM. TCM is taken as a complementary to CM to restore health. They believe it could be beneficial and experienced that it is safe to use, which is a concerning discovery that relevant government sectors or authorities must take notice of. Patients should also inform their use of both types of medical care to Chinese health care provider and conventional health care professional. The rest of the 16 patients took only TCM. The reasons for only taking TCM were its effectiveness, no side effects and use of herbal medicines. Patients

who seek TCM must understand the important fact that TCM may have side effects and in instances herbs may be harmful. The benefits of using TCM from CHCFs are receiving good services, easy to get services, getting patient oriented care and cost saving. Cost effectiveness was an important finding because for the Maldivian context, cost saving was assumed inapplicable as a benefit since Aasandha is provided only for patients who seek CM, in which case these patients would need to pay out of their own pocket. Therefore, findings from this study indicate the role TCM playing in primary health care and importance of acquiring knowledge-based information for policy. Hence, the result has given a strong evidence for the reasons why TCM is used in Maldives and the result of the study can be transferable to a wider the population of the similar context on the reasons why TCM is used from CHCF.

6.2 Recommendations

6.2.1. Recommendations for implementation

- Build an adverse reaction mechanism for TCM
- Encourage conventional health care professionals to seek more knowledge about the use of TCM and other forms of AM (WHO, 2013).
- Aware patients on safe and proper ways to consume TCM.

6.2.2 Recommendations for policy makers

- The magnitude of TCM and other forms of AM being used in the population must be evaluated. By collecting this data, all the forms of AM used, the number

of people using different forms of AM and the amount of use can be understood to evaluate its need and benefit.

- On the outcome of such a finding the scope of the sector must be defined to meet the demand of public.
- For different form of AM different approaches must be applied in forming policies and regulations since they are based on different theories, its scientific advancement are at different levels, popularity and use differs.
- For the regulatory work, resources such as finance, human capacity and capability must be ensured.
- Organize education and training for policy makers and regulators (WHO, 2013).

6.2.3 Recommendations for further research

- Analyze the cost of AM, compare the cost difference of CM and different forms of AM in primary health care.
- A real challenge facing the Maldives, which is internet- based AM which needs to be studied to avoid a public health issue that might arise from the consumption of unknown quality, safety and efficacy of products.

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Appendix 8.4: Consent Form

تعمیراتی منصوبہ

انڈسٹریل ڈیولپمنٹ کارپوریشن آف پاکستان کے زیر نگرانی اور نگرانی میں تعمیراتی منصوبہ کے تحت تعمیراتی کاموں کی کارروائیوں کو جاری رکھنے کے لیے آپ کو درخواست ہے۔

آپ کو مطلع کیا جا رہا ہے کہ تعمیراتی کاموں کے دوران آپ کو کئی پریشانیوں کا سامنا کرنا پڑ سکتا ہے۔ آپ کو یہ بھی بتایا جا رہا ہے کہ آپ کو کئی پریشانیوں کا سامنا کرنا پڑ سکتا ہے۔

آپ کو یہ بھی بتایا جا رہا ہے کہ آپ کو کئی پریشانیوں کا سامنا کرنا پڑ سکتا ہے۔ آپ کو یہ بھی بتایا جا رہا ہے کہ آپ کو کئی پریشانیوں کا سامنا کرنا پڑ سکتا ہے۔

آپ کو یہ بھی بتایا جا رہا ہے کہ آپ کو کئی پریشانیوں کا سامنا کرنا پڑ سکتا ہے۔ آپ کو یہ بھی بتایا جا رہا ہے کہ آپ کو کئی پریشانیوں کا سامنا کرنا پڑ سکتا ہے۔

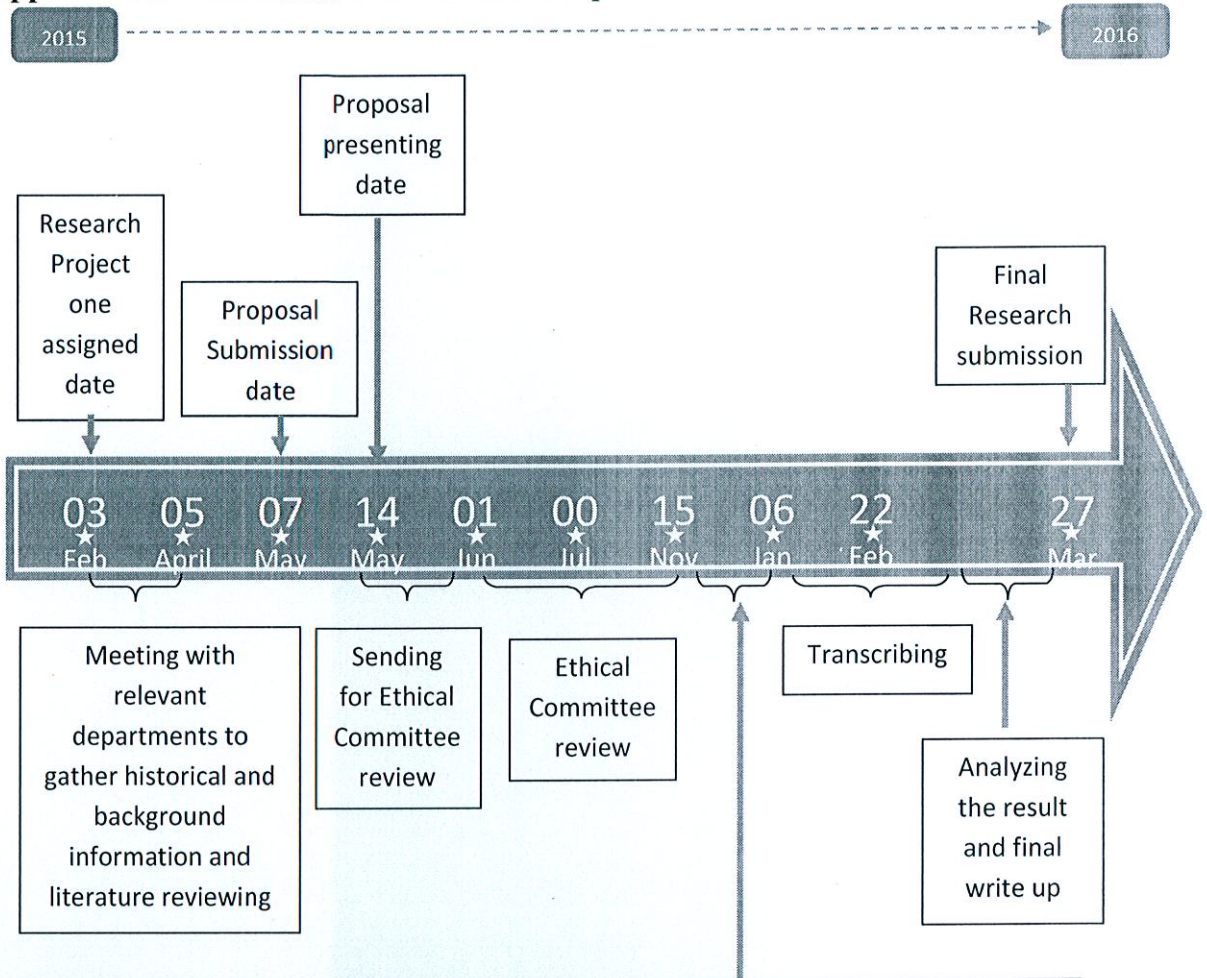
29 جولائی 2015

تعمیراتی منصوبہ

انڈسٹریل ڈیولپمنٹ کارپوریشن آف پاکستان کے زیر نگرانی اور نگرانی میں تعمیراتی منصوبہ کے تحت تعمیراتی کاموں کی کارروائیوں کو جاری رکھنے کے لیے آپ کو درخواست ہے۔

تعمیراتی: _____

Appendix 8.5: Timeline and Dissemination plan



Activity	Date
1. Meeting with owner of CHFCs	19 th November 2015
2. Briefing about the project and giving required training to moderator and assistant moderator.	21 st November 2015
3. Approaching patients and Advertising the project using the flyers	25 th November – 15 th December 2015
4. Collecting the information of the volunteers	17 th December 2015
5. Contacting volunteers to confirm date, place and time for the group discussion by phone	17 th – 25 th December 2015
6. Pre testing	26 th December 2015
7. Conducting individual interviews and group discussions	29 th December 2015- 13 th January 2016

Appendix 7.6: Budget

Activity	Budget
Printing Flyers	100 Flyers= 50/-
Printing Questionnaires and consent form	(12*6= 36) 40 questionnaires= 80/-
Water, drink and snacks, coffee	1000/-
Fees for moderator and Assistant Moderator	500*2=1000/-
Fees for transcribing	Per group interview= 500/-, 500*6= 3000/-
Total (maximum amount)	4130/-
Allocated Budget	10,000/-