

**DISPARITIES IN HEALTH AND HEALTH CARE:
A CASE STUDY IN BUDDHIST THAIS AND MUSLIM THAIS
IN NAKHON NAYOK PROVINCE**



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Thesis
Entitled

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IN NAKHON NAYOK PROVINCE**



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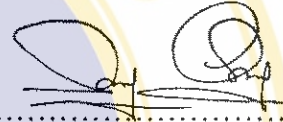
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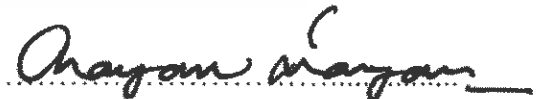
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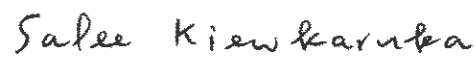
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DISPARITIES IN HEALTH AND HEALTH CARE: A CASE STUDY IN BUDDHIST THAIS AND MUSLIM THAIS IN NAKHON-NAYOK PROVINCE

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THESIS ADVISORS: SIRIWAN GRISURAPONG, Ph.D., ANAS AMARTAYAKUL, Ph.D.,
GUSOL SOONTHORNDHADA, Ph.D., ARAYAN TRANGARN, Ph.D.**ABSTRACT**

The purpose of this study is to investigate disparities in health and health care in issues of accessibility, utilization, and quality of services of Buddhist Thais and Muslim Thais in Nakhon-Nayok Province, after 3 years implementing the Universal Coverage Program. This research was cross-sectional descriptive research, using a constructed interview to survey 166 Buddhist Thai households, and 234 Muslim Thai households which respected or accepted a chief of family or representative, aged from 18 years upwards.

The study found that Muslim Thais often had illnesses caused from food consumption and physical exercise such as diabetes mellitus, hypertension, cardiopathy, and hyperlipidemia, more so than Buddhist Thais. Moreover, from body mass index, Muslim Thais had an index level beyond criterion (obesity) more than Buddhist Thais. There were disparities in health status between religious groups, particularly in females, individuals aged 30-44 and 45-59 years old, and married.

For disparities in health care, a significant difference was found in terms of cultural accessibility, Muslim Thais deemed that some provided services were not compatible to Islamic Principles and there were few Muslim service providers. Muslim Thais significantly utilized services as outpatients and inpatients more than Buddhist Thais. There was also a significant difference between religious groups in selecting medical premises, i.e. most Muslim Thais utilized services at medical school hospitals which had a high capability, while Buddhist Thais mainly utilized services at community hospitals due to arrangement of areas under the Universal Coverage Program. Utilization at different places affected perceived quality of services. Muslim Thais reported that they encountered mistakes in treatment, did not understand what the doctor said/explained, had unsuitable waiting times, felt medical staff did not honor them, and received poor quality of services, all significantly more than Buddhist Thais. Muslim Thais who had a tendency to receive poorer quality of service than Buddhist Thais were females, individuals aged 30-44 years, married, poorly educated persons, agriculturists, individuals doing general work for wages, low income earners, and persons utilizing services with a Gold Card (30 Baht health scheme).

Muslims Thais perceived that medical staff provided services with prejudice and discrimination more than Buddhist Thais. There was a significant difference between religious groups in females, persons aged 45-59 years, married persons, poorly educated person, and persons utilizing services with a Gold Card (30 Baht).

All results from the study show disparities in health and health care of persons having different religions. Results can be applied as basic information for planning, implementing, or setting up health policies to build up the equity in health and health care for people in each group.

**KEYWORD: DISPARITIES IN HEALTH AND HEALTH CARE/ BUDDHIST THAIS/
MUSLIM THAIS/ UNIVERSAL COVERAGE PROGRAM/ THAILAND**

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ความแตกต่างทางสุขภาพและการดูแลสุขภาพ: กรณีศึกษาชาวไทยพุทธและไทยมุสลิมในจังหวัดนครนายก
(DISPARITIES IN HEALTH AND HEALTH CARE: A CASE STUDY IN BUDDHIST
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บทคัดย่อ

การศึกษานี้มีจุดประสงค์เพื่อศึกษาความแตกต่างทางสุขภาพและการดูแลสุขภาพในเรื่องการเข้าถึงบริการ การใช้บริการและคุณภาพบริการของชาวไทยพุทธและไทยมุสลิมในจังหวัดนครนายก หลังจากดำเนินโครงการหลักประกันสุขภาพถ้วนหน้ามาแล้วประมาณ 3 ปี ใช้วิธีการวิจัยเชิงพรรณนาแบบภาคตัดขวาง ใช้แบบสัมภาษณ์ที่สร้างขึ้นสำรวจความคิดเห็นกลุ่มตัวอย่างชาวไทยพุทธ 166 คนวัยเรียน ชาวไทยมุสลิม 234 คนวัยเรียน โดยสัมภาษณ์บุคคลในครัวเรือนที่เป็นหรือยอมรับว่าเป็นหัวหน้าครอบครัวหรือตัวแทนที่มีอายุ 18 ปีขึ้นไป

ผลการศึกษาพบว่า ชาวไทยมุสลิมเจ็บป่วยด้วยโรคที่มีสาเหตุมาจากพฤติกรรมบริโภคและการออกกำลังกาย เช่น โรคเบาหวาน โรคความดันโลหิตสูง โรคหัวใจ ภาวะไขมันในเลือดสูงมากกว่าชาวไทยพุทธ เช่นเดียวกับการประเมินจากระดับดัชนีมวลกายชาวไทยมุสลิมมีระดับดัชนีมวลกายเกินเกณฑ์(อ้วน) มากกว่าชาวไทยพุทธ โดยเฉพาะในเพศหญิง, ผู้ที่อายุ 30-44 ปี และ 45-59 ปี รวมถึงผู้ที่สมรสแล้วที่พบความแตกต่างของสถานะสุขภาพระหว่างกลุ่มศาสนาอย่างมีนัยสำคัญ

ด้านการดูแลสุขภาพในเรื่องการเข้าถึงบริการพบความแตกต่างอย่างมีนัยสำคัญในการเข้าถึงบริการทางวัฒนธรรม ชาวไทยมุสลิมเห็นว่าการจัดบริการบางกิจกรรมยังไม่ถูกต้องตามหลักศาสนาอิสลามและมีผู้ให้บริการที่เป็นคนมุสลิมน้อยมาก ชาวไทยมุสลิมไปใช้บริการรักษาพยาบาลทั้งแบบผู้ป่วยนอกและผู้ป่วยในมากกว่าชาวไทยพุทธอย่างมีนัยสำคัญ ส่วนการเลือกใช้สถานพยาบาลพบความแตกต่างระหว่างกลุ่มศาสนาอย่างมีนัยสำคัญเช่นกัน กล่าวคือ ชาวไทยมุสลิมส่วนใหญ่ไปใช้บริการที่โรงพยาบาลของมหาวิทยาลัยซึ่งเป็นโรงเรียนแพทย์ที่มีศักยภาพสูง ขณะที่ชาวไทยพุทธไปใช้บริการที่โรงพยาบาลชุมชนเป็นหลัก อันเป็นผลจากการจัดแบ่งพื้นที่ของโครงการหลักประกันสุขภาพถ้วนหน้า การใช้สถานพยาบาลที่แตกต่างกันนี้เองส่งผลต่อการประเมินคุณภาพบริการที่ได้รับแตกต่างกัน โดยชาวไทยมุสลิมเห็นว่าตนเองต้องเผชิญกับความผิดพลาดในการรักษา, ไม่เข้าใจในสิ่งที่หมอพูด/อธิบาย, เวลารอคอยกับเวลาที่ได้รับการบริการไม่เหมาะสมกัน, รู้สึกว่าเจ้าหน้าที่ไม่ให้เกียรติและได้รับบริการไม่ดีมากกว่าชาวไทยพุทธอย่างมีนัยสำคัญ โดยกลุ่มไทยมุสลิมที่มีแนวโน้มว่าจะได้รับบริการที่คุณภาพไม่ดีมากกว่ากลุ่มของชาวไทยพุทธคือ เพศหญิง, ผู้ที่อายุ 30-44 ปี, ผู้ที่สมรสแล้ว, ผู้มีการศึกษาน้อย, เกษตรกร, ผู้ประกอบอาชีพรับจ้างทั่วไป, ผู้มีรายได้น้อย และผู้ใช้สิทธิ์บัตรทอง 30 บาท

สำหรับความคิดเห็นต่อการให้บริการ ชาวไทยมุสลิมเห็นว่าเจ้าหน้าที่ให้บริการแบบมีอคติและดูแลแบบเลือกปฏิบัติมากกว่าชาวไทยพุทธ โดยพบความแตกต่างอย่างมีนัยสำคัญระหว่างกลุ่มศาสนาในเพศหญิง, ผู้ที่อายุ 45-59 ปี, คนที่สมรสแล้ว, ผู้มีการศึกษาน้อยและผู้ใช้สิทธิ์บัตรทอง 30 บาท

ผลการศึกษาทั้งหมดแสดงให้เห็นถึงความแตกต่างทางสุขภาพและการดูแลสุขภาพของคนที่มีความแตกต่างในการนับถือศาสนา ซึ่งสามารถนำไปใช้เป็นข้อมูลพื้นฐานในการวางแผน ดำเนินงานหรือกำหนดนโยบายด้านสุขภาพเพื่อให้เกิดความเป็นธรรมทางสุขภาพและการดูแลสุขภาพให้แก่ประชาชนแต่ละกลุ่มต่อไป

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CHAPTER I

INTRODUCTION

1.1 Background

The declaration of World Health Organization stated that “having the good health is regarded as a fundamental right that everyone should receive at the high standard level as much as possible”. It is congruent to the human rights principle which stated that “everyone has the right to a standard of living adequate for health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control” and “everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status”. Almost every country has adopted this international principle since 1946. Thailand is giving the importance to the good health and well-being. The constitution of Kingdom of Thailand 1997 article 52 of the section of the personal right and freedom stated that “A person shall enjoy an equal right to receive standard public health service, and the indigent shall have the right to receive free medical treatment from public health centers of the State, as provided by law”, “The public health service by the State shall be provided thoroughly and efficiently and, for this purpose, participation by local government organizations and the private sector shall also be promoted insofar as it is possible”, “The State shall promptly prevent and eradicate harmful contagious diseases for the public without charge”; and article 81 of the section of the foundation principle for establishing the government policy stated that “The standard public health service by the State shall be provided and promoted thoroughly and efficiently”. These are the important goals that every sector

must pay attention to the equitable health services to all people regardless of their social class.

At present, however, the good health status and well-being for all people have not actually occurred yet. The competition in getting possession of resources for better living, the drug resistance in the infectious diseases arose to the poor, the burdens from non-infectious disease, the behavior related diseases, including the domestic and international inequity, are increasing. The globalization, the free trade system, the market oriented economic system, and the liberal democratic system spreading over to the country are the main cause making the people weaker, or making the inferior become the socially marginal person. As well, they originated the inappropriate ratio of the person having health problems.

The inequality in health started from the unequal infrastructure in the society. Generally, dying and having good health are huge different situation. The inequality in health is the consequence from the economic factors and the relationship in the society. As a result, in order to eliminate the disparities of the health outcomes, the correction of the social inequality must be focused on (WHO, 2001:6).

Thailand has used of National Economic and Social Development Plan as the guideline for developing country for not less than 40 years. It is considered that there is satisfactory success in economic, social and infrastructure aspects. Or it can be said that there is success in upgrading the quality of life of people. Thai people have better health, higher average age of the newborns, the decreasing tendency of the mortality rate of mothers and babies for the past 10 years, as well as the decreasing rate of nutrient deficiency in the children aged 0-5 years. The communicable diseases which were once very harmful such as smallpox was eradicated and some communicable diseases have had the decreasing tendency continuously. These health indices reflect that the overall health status of people is getting better (Kanjaneer Kangwanpornsir et al., 2003: 42).

Although the health development in the big picture is getting better in terms of the resource distribution, the health problems of inequality and inequity still are found, which can be observed from the health situation of Thai people in both region and area levels. The service providers and health resources are concentrated in

Bangkok and urban areas making oversupplies of some resources, whereas these resources are repetitively insufficient in some rural areas. It can be noticed that in 2000, 1 Bangkokian doctor took care only the 793 citizens, while 1 North-eastern region doctor must took care of 8,311 people, which is 10 times difference. In the same token, the different rate of dentist distribution is more or less the same (Public health statistics, 2001). Besides, the socially inferior group could not equally access to service which can be observed from the national survey results of provincial health situation in terms of the accessibility to the public health in 1995, 1996 and 2001, which found that the people would opt for self-medication at the percentages of 19.1, 13.1 and 19.0 respectively when they had little sickness. Half of them gave the reason of convenient transport and less cost. When their sickness was getting more, they still preferred self-medication and gave the same reason of convenient transport (Kanjaneer Kangwanpornsir et al., 2003).

The public sector, as the responsible person, has tried to solve the problems by proposing the policy of Health Insurance to the people. This policy was officially implemented in 1975 by giving the low income persons a right to receive the service from public health care facilities free of charge. Later in 1994 the coverage was expanded to other deserving groups including the old people, the children aged 0-12 years, the disable persons, the war veterans and their families, and the monks, the novice monks and the religion leaders (Viroj Na Ranong and Anchana Na Ranong, 2001: 1-2). Nevertheless, a lot of people still did not have health insurance. From the 1999 survey of the coverage in health welfare health and health insurance in Thailand, it found that 20 million Thai people were not under any health insurance system, and 23 million people were under the social welfare system which did not have any guarantee for the quality service standard (Samrit Sritamrongsawad, 2000). Furthermore, the service receivers suffered from the system that only doctors set the time for the patients and the patients did not have chance to negotiate, the conflict problems among the service providers, and the frequent rudeness of service providers to poor patients. These were regarded as the disparity of service quality resulted from the social class discrimination (Yotin Sawangdee et al., 2000).

In 2001, the government proposed the policy of “Universal Coverage Program” with the aim to build up the equality in terms of the distribution of health budget, to improve the efficiency in management, to increase the appropriate service alternatives, and to focus in health construction rather than health repair. Consequently, public health circles became alert; each health care facility changed the operation pattern and expanded their services to the people. Nevertheless since this program is in the transitional period, the operators lack the knowledge and understanding, and there is the limitation in budget so that the efficient service system can not be provided equally to the all levels of the receivers. The poor still receive not good enough and low-grade services. The 2002 survey result of National Statistical Office found that 23.1 percent of people holding gold card who received the services faced with the following problems: long waiting queue - percentage of 66.9, can not use the services after official working hours - percentage of 15.7, and the things should be taken note are the fact that the primary health care facilities did not provide referrals for the patients and the secondary/tertiary health care facilities did not accept the referred patients at percentages of 4.6 and 1.8 respectively. Only the 10 percent of receivers used the service of health promotion. When comparing with the past services, the 29.5 percent of receivers considered that the quality of the service and quality of medicines was getting worse. Almost samples themselves in the survey wanted to choose the health care facility used with the gold card and it was also found that almost people who made use of the right in gold card were poor, the well-to-do persons would not use it since they were not sure in quality of services (National Statistical Office, 2002: 1-11).

Having a good health depends on many factors including economic, social, culture and health service system itself. The inequity in health is the picture reflecting the unbalance in society and the public health system that might be good to solve the problem or become the problem. The fact that there is no chance in accessing to public health system equally; or the system in some place is inefficient. As a result, the resources that should be enough for all people were accumulated for some groups only so that the inequity arose (Samrit Sritamrongsawad and Supasit Pannarunotai, 2000: b). Having the good public health system and the equitable resource distribution

is considered as the government's important tool to make the good health for all people equally.

In order to develop the health service system, aside from the economic factors, the social and cultural factors should be paid attention as well. The study of Smedley, Nelsen & Stith pointed out that the person in the minority group has a tendency to receive health care services with the poorer quality than the person not in the minority group. The happening of this thing is related to the factors of accessibility, such as having the health insurance and their income is controlled. All disparities have revealed the inequity with the complexity and involving with many aspects in each level composed of health system, management process done upon the minority group, management in the receipt of the services, health profession including the patients themselves. In the study of analyzing the situations of patients' illness, it found that - when other factors were controlled constant - stereotype, bias and uncertainty of service providers was clearly the main principles to make the inequality in health care services. From the various situations, such as the structure determined by the time pressure, several complicated perceptions, as well as financial pressure would escalate the events of the inequity, resulting in the fact that the health care services did not meet the need of patients who were in the minority group. The minority group had a hard time to access the services while others in the same level were guaranteed. The problems included language, geographical characteristics and cultural familiarity. Further, the changes in financial system and organization of health system including the existing regulation, rule, and policy would be treated differently among the people and had the negative impact to the capability of the minority group to have the good quality service (IOM, 2002: 1).

In Thailand, Muslim Thais are classified as a minority group different from Buddhist Thais in terms of race, ethnicity, religion, language and tradition. Currently, the differences in race, ethnicity and language are declining, resulted from the cross marriage between the different races, migration and the increase of Thai language usage; however, Islam is the religion that is very different from other religions. Although the factors making difference are decreasing, the difference in the whole picture clearly exists. We can say that it is the most obvious compared to other ethnic

groups in Thai society (Saowanee Jitmuad, 1988: 255-256). In terms of the number and the political significance, Muslim Thais are considered the largest minority group accounting for the 4.86 percent of Thai population or around 2.8 million people (National Statistical Office, 2000), separately locating almost all provinces. The dense population of Thai Muslims will be found in the 5 bordering provinces in the Southern region and the provinces in Central region around Bangkok. They have the way of life from birth to death, making living, worship, health care services etc. tied to religion principle tightly. Their systems of thinking, belief, and value are distinctly different from the majority of Buddhist Thais. Like other people, their fundamental problems that should be solved and taken care are poverty, lack of knowledge, illness etc. (Manee Chu-thai, 2001: 1-2). The development and solving these problems must take the cultural limitations of the ethic group into account in order that they can accept the given innovations.

The government health service is a method to make people have the good health. The pattern of health services provided for Muslim Thais should have specific characteristic and concern of the religion principle in terms of the way of life. The service providers are required to have this knowledge and understanding. However, in some areas there are very few Muslim public health officers. When they get sick and need to go to a health care facility, most of the officers do not understand their religion and culture. Further the setting of policy, management including rules and regulations is in accordance with medical criteria and is for the majority people that might not suit for the way of life of Muslim person. When a Muslim patient can not follow these rules and regulations, the service providers might prejudice or discriminate against them, not give the equal treatment. While a patient himself might refuse the treatment or go to the health care facility late, resulting in their poor health and not having equity in health and health care services which are the fundamental rights of everybody.

In the joint meeting between the public administrators and religion leaders for making the strategic plan in developing public health for Muslim Thais in March 2004, the Permanent Secretary of Ministry of Public Health said that the bordering areas of Southern region, where most of the population are Muslim Thais, had the

significant problem in maternal and child health. It was found that the mortality rate of mother was around 3 times higher than those of other areas, and the mortality rate of baby was around 2 times higher since the pregnant women in these areas preferred giving birth with a traditional midwife to a health care facility. Moreover, there were problems of malnutrition in children as well as endemic diseases e.g. hookworm tuberculosis, and elephantiasis with the higher rate than other areas. The correction guidelines were to make the hospitals arrange the place of making religion worship for delivery patients; for other diseases, the mobile medical unit would be provided to serve in villages or mosques. The religion leaders also would educate people in the issues of health care services according to the religion principle (Office of Public Health, Region 12, 2004: 2). The adjustment in the policy and the operating procedure as the guidelines mentioned in the areas, where a lot of Muslim Thais are living, can be done without considering many limitation factors. However, in the areas where the Muslim Thais communities are small, there will be the obstacles while adjusting procedure in terms of time pressure, limited resources and the most important thing – the negative perception and attitude towards Muslims.

Nakhon-Nayok Province is located in the Central region, it has the population of 248,445 persons, and the yearly average household income is 12,595 Baht. There are 4.8 % of population having the income of 860 Baht /month, which is below the poverty line; the literacy rate is of 90.5 % (Kanjane Kangwanpornisiri et al., 2003: Annex). There are Muslim Thais living in this area at 5.86 % or around 15,000 persons descending from the Southern region immigrants since early Rattanakosin period (Jaran Maluleem et al., 2539). Most of their communities will be in the south western of Ongkarak District. This group of Muslim Thais adjusted themselves to the way of life of Central region Thai people and their general living patterns are similar to Buddhist Thais; the only difference is culture rooted from the religion principle.

Consequently, the researcher is interested to study how the health status of Buddhist Thais and Muslim Thais in Nakhon-Nayok Province is and whether there is disparity of health care services in terms of accessibility, utilization, and quality of service – after the Universal Coverage Program is implemented. These important issues will reflect the equity in the health service system. It is expected that this

research will have benefits to the planning and making health policy including the running Universal Coverage Program to be congruent with the way of life and the need of people in each group.

1.2 Research Question

1) How is health status of Buddhist Thais and Muslim Thais in Nakhon-Nayok Province? Is there any disparity of health care in terms of accessibility, utilization, and quality of service?

2) When the population, socio-economic and health insurance factors, i.e. gender, age, marital status, education occupation income and type of health insurance, are taken into the consideration, how is the disparity in health status and health care in terms of accessibility, utilization, and quality of service between Buddhist Thais and Muslim Thais in Nakhon-Nayok Province?

1.3 Objective

1) To explain the health status and health care in terms of accessibility, utilization, and quality of service that Buddhist Thais and Muslim Thais in Nakhon-Nayok Province are receiving.

2) To study the factors related to the disparities in health status and health care in terms of accessibility, utilization, and quality of service of Buddhist Thais and Muslim Thais in Nakhon-Nayok Province.

1.4 Scope

This research was done as the descriptive research in the type of cross-sectional study by soliciting the opinions of the samples in Nakhon-Nayok Province which has Muslim Thais living there at 5.86 %. Most of Buddhist Thais and Muslim Thais in this area make a living in similar ways; all of them speak the same language. The only difference is the living patterns rooted from religion principle. Therefore there might be the limitation for making the inference to other group.

1.5 Limitation

The household samples will be selected from the villages where both of Buddhist Thais and Muslim Thais are living in. However their homes were built into the group of kindred, the systemic random sampling of the households can not be

done. Instead, the purposive sampling will be used. As a result, there might be the bias from the sample selection.

1.6 Operation Definition

Health status refers to the assessment of health situation received from one's own perception, the illness / personal illness and from body mass index.

Self-health perception refers to the feeling of one's own overall health status at one point of the time; in what scale his health belongs to – excellent, good, fair, or poor.

Illness refers to the physical or mental uneasiness causing a difficulty to a person for making a normal living. The illness can be recognized by the person himself or the diagnosis from the specialist.

Body Mass Index:: BMI refers to the assessment of body mass calculated from body weight/height². The normal value is between 18.5 – 24.9 kg./sq.m. (Department of Health, 2002) received from measuring weight and height of a sample before interviewing, then the samples were divided into 3 groups, i.e. thin, normal, and fat.

Accessibility refers to the rights that each person can receive the available health services as they need without the limitation in geographical, financial and cultural/belief factors.

Utilization refers to the actual receipt of the services in health care facilities as needed or when getting sick.

Quality of services refers to the receiver's perception or opinion to the care received from service providers.

1.7 Usefulness

This study will make us know the disparities of health status and health care that Buddhist Thais and Muslim Thais in Nakhon-Nayok Province are receiving, including the factors related to those disparities when the universal coverage program has been implemented. The insight from this research can be use as the guideline for planning, taking action, and preparing health policy so that the distribution and allocation of public health resources will be suited to the need and the equity will be materialized as much as possible.

CHAPTER II

LITERATURE REVIEW

The study of disparities in health status and health care: A case study in Buddhist Thais and Muslim Thais in Nakhon-Nayok Province, researcher reviewed literatures related to concepts, theories and relevant researches works as follows:

- 2.1 Concept of Equity in Health and Health Care
- 2.2 Universal Coverage Program
- 2.3 Concept of Minority Group
- 2.4 Disparities in Health Care Services for Minority Group
- 2.5 Conceptual framework
- 2.6 Hypothesis

2.1 Concept of Equity in Health and Health Care

Equity is an abstract characteristic that must be practically defined for understanding the same meaning among all people. There are many close defined meanings of equity in Thai language such as equality, fairness. The Thai dictionary, the edition of the Royal Institute 1999, gave the meaning of equality as owning the equal parts, having the same rights as everyone else, the meaning of fairness as justice and rationale. The fairness has the context close to the legal process. In this study, the researcher will use the word of equity.

2.1.1 The basic concept of equity

Equity is a concept closely congruent and related to human rights principle. It is based on the rightness and fairness created by a society and it determines the relationship norm of people in the society. In principle, there will be no one who gets advantage or disadvantage regardless of natural chance or social circumstance (Rawls, 1971 quoted in Suwajee Jantanom-Good, 2000: 10).

It is difficult to understand equity philosophy and receive consensus in this issue. It depends on social theory of each group to have supposition and interpretation (Supasit Pannarunotai, 2001: 95). The philosophic argument in equity concept can be divided into 2 kinds, i.e. liberal concept and equality concept. The person who believes liberal concept will refuse equality of everybody and accept only the existence of minimum standard. The things beyond this standard will be considered as rights and freedom of each person that can be bought or acquired by each person's capability. In contrast, the person believing in equality concept considers that everybody should have equality in all aspects from having equal chance to receive care from society equally and having the resembling health results.

Le Grand who has the concept tending to equality concept said that each person will be able to choose the best choice based on his judgment and freedom must be given to everybody. From this cause the equity as choice will be materialized. If judgment is confined by the compositions that the person can not control, the collective system is required to build up the security of choice (Le grand, 1991 quoted in Supasit Pannarunotai, 2001: 96).

William said equity refers to the fair distribution which Aristotle gave the principle as: the fairness is the treatment to the equal persons with equality and to the unequal persons with inequality according to the ratio of the difference (William, 1993:287).

Rawls said that the first most important equity is the freedom of citizens that everybody should have equal right and freedom. Secondly, resources or primary goods including income, wealth, status, responsibility and prestige must be distributed into the lowest level of the people in order to improve their social status. This principle is called Maximin Principle: the least must receive the most (Rawls, 1971 quoted in Sassi, Archard & Grand, 2001:10). Then Peter & Evans explained the equity in line with this concept that the inequality in society can be adapted like the socio-economic condition and political requirement. This adaptation is not the sacrifice of the group losing benefits to the group gaining benefits solely (Peter & Evans, 2001: 24-33).

Barry said that equity is a comparative principle to consider a person or a group of person who must have interaction with other people. He claimed that “equity is the equality of the things that must be shared equally, and is the inequality of the things that should not be shared equally” (Barry, 1990). His idea is similar to the vertical and horizontal equity concept of Culyer & Wagstaff who stated that the horizontal equity is the equal resource allocation or distribution for the equal needs and the vertical equity is the unequal resource allocation for the different level of requirement (Culyer & Wagstaff, 1993).

It might be said that equity is an ethical concept that eludes precise definition. Synonyms are social justice or fairness, which certainly mean difference people at difference time. Equity implies that need rather than social advantage is considered in decisions about resource allocation. Equity is not the same as equality; inequities are inequalities that are judged to be unfair, i.e., both unacceptable and avoidable (Whitehead, 1992: 431). Besides Bambus & Casas (1999: 12-21) proposed that equity is not only the equal resource distribution but also the fairness of the results. Later, Braveman & Gruskin added that definition of equity must be put into practice and can be evaluated (Braveman & Gruskin, 2003: 254-258).

From the above meanings and concepts, it can be concluded that equity is making the avoidable difference, which can not be accepted or is unfair, lower or disappear in order that everybody will receive the equal chances and have the legitimacy to access the fundamental factors necessary for living and allocation must be done according to the need of a person.

2.1.2 Equity in health

Equity in health is the concept that requires the efforts to understand it since it has been given the meanings by many groups of people. The group emphasizing the issue of poverty considers that the poverty is the origin of inequality and leads to the inequity in society. The solutions must follow the concept of “basic needs of human beings”. The group emphasizing the issue of equality considers that the difference between the poor/socially inferior groups with the wealth group will become wider as time passes. The measurement of inequality between the different groups of people will be easier than the evaluation whether the equity happens or not. As a result, there

are many published academic articles that measured the inequity from the inequality in society; however, there is a dispute that the equality is different from the equity in many cases; an inequality society might have equity, whereas in another case, making more equity in society is to reduce disparities between the best group and the worst group. For the group interested in the inequality of health status will concentrate in solving the problem of unfairness observed from inequality or poor health status of socially inferior person (Gwatkin, 2000: 4).

The academic persons have given the meanings and proposed the concept of equity in health summarized as follows:

Braveman & Gruskin (2003: 255-258) stated that the definition of equity in health must consider the following elements:

- Equity means social justice or fairness; it is an ethical concept, grounded in principles of distributive justices. Equity in health can be-and has widely been-defined as the absence of socially unjust or unfair health disparities. For the purposes of operationalisation and measurement; equity in health can be defined as the absence of systematic disparities in health (or in the major social determinants of health) between social groups who has different level of underlying social advantage/disadvantage-that is, different positions in a social hierarchy.

- Equity is not the same as equality. The concept of health inequity focused attention on the distribution of resources and other processes that drive a particular kind of health inequality-that is a systematic inequality in health (or in its determinants) between more and less advantage social groups, in other words, a health inequality that is unjust or unfair.

- Equity is equality in terms of rights and opportunities to be healthy according to the highest standard or is the thing that the advantaged social groups are receiving at that time and will be the minimum standard for everybody in the future.

- Ease of avoidability should not be a criterion for inequity. The principle is whether those things can be avoided in terms of technique, finance or morality (Bambus & Casas, 1999: 17).

-The consideration in equity must uphold the rational principle according scientific methods.

Tongjan Hongladarom (1997: Appendix page 26) stated that equity in health is about having equal chance in seeking for health services and reducing difference into minimum. The difference causes the inequity in health can be noticed in various way. The first one that can be clearly noticed is the difference in geography between the person living in urban and in rural or the person living in developing country and in developed country. The second way is the difference between people with different races, religions, and cultures. The third approach is the difference between occupation and social class. The fourth direction is the difference between working persons and jobless person. The fifth method is the difference in education. The sixth approach is the difference between the groups with different incomes. And the seventh way is the difference between gender and age.

Whitehead stated that inequity in health is unnecessary difference in health. It can be avoidable, can not be accepted, and is unfair. She proposed that difference in health situation has arisen from the major determinants as follows:

1. Natural, biological variation.
2. Health damaging behavior that is freely chosen, such as participation in certain sports and pastimes.
3. The transient health advantage of group over another when that group is first to adopt a health-promoting behavior (as long as other groups have the means to catch up fairly soon.
4. Health damaging behavior in which the degree of choice of lifestyles is severely restricted.
5. Exposure to unhealthy, stressful living and working conditions.
6. Inadequate access to essential health and other basic services.
7. Natural selection or health-related social mobility involving the tendency for sick people to move down the social scale.

Disparities in health situation originated from the first three determinants are not considered as inequity or unfairness, but the determinants in number 4, 5, and 6

will be considered as the avoidable thing and will unfairly affect disparity in health. For the determinant in number 7, although the illness might be unavoidable, the sick person must have lower income and it will be considered as an unfair thing and it is likely to be prevented. (Whitehead, 1992: 431-432)

Braveman practically defined the equity in health as minimizing the inequality in health and avoidable determinants causing the gap (not limited to the only health care) within the group of persons who have different social benefits or rights such as authority, wealth, or prestige according to the social status when comparing with other groups (Braveman, 1998:2). Mills additionally proposed that giving the practical definition of equity in health in each level that must be considered in the contexts of each country, local as well as the culture. (Mills, 1998:2)

EUROWHO defined operational definition of equity in health as the equitable opportunity for everybody to be healthy according to their potential and there is nobody losing the opportunity to achieve the good health if the causes of bad health can be avoided (Whitehead, 2000).

It can be noticed from the various definitions and meanings that they are the questions of giving values close to the fairness concept in society. When used in health, it will be linked to the disparities in health or inequality in health that is considered as unfairness. The most important dimension of the inequality in health is the disparities according to the income or economic situation, but there are other important dimensions such as inequity in gender, education, occupation, residential area, race, and ethnicity (Braveman, 1998: 7) including religion and political right (WHO, 2001). Consequently, these disparities must be paid attention in the process of making equity in health.

In summary, the consideration of having equity in health will take the disparity health status both from avoidable and unavoidable causes into account. For the avoidable part, if the unfairness or unacceptable things make disadvantaged persons get more disadvantages, this will be called as the inequity in health (Health Inequity) as shown in figure 1.

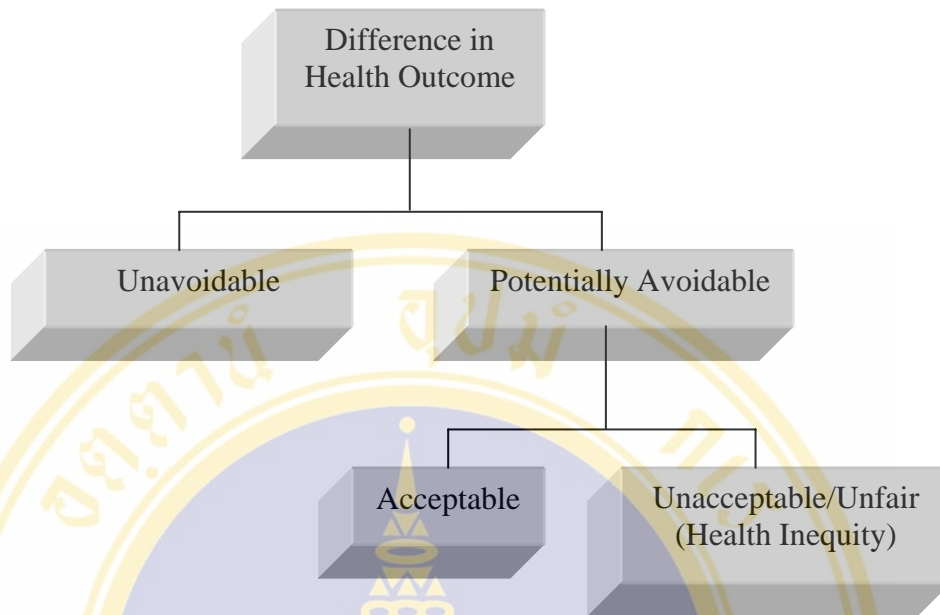


Figure 1 Judging the equity of health outcome
Source: Whitehead (1992)

2.1.3 Equity in health care

The word of “health system” has the immense meanings but the word of “public health system” has narrower meanings referring to only the system of health care services (Praves Wasi, 2000: 22-23). Consequently, the difference between health status and health care should be clearly identified because a health care service is one determinant of health status (Braveman, 1998: 3). However, the good and equitable public health systems are considered as the important tools for the health care services towards well-being and good health of people.

One of the explanations in the concept and meaning of equity in health care is the fact that equity in health care means that health care resources are allocated according to need, health services are received according to need, and payment for health services is made according to ability to pay. Equity in health care implies a commitment to ensuring high standards of real (not only theoretical) access, quality and acceptability in health services for all. The geographic location of facilities and personnel reflects potential access with respect to geographic barriers. Real access, which requires overcoming many different kinds of barriers (e.g., language barriers,

lack of knowledge, or perceived poor quality of available services) in addition to geographic and financial obstacles, can only be determined by measuring the quantity, nature, and quality of the services that people actually receive (WHO, 1996: 21; Braveman, 1998: 3).

Whitehead defined the operational definition of the equity in health care as the equal accessibility for the equal need, the equal service utilization for the equal need, and the acceptance of equal service quality for everybody (Whitehead, 2000). In this meaning, the equal accessibility for the equal need refers to the possession of equal right of each person for the equitably distributed services in all areas according to the need of the person including the easy accessibility to the services in all regions as well as the elimination of obstacles which affect to the accessibility. The equal service utilization for the equal need must be carefully interpreted; the disparity in rate of utilization does not mean inequity because the difference occurred when some people do not go to use it. Only the utilization is limited due to the socio-economic inferiority will be considered as the inequity. Consequently, the emphasis will put on the equal service utilization for the equal need. The equal service quality for everybody refers that the service providers must try to give the same service for all people with the uniform standard and the customers' service acceptance is also an important component of the service quality (Siriwan Grisurapong, 2003:11-14).

In order to determine the conceptual framework for making National Health Disparity Report: NHDR and National Health Quality Report: NHQR in USA, the Institute of Medicine (IOM) gave the meaning of equity is a component that applies to both populations and individuals. It is defined in terms of "providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status". For populations, equity means reducing disparities in the use of health care services that are related to personal characteristics such as race, ethnicity, socioeconomic background, and geographic location. For individuals, it refers to the receipt of safe and effective services based on need. In order to evaluate these disparities, the 4 components of health care services, which are safety, effectiveness, patient centeredness, and timeliness are proposed as the horizontal factors. For the vertical factors, the 4 components from the consumer

perspective on health care needs, which are staying healthy, getting better, living with illness or disparity, and coping with the end of life, are used as shown in figure 2.

Consumer Perspective on Health Care Needs	Components of Health Care Quality			
	Safety	Effectiveness	Patient Centeredness	Timeliness
Staying Healthy				
Getting Better				
Living with Illness or Disparity				
Coping with the End of Life				

↑

← EQUITY

Figure 2 Frameworks for the NHQR and NHDR
Source: IOM, (2002: 12)

From the meaning and concept of equity in health care mentioned, we can conclude the equity in health care as the ability that everybody can access to the health services according to need, can utilize the health services according to need, the services have good quality and are recognized by all people, the avoidable obstacles of good health care services will be reduced or eliminated.

2.1.4 Monitoring equity in health

The consideration whether or not each social group received equity in health must have the monitoring to evaluate pattern and tendency of inequality existed in society in combination with the regulations in the past. The emphasis will put on the avoidable inequality and the unfair things. Therefore “monitoring equity” implies an ongoing assessment of how different social groups are faring in absolute terms as well as the size of gaps between groups. The primary goals of monitoring is to serve an early-warning system, to indicate whether the combined effects of all the policies influencing equity in health appear to be heading in the right direction, i.e., toward both an absolute improvement for everyone and a narrowing of the avoidable gaps (Braveman, 1998: 4). These procedures must include various health index of each group to make a comparative evaluation.

Braveman (1998:20-21) proposed the index to monitor equity in health as follows:

1. Indicators of health status for assessing equity

- Children's growth and nutritional status, and particularly rates of stunting (low height-for-age) among children < 5 years old.
- Child (under 5) mortality and, where possible, its components assessed separately: neonatal, post-neonatal, and infant mortality, and mortality among children 1-4 years old.
- Life expectancy at birth, or at age 5, or related measures.
- Maternal mortality ratio.
- Rate of tobacco use as a major risk factor for important chronic non-communicable diseases.

2. Indicators of major determinants of health status

Indicators that are ideally measured at both the individual-and group-or area levels include the following:

- Safe water and sanitation.
- Food supply.
- Adequate housing.
- Poverty (based on income, expenditures, or economics assets)
- Educational attainment.

The following indicator is only relevant when measured at the group-or area-level:

- Income inequality in the society.

3. A key indicator for assessing equity in health care financing

- The burden of payment for health care.

4. Indicator of health care resource allocation for assessing equity

- Public expenditures for health care.
- Distribution of qualified health care personnel.
- Distribution of health-care facilities at the primary, secondary, tertiary and quaternary levels.

5. Indicators of the utilization and quality of health care

- Immunization coverage of infants
- Reproductive health care coverage, Including:
 - o Antenatal care coverage

- Safe delivery care coverage
- Contraceptive prevalence rates
- Quality of primary care as reflected by the availability of essential drugs.
- Access to health care referral services as reflected by appropriate representation of disadvantaged populations among the users of referral-level facilities.

IOM (2002: 1-2) proposed guideline for making National Health Disparity Report of various ethnic groups focused on:

1. Measurements of socioeconomic status in disparities research; the applied indices are income and education
2. Measurements of disparities in health care services and quality; the applied indices are the coverage of health insurance, accessibility in terms of language, location of health care facilities and accessibility to mental health services
3. Measurements of disparities in health care access; the applied indices are the possession of health insurance, proportion of persons who do not receive home visit and health situation visit, location of health care facilities and the number of service providers, the prevention and diagnosis of a treated disease after the inception of the symptom, the reduction of impact of chronic diseases, the reduction of prevalence of disease and pain with the prompt treatment
4. Measurement of disparities in health care services according to geographic units, the applied indices are the disparity between regions, the condition of being rural and urban

Monitoring equity situation must be periodic inspection to observe the changes of situations. It requires methods that can be used all times. The methods should be easy to handle, have low cost and can be done by only one research. However, since the study of disparities in health and health care: a case study in Buddhist Thais and Muslim Thais in Nakhon-Nayok Province has limitation in budget and operating time, researcher chose the method of interviewing community with the technique of Rapid-Assessment and used the indices to monitor equity in health and health care services as follows:

Health status indicators

From the definition of “health”, we can conclude that healthy is the well-being of individual at the normal condition in daily life. Consequently, illness is abnormal or pathological of the body. If abnormality can not be reduced or eliminated, it will lead to bad health condition or illness. Also illness has the cultural meaning. Giving the meaning of healthy or illness is the concept related to cultures, traditions and ceremonial procedures in each society. The manifestation of some indications might be regarded as illness in society, but same manifestation might be considered healthy in another society. Besides, the meaning of healthy or illness is also associated with perception and value of individual (Mallika Mattiko, 1999: 1).

The perception in health situation by letting individual expresses his opinion towards his own health situation is one assessment method that can reflect health situation at that time. There was a study found that self-health perception was related to death; a person who gave assessment as poor health would die more than a person who gave assessment as good health (Wannamethe & Shaper, 1991). However, there is a problem that self-health perception is subjective and it is often different in giving weight depending on individual’s experiences. As a result, another measurement in health situation was created. It was setting up reference frame of the illness, i.e. the illness refers to state that an individual can not work, making a living in daily life within the specified period (Santad Sermsri, 2002: 245). However somebody argued that measurement of health status by considering illness, health status assessment and receiving health-care services in a medical premise is not the assessment method to show the actual health situation. The illness assessment also requires internal and external perspectives. It is the combination of a patient’s feelings and the decision from an expert based on the diagnosis with the measuring equipment in order to make a health index trustworthy in usage (Sen, 2001: 69-75).

Nutritional status is the health status caused from consumption and a body receives nutrients and use energy from the nutrients. The nutritional status is associated with socio-economic and cultural conditions of a person (Saovanee Jakpitak, 1989). Somebody mentioned that a healthy person refers to the person who has strong and sound body structure which can physically and mentally function well.

As a result, receiving nutrients and having good nutritional status are important factors to make healthy (Orem, 1995). Sahyoun (1992) found that the long life is related to nutrient, nutritional status and deterioration of a body when the age increases; and the study in countries located in the east of Mediterranean Sea found relation between people with obesity of body mass index over 29 kg./sq.m. and reduction of life expectancy. The study in Oman found that the mortality rate of population will increase when the body mass index is more than 25 kg./sq.m. (Metha et al.,1995)

In Thailand there is a proposal in using body mass index to evaluate health situation since it will be easy to put into practice, suitable for field work study, reliable in adult and elder groups (Vichai Tanpaijit, 1993; Jureeporn Jitjamroonchokchai et al., 1994; Nutrition Division, 1995). Bureau of Health Promotion, Department of Health set up the suitable body mass index in adult Thai people at the normal value between 18.5 – 24.9 kg./sq.m. (Department of Health, Ministry of Public Health, 2002).

Therefore, in this study the researcher chose the indices for health status assessment as follows:

1. Illness
2. Self-health perception
3. Body mass index: BMI

Health care indicators

Health care disparities, including those in service utilization and quality, can be measured in absolute or relative terms. Measuring disparities in absolute terms means comparing the care received to evidence-based standard of quality. Measuring disparities in relative terms usually involves comparing the care that racial and ethnic minorities receive to the care that major receives (IOM, 2002: 22).

From reviewing concepts and meanings of equity in health care, it was found that the indices used in assessing actual service condition should be reflected from customers' perspective, too. Consequently, this study chose the following indices as the components of health care services:

- **Accessibility**

Braveman stated that to access equity it is essential to measure health care utilization, i.e., the actual receipt of services or the actual coverage of the population with services, in addition to the availability of services. Actual utilization is distinguished from the theoretical ‘availability’ of health services reflected by where and how facilities and personnel are allocated. (Braveman, 1998: 81)

Whitehead stated that the equal accessibility for the equal need refers to the fact that everybody should have equal right in utilization of health services and must have thorough, fair public health resource distribution based on the necessity in health care services of people in area and geographic condition and they can access to the services. Also the problems and obstacles affecting the accessibility such as race, gender, age, religion or other factors not directly associated with the necessity in health care services for example financial status, regulation and culture of organization that obstruct the service acceptance of people must be eliminated. Although in theory a person might have the right in health care services, he might be practically restricted. For example, traveling cost which is a burden for low income earner, the limitation in receiving the available services, the working hours of health care facility that may be inconvenient for utilization and language and cultural barriers, these things may allow only some groups of people access to the services (Whitehead, 1992: 434-435).

Some scholars disagree about whether utilization of services is an acceptable measure of “access,” because it does not take into account the effect of different “preference.” This controversy notwithstanding, it is only by measuring the actual utilization of health services, rather than the theoretical availability of services, that one can determine whether health care actually is or is not delivered. There are multiple obstacles to obtaining access to health services in addition to obvious financial, geographic, and linguistic barriers. Obstacles include, for example, a lack of awareness of the need for a given services or of how to obtain it, fear of adverse legal or social consequences of receiving care, or other beliefs that could deter care-seeking. Perceived low quality of care can be a powerful barrier to utilization even of “free” services, especially when time costs (travel and waiting times) to receive

services are substantial. If such powerful influences are not taken into account, the concept of “access” may not be very meaningful and may result in a tendency to “blame the victim.” Approach to the delivery of health care that are suitable for some social groups may not be appropriate for others with fewer advantages (Mooney, Hall, et al., 1991 quoted in Siriwan Grisurapong, 2003: 79).

Measuring actual utilization implicitly takes all significant barriers to realized access into account. A limitation of this approach, however, is that one needs to consider whether under particular circumstances certain groups may freely choose not to seek certain services considered beneficial by the society at large. An example would be a religious group that, despite reasonable efforts to provide understandable information on associated risks and benefits, believes that certain procedures should not be performed. While such instances of truly free and informed choice to forgo specific services do occur, the far more usual circumstance is that in which a population group at particular risk of underutilization does not receive a given services in large part because they lack sufficient information and/or support to overcome ameliorable obstacles. It is important to consider whether the health sector has made a reasonable effort to reduce modifiable barriers, and whether an individual’s choice not to receive services is truly made freely, based on an informed decision. The “preference” of an individual who has not been adequately informed of the importance of a given services or who requires and has not received special support represents a manifestation of lack of access, rather than free choice (Aday & Anderson, 1981).

Access can be defined as entry to the system of care as well as entry within the system of care. Access is a central aspect of quality. The framework treats access as an important aspect of all four components of health care quality: safety, effectiveness, patient centeredness, and timeliness. However, access deserves greater prominence in its own right because it is a critical starting point for quality care. As such, it is a fundamental aspect of quality, especially for racial and ethnic minorities, those with fewer socioeconomic resources, and those in disadvantaged geographic areas.

As a result, access should be reconceptualized as a dimension of health care rather than as a dimension of medical care alone. Access to physicians and other medical care professionals is essential: it provides the diagnoses, medical interventions, and monitoring that can be critical to preventing and treating illness. However, primary care physicians typically coordinate care received from other health care specialists including nutritionists, dentists, and occupational, physical and mental health therapists.

Disparities in access depend in part on the social and human capital of the patient and the community. Some factors play important roles, including adequate and secure material resources; community norms that favor healthy lifestyles; social support networks supplied by families, friends, and religious, professional, social, and civic organizations; the availability of safe and convenient places to exercise and shop for fresh food; well-developed transportation systems; high literacy rates; and low crime rates (IOM, 2002: 19-20).

As such, a wide range of measures of access influence entry to the system of care as well as entry within the system of care. They include factors as diverse as the extent of insurance coverage, language access services, and other aspects of culturally competent care. For example, cultural competency is critical in the diagnosis and treatment of mental illness: behavior that is interpreted as mental illness in one culture may be an appropriate way of displaying emotion in another culture.

The accessibility to equal health services does not have geographical, socio-economic and cultural limitation or language barrier. The geographical limitation can be measured from length of transportation, traveling time and other obstacles that hinder the service utilization. The economic limitation can be measured from the purchasing power in services. The socio-cultural limitation can be measured from the convenience in accessibility, the speed of waiting time, the usage of understandable language in communication, the appreciation to the value, belief and attitude of patient (Brown, Franco & Hatzel, 1992 quoted in Anong Euwattana, 1999: 35).

From concept and theory explaining the accessibility, the researcher used their indices in the study of equity in health care services in terms of accessibility; i.e. everybody must have equal right in utilization of the available health services in

accordance with their necessity, there will be no problem, obstacle and difficulty in accessibility in the following aspects:

- Geographical aspect will be considered from mode of transportation, traveling length and traveling time.

- Financial aspect will be considered from traveling expenses and opportunity to choose the utilization of services.

- Cultural aspect will be considered from experience in services provided whether it is congruent to the religious belief.

- **Utilization of health services**

Equity assessment must measure utilization of the service in order to observe whether the services actually cover all people or not. Aside from provisions of services, the actual utilization is different from the theoretical available services. The existing of services only reflects how health care facilities and personnel are and where they are.

When the concept of equal utilization for the equal need is used, it must be carefully interpreted because the difference in utilization rate between groups of people does not mean the inequity. Sometime the difference might arise from some groups of people do not utilize the services due to some religious or cultural reasons. In the same token, the willing to make equality in some utilization might cause unnecessary treatment. However, if the utilization is exclusive for some people owning to the socio-economic factors, the service provider must focus on making equal utilization for the equal need (Siriwan Grisurapong, 2003: 12-13).

ADay & Leoprapi (quoted in Saisampan Rubkwan, 1986: 17) studied the pattern of utilization and proposed the model. The selection of public health service utilization depends on various factors as follows: 1) personal factors such as perception in one's own the illness, perception in public health facilities, time, past experience, time, familiarity with service providers, transport, finance socio-economic and cultural characteristics 2) characteristics of health care facilities including service quality, reputation, devices, equipment, friendliness with people and community, cost of service utilization, and waiting time 3) interfering factors include traveling length,

vehicle, conditions of road or river course, opinion of friends and relatives, and the other alternative health care facilities.

From concept and principle explaining the utilization of health services, the researcher applied their several factors in the study of disparities in health care in terms of utilization of health services of Buddhist Thais and Muslim Thais. In this study, the number of utilization, types of health care facilities utilized, the refusal to the treatment including the reasons of refusal will be considered.

- **Quality of services**

Quality is the beneficial condition to users. In view point of a professional operator, quality is the practice following to the required standard; it is involved with regularity and can be predicted. While in view point of a user, quality is the response to the need and expectancy of the buyer. It is divided into 2 levels. The first one is the quality that must be included. It is the lower level that must exist because if there is no this kind of quality, customers will be unsatisfied. The second one is quality that is impressive. If there is no this quality, customers will be indifferent. It is provided to make customers' admiration and solidarity so that they will use the services again. Therefore, the provision of services that have two kinds of quality is necessary (Anuwat Suppachutikul, 2002: 1).

The provision of quality services should be the effective services, meaning that these services can make the best result to health problem which is happening and problems that might happen in future. It must be treated with the holistic approach. Firstly, the person utilizing the services will not be perceived as only a patient or a service taker. In contrast, the worries or doubts that might arise should be observed. The service providers should have mutual understanding with the service taker. Secondly, the continuing care is the fact that the service taker should receive care since the inception of health problem until the end of problem. Lastly, the harmonizing care consisting of the provision of services in treatment, prevention and health promotion including educating the service taker which can be done in parallel will build up more faith and confidence in the services. Therefore these three characteristics should be supplemented to create quality of the most effective service (Yongyut Pongsupap, 1999: 36).

The service providers must try to offer the same services for all people, in order that each person will receive care with the same standard. The inequity will arise when a medical personnel does not offer the services to some groups of people as equal as other groups. He may spend less time for low class people. There is a study in Britain found that a doctor would spend less time for a patient in low class and would refer less patients in this class to a specialist (Cartwright & O'Brien, 1976; Blaxter, 1984 quoted in Whitehead, 1992: 436). Besides, it was found that the quality of the services in socially inferior area would not have quality as well as that of other areas since the experienced medical personnel often did not want to work in these areas. The affirmation in the services is the important component of quality of the services. Some kinds of services might have inequity arisen from management and made the services unacceptable in some people who should receive the services. The guideline for solving these problems is try to build up affirmation by providing the services in the pattern that people want (Siriwan Grisurapong, 2003 14).

From the concepts and the principles in equity above mentioned, quality of services refers to the same health care services for all social groups, there is no discrimination. The provision of services should be acceptable for all groups. In this study the measurement in quality of the services will be done by the way of thinking towards the utilized services in the issues of confidence in service providers, heed to the problems of patients, the understanding in what doctors say/explain, the involvement in making decision of treatment methods, the feeling of having questions to ask but did not ask, the feeling of having questions to ask but did not ask, the suitability of waiting time compared to the caring time, quality of medicines, the attention in appointment of receiving the services, feeling honored from doctor/staff, overall quality of the services, refusal treatment, prejudice, and discrimination.

2.2 Universal Coverage Program

Universal Coverage Program is the policy that intends to build up health insurance or security for Thai people. When they get sick, they can go to see a doctor for advices, care, or treatment without worrying in the fees and losing treatment opportunity. The government will pay for the treatment in accordance with the regulations (Office of the Health Care Reform Project, 2001: 3). Besides, the program

also puts emphasis in health promotion and prevention of disease to each person as necessity.

In the beginning, the government created Universal Coverage Program for Thai people who did not have any privilege and they could utilize health services without worrying about fees. The government released the cabinet policy, general announcement edition, and volume 118, special section of 21 Ngo, dated 21 March 2001 to transmit the urgent policy in creating Universal Coverage Program to reduce medical care expenses in whole picture of country. The people would pay 30 Baht per time for services. The policy also would create opportunity to equally and thoroughly access to the standard public health services (Royal gazette, 2001: 5).

For the operation, the government set up national health insurance fund and made a national health insurance law to increase the health budget efficiency and reduce the burden of people in accessibility to health services. The Ministry of Public Health orders in Universal Coverage Program 2001, Royal gazette, general announcement edition, and volume 118 special section of 31 Ngo dated 2 April 2001 was effective on 1 April 2001. At the beginning, there were in 6 provinces participating in the program. Later on it expanded to 21 provinces and covered all provinces in fiscal year 2002. The persons who have a right in Universal Coverage Program include all Thai people who previously have not had any legal medical care privilege.

2.2.1 Objective of program สร้าง universal coverage program

The operation in universal coverage program has the objectives to be succeeded as follows (Office of the Health Care Reform Project, 2001: 15-16):

1. Equality, equal right, no discrimination, no different standard in treatment: everybody is responsible in putting money into health insurance fund; but the payment must not make difficulty to anybody or any group. The payment will be shared equitably (sharing suffering, sharing happiness).

2. Efficient systems: the health systems must have good management, in other word, the resources will be utilized economically (without reducing standard of services) and the people can conveniently utilize the services (easy to access, near

home, choices available). The systems will be managed to prevent complication for both patients and service providers. The medical care will emphasize health promotion and prevention of disease to reduce the illness and overall health expenses of the country. The auditing procedure will be set up and the system auditors will be specified. The people should have involvement in auditing and controlling the services. The role of fund manager, services buyer and service providers will be clearly determined. Technology will be used efficiently no matter what budget allocation, payment, audit, and development of service quality. The payment to service providers will be specified, it must be able to be audited and directed to build up the efficiency in medical care, and prevent service providers from ordering unsuitably treatment because of money expectation from fund.

3. Choices in utilization: everybody should have opportunity to choose the types of health services, and should not restrict to only government services. The various health services should be provided. The opportunity should be open to private sector to participate in the provision of services. However, the service standard should be suitably regulated.

4. Sustainable good health: Universal Coverage Program is starting point of having good health for all people. It does not only give security in the fee of medical care, but also include the services in health promotion, prevention of disease and rehabilitation after recovering from illness.

2.2.2 Principle of building up universal coverage program

For procedure guideline, Universal Coverage Program holds primary principle as follows (Office of the Health Care Reform Project, 2001: 12-15):

1. To not worry about in the expenses of medical service utilization, nobody can avoid the illness because it is normal of the life. If anybody gets sick, he can go to see a doctor, purchase medicines (can reimburse fees for medicines). Everybody will receive suitably treatment, can discuss with the doctor longer time.

2. To create the equality without discrimination, everybody must receive the same privilege and standard in treatment. Nobody wants to receive the medical services with pity. Everybody want to receive treatment with honor of human being,

wants to receive the same standard medicines and medical supplies like other people. A hospital will not be unwilling to provide or refuse the treatment only because each (security) system pays to the hospital unequally.

3. To follow the civil right principle according to the constitution, everybody must be equal in law, in society. In human rights principle, the discrimination towards anybody because of the difference in domicile, race, language, gender, age, health status, personal status, socio-economic status, religious belief, education or political opinions can not be done. The constitution of Kingdom of Thailand 1997 gives the right of health services as follows:

- 3.1 Having equality in accessibility no matter how poor or different he is, these things will not be obstacle in accessibility to health services.
- 3.2 Health care facilities health must have standard.
- 3.3 Open opportunity for participation in the provision of services both from private sector and local administration organizations.
- 3.4 The government has the main duty in the prevention of pestilence free of charge.

4. To not make the treatment in health care facilities depending on the luck (meet good person, good doctor, good hospital), opportunity (incidentally at that time a patient has work, and has enough money to pay, other members in family are sick), or discrimination according to the type of health insurance.

Receiving health insurance is the right that government gives to citizens, not the issues of opportunity, luck, or the choices of whether they deserves to receive it or not, and how much they must pay.

However the operation in this program is in the transitional period, the operators still lack of knowledge, understanding; further there is limitation in budget. The efficient service system can not be equally provided to the service takers at all levels. The poor or the socially inferior person still has to utilize the poor services and poor quality. From the final report of survey result in the opinion of people towards Universal Coverage Program, it was found that the person, who utilized the services with the right of gold card, 23.1 percent, encountered the problem as follows: percentage of 66.9 had long waiting time; percentage of 15.7 could not utilize the

service outside working hours. The point to pay attention is that primary health care facility did not refer patient and secondary/tertiary health care facility did not receive the referred patient at the percentage of 4.6 and 1.8 respectively. Only the percentage of 10 utilized the service in health promotion. When compared with services in the past, the percentage of 29.5 replied that the quality of the service and quality of medicines were poorer and almost all of them wanted to choose the health care facility by themselves when using gold card. And almost people who made use of the right in gold card were poor; the well-to-do persons would not use it since they were not sure in the quality of the services (National Statistical Office, 2002: 1-11). Besides it was found that although Universal Coverage Program is under operation, the groups of the poor or the socially inferior person still felt that their health status is weaker than other groups and received inequity in health care services the same as before. Universal Coverage Program did not make people to increase the service utilization and they did not have the opportunity to receive the better quality of services. The program only increased the convenience of service utilization (Nguanboonmak, 2003).

In summary, Universal Coverage Program is considered as the government policy offering health insurance to the people who do not have any right in health care, so that they can utilize the services. It aims to build up equality among people in receiving the equal standard of services which is in the civil right principle according to the constitutional law. Besides, the government also opened an opportunity to private sector and people sector to participate in providing the services increasingly in order to create competition and cooperation. The prime target is that people can access to the efficient and quality services and then impression and satisfaction will be materialized later. Although up to now the operation is not quite successful, the people who get involved in all levels are working hard with the cooperation from all sectors in order to make the program success quickly.

2.3 Concepts of Minority Group

In each society particularly national society level, it often consists of many different groups in terms of characteristics such as race, religion, culture etc. The bigger a society is more variation in race and culture it has. However, these differences are the source of these problems or conflicts, if equity principle is taken into consideration in the things involving with the way of life of each group of in the society.

Generally a group living in the same society with other groups is collectively called “ethnic group” which often refers to a group that is different from other groups in the same society in the aspects of cultural identity and the origin of ancestor. Nevertheless it practically can be used to call any group which has cultural differences including the problems in living with other groups (Arrong Suttasad, 1981 quoted in Saowanee Jitmuad, 1988: 2). The word of “ethnic group” often refers to a minority group which has cultural differences from majority group. Encyclopedia Britannica (1964 quoted in Saowanee Jitmuad, 1988: 2) define the meaning of “minority group” as the ethnic groups gathering together through the same historical background, language or religious belief and feeling that they are different from majority group in several ways.

Louis Worth (1945 quoted in Marger, 2001: 281-282) defined the meaning of minority group as the ethnic groups separated from others in society; they are treated disparately and unequally or are insulted from society resulting from the social regulations using the physical and cultural characteristics for making separation.

Wagley & Harris (1958 quoted in Gonzales, 1996: 5) summarized the 5 fundamental characteristics used in determination of being a minority group as follows:

1. Minority group is the group that is treated unequal with other groups.
2. Minority group has different physical and cultural characteristics from majority group.
3. People in this group will unwillingly become a minority group.
4. People in this group have the tight relationship among themselves.

5. People in this group have awareness in their status.

Arrong Suttasad (2001: 49-52) gave the explanation to understand the meaning of minority group as follows: 1) minority group is comparative or relative concept with another group. The words of “majority group and minority group” are reciprocal definition and reflect the meaning that are tightly related together 2) minority group is the group having at least one identity differently from the majority group such as language, religion, tradition, culture, ancestor, complexion, race, nationality and etc. 3) minority group has disadvantaged political relationship and it is under control by the majority group 4) the relationship between minority group and majority group always has any kind of problem; the problem often found is ethnocentrism which is defined as the feeling that the one’s group has the way of life, value and adaptation better than those of other groups and at the same time there is the feeling of insulation against the members of other groups.

From the above mentioned characteristics, the main issue is that minority group is the concept of the relationship between the disadvantaged group and the majority group, and there are problems from any kind of different identities. It is congruent with the definition regarded as the best which is the meaning given by Wagley & Harris and summarized by Robin M. William Jr. as “minority group is a ethnic group in society that is clearly different in terms of culture or appearance and the people in the minority group have awareness in themselves and inherit their root of origin and restrict themselves within their group which is politically, or socially, or economically impeded by the controlling group of urban societies”.

2.3.1 Muslim Thais: ethnic minority group

Thailand is the society consisting of many ethnic groups such as Chinese, Mon, Khmer, India, Malay, many clans of hill tribes and etc. Bangkok itself consists of many ethnic groups and at present almost people in each group are mixed, intertwined or integrated into Thai people. However in Thai society, there is one ethnic group having different characteristics from other groups, which is Muslim Thais. This group is different from the majority group in the nation in the aspects of religion and tradition. The Muslim Thai group itself also consists of people descending from several races and ethnicities.

Muslim Thai is classified as the ethnic group or minority group which is different from the majority group in race, ethnicity, religion, language and tradition; but at present the differences in race and ethnicity are diluted from the intermarriage between persons with different race and ethnicity. Difference in language is reduced by migration and changing to use Thai language much more than before. In the whole picture only Muslim Thais in the southern region is still different from the majority group in religion, tradition and language. However Islam is the religion quite differing from other religions. Although the factors causing difference will be fairly reduced, the difference in general is still clearly existing (Saowanee Jitmuad, 1988: 255-256).

In terms of number and the political importance, Muslim Thai is considered as the most important minority group in Thailand (Jaran Maluleem et al., 1995: 32). From the population census and the national housing authority data in 2000, it was found that there were Islamic people in Thailand around 2.8 million or the percentage of 4.86 (National Statistical Office, 2000) scattering almost all provinces. Their density is in the 4 bordering provinces in southern region and provinces in central region around Bangkok. They have guideline in the way of life from birth to death, living, worship, health care services etc. tightly connected to the religion principle. They have the systems of thinking, belief, and value clearly differing from Buddhist Thais who are the majority group.

From the study in the status of Muslim minority groups in Thailand and Philippines where the civil rights in the equality in law, education and social benefits are approved, it was found that in the past, there was problems of living with each other in many ways resulted from the policy of building up integration for consolidation, negative attitudes towards Muslims, Islamic consciousness, psychological identity. The study proposed the majority people of the countries accepted some activities in order that everybody can suitably live with each other and Muslims would set aside their fear of insecurity including assimilation of the Islamic identity in the aspects of: 1) afraid of the assimilation from other religious people 2) afraid of the emigration from the existing settlement 3) afraid of no involvement in determining their own future 4) afraid of the difficulty in maintaining Islamic culture, language, the way of life, and value (Gowing, 1975). The method for making each

group live in society together in peace must receive the cooperation from all groups by holding basic principle of living with each other that is the equity in society.

2.3.2 Islamic principle

The word of “Islam” comes from the word in Arabic language having the meanings of peacefulness, respect, absolutely surrender, and delegation. Religiously, “Islam” refers to respect, and give oneself to the desire of God which all Muslims know as “Allah”. The condition in the firm belief is the feeling of freely thinking in selection and acceptance, not because of coercion. A person becoming Islamic must do willingly and has faith seriously and sincerely.

Muslim is the word called Islamic people; it does not belong to a particular race. Especially Islam is an international religion which the people in all nations, continents, and complexions have faith in. It is an important religion to the world in past, present and future. No matter what nationalities, Muslim refers to a person who absolutely respect to God for the peacefulness.

Islam is not the religion teaching only the faith in God, but also the basic law of life for everybody. Islam has a lot of characteristics different from other religions. The important thing is that it is the religion stipulating almost aspects of beliefs and practices, having teaching about sciences, liberal arts, ethics, social sciences, humanity and etc. in general principle level and practicing in daily life principle level, having physical and mental teachings which can be said that almost all behaviors or concepts of human being will skip from the scope of Islam. To understand Islam, the following issues must be understood: 1) Islam as a religion 2) Islam as a government and political system 3) Islam as a culture (Jaran Maluleem et al., 1995: 21)

The important 3 structures of Islam that every Muslim must hold and practice are as follows:

Faith principle Muslims must have faith in 6 principles as follows:

1 Must have faith in one God as a creator everything in this world and as supreme administrator, Muslim must not elect anything to match with him.

2. *Must have faith in all angels* (the respondents to verdict) Muslim must always recognize that any actions will be seen and heard by God, besides the angels will also record all actions in hidden places and open places no matter when he is alive or already dies.

3 *Must have faith in scripture of God*, God conferred scripture to religious founder for disseminating to people in his era to study and follow. The last scripture is Quran conferred to Prophet Mohammed. This scripture contains the perfect precepts and will not have any further correction.

4 *Must have faith in all prophets (religious founder)* God appointed the pure persons and religion leaders to disseminate religion to mankind, so that Muslim must have faith in all prophets. Among 25 all prophets, Prophet Mohammed is the last person whom Muslims must study and follow.

5. *Must believe in the end of the world*, world and cosmos must have the end day. When the world is destroyed and all human being dies from this world, they will reincarnate upon the face of God and let him make a judgment. Any person who did good deed or bad deed, he will receive the compensation as he did. Everything depends on God, nobody can help except the goodness that he did.

6. *Must have faith in situational rule*, when talking about good deed and bad deed, God determined both merits and demerits. The human beings have choices in what God determined. The human beings must think of the good thing, behave well and plead with God to ask for the protection from badness. If human beings must meet the demerits, they will ask for understanding and endurance because these situations are regarded as the test from God.

After passing the first foundation, when every Muslim comes to the certain religious age, he must strictly follow **Five Pillars of Islam** as below:

1. *Declaration of faith* A person must recite 2 sentences i.e. “*There is no God but Allah and Mohammed is his prophet*” to remind the firm faith and must express his faith physically, verbally, mentally.

2. *Pray to God (Salah)* In order to control his mind to think of God with pure heart, every Muslim must pray to God without exception regardless of having light or heavy illness. When he is alive and has a good mind and memory, he must practice.

3. *Donation (Zakat)* The one who owns assets in the period of one year without circulation, he must bring 2.5 percent of the assets for donation to help 8 types of the poor or the helpless persons. Aside from money and gold, the assets also include goods, cultivated crops, and livestock.

4. *Fasting during the holy month of Ramadan* It is abstaining from eating, drinking, and sex from dawn to dusk including not to lie, slander, incite, scold, talk nonsense and refrain from evil passions in the 9th month of Hijrah which is the month that Quran was conferred.

5. *Haj to Mecca in Saudi Arabia* This is for the person who is wealthy enough to have a return trip and must have money left for the family members behind. If he can not go, he will not do demerits, however.

The **virtue principle** is the teaching principle responding to the faith principle and practicing principle. All faiths are center in the confidence and faith in God. Prophet Mohammed stated that “Doing good deeds as if you see God (Allah) in front of you. Although you can not see God, you must aware that God takes a look on you all the time” (Al Hadis). Therefore, to build up the highest virtue in mind, the faith principle and practicing principle must be completely followed. Otherwise the virtue will not happen. The major virtue principles of Islam consist of the duty to God, the duty of scholar or teacher, the duty of student, the duty of child to parents, the duty to friends in society etc.

2.3.3 Islamic culture

Islamic culture is the patterns of living or the patterns of behavior including the creations brought in or are in the scope of Quran and teachings of religious founder. Customs, tradition, culture of Muslims all have closely connection with Islamic practice because the religious practicing principle stipulated almost all kinds of practices. It can be said that “the religious precepts are the basic law of life that must be practiced strictly”. If somebody wants to change the contents of culture or the

way of life of Muslims, the changes must be under the specified scope. As a result, the culture has the unchanging characteristics according to time and surrounding societies. Even there is a conclusion that Islamic culture is the solid culture (Saowanee Jitmuad, 1992). Other cultures not rooted from Quran and teachings of religious founder are the values arise from the development of society in Muslim communities and they might be adjusted according to the suitability.

Islam specially emphasizes the inheritance of religion and culture. Aside from the feeling that Islamic culture is better than the cultures of other groups because there are a lot of teaching principles stated in the way that “the path of God is the most correct path and Islam is the most correct religion”. These two characteristics give the effect to all Muslims to have a duty to study and disseminate religion culture, including make Muslims love and guard their cultures zealously. They must limit the interference from other cultures that will cause inconvenience in living and make the dissemination of religion and culture with difficulty.

There are Islamic Thai citizens almost every province and almost all of them use Thai language in daily life, only the customs stipulated by the religion are different from the majority group. There might be differences in some cultures stipulated by the religion such as clothing. Muslims will not partly promote the common expression because it is against the religious statutes or makes the risky opportunity to easily violate the statutes due to no clear mark of costume. Consequently, other groups may have the feeling Muslim group hates the person from other religions and cultures and does not accept the essence of other groups and it seems that Muslims hate or are unwilling to do a thing like other population. In fact, it is because of the firm belief in their religion and tradition that they only do not want to make confusion and violation (Jaran Maluleem et al., 1995).

2.3.4 Islam, illness and treatment

In terms of health and illness, Islam stipulates that human being consists of 2 important components, i.e. body and soul. The body is the concrete part can be seen and touched with the five senses. The body component is alive and can grow from the influence of soul component. Each component has specific needs. The body component needs in the 4 survival factors, i.e. food clothes shelter and medicines to

survive and grow. The soul component needs knowledge, faith, the guideline in faith and in living practice in the present world and the world after death. Once the soul of human being exists, it will be immortal, but the body will be destroyed after death but will regain life for the last turn in the other world. Since human being consists of body and soul, human being will encounter the illness from both components. If any component is disturbed or sick, the other component will also be abnormal or receive the impact (Nuruddeen Sareeming, 1997).

In perspective of Islam, there are a lot of teaching principles about the illness, and the core statements can be concluded as follows:

1. The illness and difficulty are the tests of God, and the good result will be received in the next world.
2. When getting sick, Muslim has duty to receive treatment but not by pleading, asking for protection or depending on other things else aside from God. If anybody violates, he will be regarded as setting up faction against God. The treatment must not be the method that is against the religion principle or without any forbidden thing mixed in it such as liquor, blood, animal produce which is not passing the Islamic killing process or animal which are not allowed as food, etc.
3. Muslim must endure to the illness, and does not express low spirits and despair.
4. When Muslim has tolerance, it will help to clean the sin.

When a person gets sick, a practitioner can be anybody who has knowledge in the treatment of that sickness, but it must not be sacrifice to the spirits or done in accordance with other religion principles. The aim of treatment is to heal or relieve from that sickness. If a patient has no hope from the treatment, the therapy should not be done further. If there is a chance to recover from the illness or can make good deed, the treatment must be done further. The patient who has hope or can recover from the illness but does not accept the treatment, he will regarded as committing a sin because he is committing a crime to himself.

The criteria in taking care of Muslim patient when he must be hospitalized can be concluded as follows:

- In case of outpatient, male and female should play the role of him/her i.e. does not stay privately with the opposite sex by taking the level of relationship into consideration. The principle is that the close relative is the one whom can not get married with. When going to see a doctor, a relative with the same sex should accompany the patient. Except in case of child, old people or emergency illness, if at that time there is no a relative with the same sex, a relative with the opposite sex can take the patient for treatment.

The person who makes a treatment should have the same sex with patient. A doctor with opposite sex can give the treatment; however, there must be a close relative or provide a staff with the same sex as patient attending the treatment. The good point is that there is the witness and it will be transparent for both sides. The exception is in the cases of prenatal care, childbirth or the emergency that might be harmful to life.

- In case of inpatient, aside from the methods of treatment that must follow the religion principles, there are regulations covering the daily life in general which are consisting of:

1. Covering the body particularly the female, there is the regulation that only face and hand can be unfolded.
2. Keeping clean and cleaning body before doing activities such as Salah, reading Quran etc. Islamic principle considers that the cleanness is the half of faith.
3. Salah at least 5 times a day, the place for Salah must be clean and calm.
4. Food and nutrition, the kitchenware must be separated from that of non-Islamic patient. The cooking must follow the Islamic principle (halal) only.

The treatment by surgery, transplant or blood transfusion is allowed to do. The donation of blood or various organs in principle is allowed to do but it is not popular because of the fear that the receiver will behave badly and the blood or organ used to belong to the donor must go to hell too. Therefore the donation is popular within the group of relatives or among Muslims themselves.

- If the plastic surgery has the objective in treatment to maintain honor and dignity as well as prevent insulation or suffering from the illness, the religion will allow doing it. However, the surgery for beauty will not be allowed; or the surgery for

sex transformation will also not be allowed because it is considered as changing the nature and it is only the opinion of human being such as academic person or psychologist, not the principle, except in case that there are 2 genders at birth, but it must be thoroughly considered before surgery.

- For the surgery of giving birth, Muslim must give birth by the natural method. Except considering that the childbirth will be harmful to mother and baby, the childbirth by other methods will be allowed. As such there must be the evidence for support. The childbirth according to the auspicious occasion determined by human being is not allowed. The placenta or organ taken out from surgery must return back to the relatives to bury it in accordance with religion principle. After a baby is born, the father or relatives should be allowed to get into for conducting Arsan ceremony which is the worship for welcoming the new born Muslim baby.

- Visiting a patient, when receiving the news that relative or acquainting person gets sick, Muslim has a duty to visit and encourage him. The etiquette for visiting is that a visitor should not spend too much time and should stand in the range between the waist and the shoulder of patient, should not stand across the head. The visitor should speak for encouragement and tolerance of the patient and apologize to God. If the visitor found the bad thing, he should not relay this thing to other people.

- For a patient under serious condition and no hope from treatment, his relative must go into to teach him the vow until the patient gives the response and read the divine prescription in Quran for him. If the time passes for several days and the patient is still alive, his relative must go into to teach him the vow again. When the patient dies, his relative should close his eyes quickly and take his body out as fast as possible for performing religious funeral.

Although Islam has quite strict regulations, there is exception in case of necessity or limitations such as the medicine having the mixture of alcohol can be used in treatment provided that there is no other medicine for treating or relieving that illness. However, it must be accepted by the expert and the person having knowledge in religion principle before the usage.

Although Muslim Thais have thinking and belief systems clearly differing from the majority group of Buddhist Thais, the fundamental problems that should be taken care, supported, promoted, and improved are poverty, lack of knowledge, illness with various diseases and etc. like general people (Manee Chuthai, 2001). Due to the small number and the scattering settlement, there is less opportunity for Muslim to be a representative to vote in national level and local level to set up rules and regulations congruent with the way of his life. Further, there is very few health professional Muslim Thais. When a Muslim gets sick and must receive the services in health care facility where most of the staff do not understand Muslim cultures as well as the policies, management, and regulations are arranged by using medical criteria and for the majority people, including the service providers do not have truly knowledge and understand Islamic cultures, these might cause the prejudice or the care in the discriminating way by not giving equally services. The Muslim patient himself may not accept the treatment or he goes to health care facility to receive the treatment lately resulting in poor health status and receiving inequity in health.

From the above mentioned, Islam is not only a religion that general people know, but also Islam is a culture or a system of the way of life covering all kinds of activities such as politics, socio-economic, culture etc. Islam is not just one part of life, but it is the whole life of the believer. It is the guideline in the way of life from birth to death. Consequently, Muslim Thais are a group clearly differing from the majority group of country who are Buddhism. Therefore, all activities involving with Muslims, these differences must be taken into consideration to prevent the conflict that might bring into the separation in general society.

2.4 Disparities in Health Care in Minority Group

The study of Institute of Medicine (IOM) found that the minority group having the disparities in terms of race and ethnicity has the tendency to receive the poorer quality of health care services than the person who is not in the minority group. The factors of accessibility such as the possession of health insurance and income are controlled. The causes of these disparities have revealed the inequity in the past and at the present, which has complication and connection with other aspects in each level consisting of health system, management process towards minority group, utilization

management, health professional career, including the patient himself. When controlling several factors constant in the study to analyze the confrontation with the illness, it was found that stereotype, bias, and uncertainty situation of service providers are the promoter of the existing inequality in health care services. In the situation that service providers must confront with many aspects such as working under time pressure, complicated perception process, including financial pressure, the chance that makes these processes affect the health care which is not congruent with the need of a patient belonging to a minority group will be increased. The minority groups often have to challenge with the obstacles in services accessibility such as language barrier, geographical characteristics and cultural familiarity, when there is a guarantee that they will receive the health care services like other people. Besides the adjustment in financial system and organization of administrative units of health system as well as the differences in the current rules, regulations and policies have the negative impact to the capability of minority group for receiving the quality health care (IOM, 2002: 1).

Many studies in foreign countries found that minority group has less opportunity to receive the health care services than other ethnicities in the aspects of accessibility, utilization or quality of the service. For example, a white person has more opportunity to receive diagnosis and coronary artery surgery than black person, Hispanics person and Asian race person. Further, when compared with black person, white person has tendency to receive the diagnosis of intestinal cancer with higher efficiency method and receive the better health care services after the treatment and it is possible that white person will receive more analgesic for the last phase of cancer. In some cases, the minority group could utilize more services but it does not mean better services than that of the majority group. For example, when compared with white person, black person who gets sick with asthma has more opportunity to receive the treatment in emergency unit and the hospitalization. It points out the poor service utilization in terms of the prevention and primary services. Black person with diabetes mellitus has more chances to be amputated which points out the poor primary health care or lack of accessibility in primary care (IOM, 2002: 23).

2.4.1 Causes of disparities in health care services

Smedley, Stith & Nelsen (IOM, 2002: 7-12) proposed that causes of receiving disparities health care services arising from the factors of 3 levels, i.e. patient himself, service providers, and health system that lead to the different health care services in various groups, race, and ethnicities like the factors associated with the accessibility.

1. Patient level: the expression, the refusal to the treatment and the suitability of the clinical health care makes a patient in minority group has a chance to refuse the recommended services, to receive the poor treatment and the late services. These behaviors and attitudes can result to the poor cultural matching between a patient in minority group and service providers, unreliability, poor understanding the instruction of service providers, poor responses to health care services system or lack of knowledge to utilize the best health care services.

2. Health care service level: the factors in health system such as the patterns of organization and finance, the current available services, language barrier, the limitation in available time of doctor, the geographical location of health care unit, the changes in finance and the delivery of health services which often destroys folklore health care system and replaces the service providers who are familiar with language, culture and value in the community of minority group.

3. Health care process level: The characteristics of bias, stereotype and uncertainty often affects the health care that is not the same as other majority group from the view point of the service providers.

From the study in the experience of receiving health care services after the revolution of health system in Israel, it was found Arabian race Israel female evaluated that she had poorer health, less utilization in health care services at primary level and less satisfaction in services. However, she must receive the treatment in hospital more than other groups. As such it resulted from 3 main factors, i.e. 1) she must disclose her body to an unfamiliar practitioner and she did not get used to the other social characteristics 2) she had the difficulty in communication with the male

practitioner and 3) the regulation in family regarding the health care. All factors are the result from the different cultural regulations (Elnekave & Gross, 2003).

The study in Mexico about the behavior seeking for health services of the aborigine found that the aborigine had the tendency to have positive behavior towards the modern health care services when compared with other groups under the same socio-economic regulations. The cultural obstacles in receiving the services of prevention of disease and health promotion were not found. However the difference in ethnicity still has the negative connection towards the health care services in hospital, the medical consultation and the dental services. It also found that the possession of health insurance has importance and affects the utilization of health services of aborigine (Paqueo & Gonzalez, 2003).

In summary, disparity in receiving health care services is the main reason that makes the minority group has a chance to have lower health status than the majority group. Understanding in each levels is important thing to eliminate the causes of these disparities, which in the whole picture they consists of the health service providers, the patient himself, and the health care system. The society should pay attention to the gap in health care services between various ethnic groups. The health care system should take the resource allocation according to the guideline of the specified illness into consideration to make sure that the medical expenses will be allocated to the accessibility of minority group and the procedures of accessibility should be improved with the aim of giving services in accordance with the needs of the communities.

2.5 Conceptual Framework

The conceptual framework in this study will consider from the health care services factors in accessibility, utilization, and service quality affecting the disparities in health status. Aside from these, other determining health status factors are factors in population, socio-economic which shows the inequality in society and factors in health policy. All these factors have a direct effect to the disparities in health status and health care.

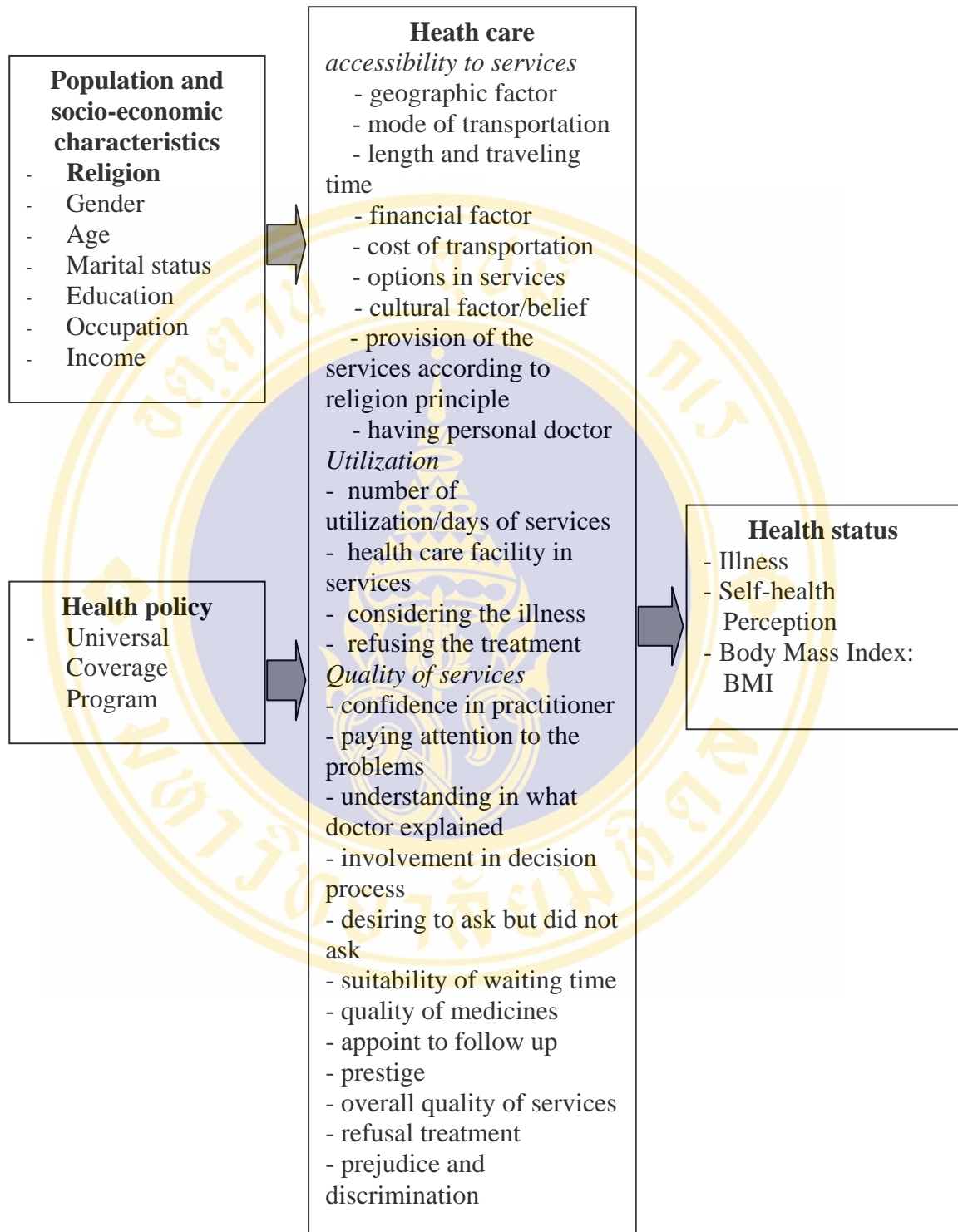


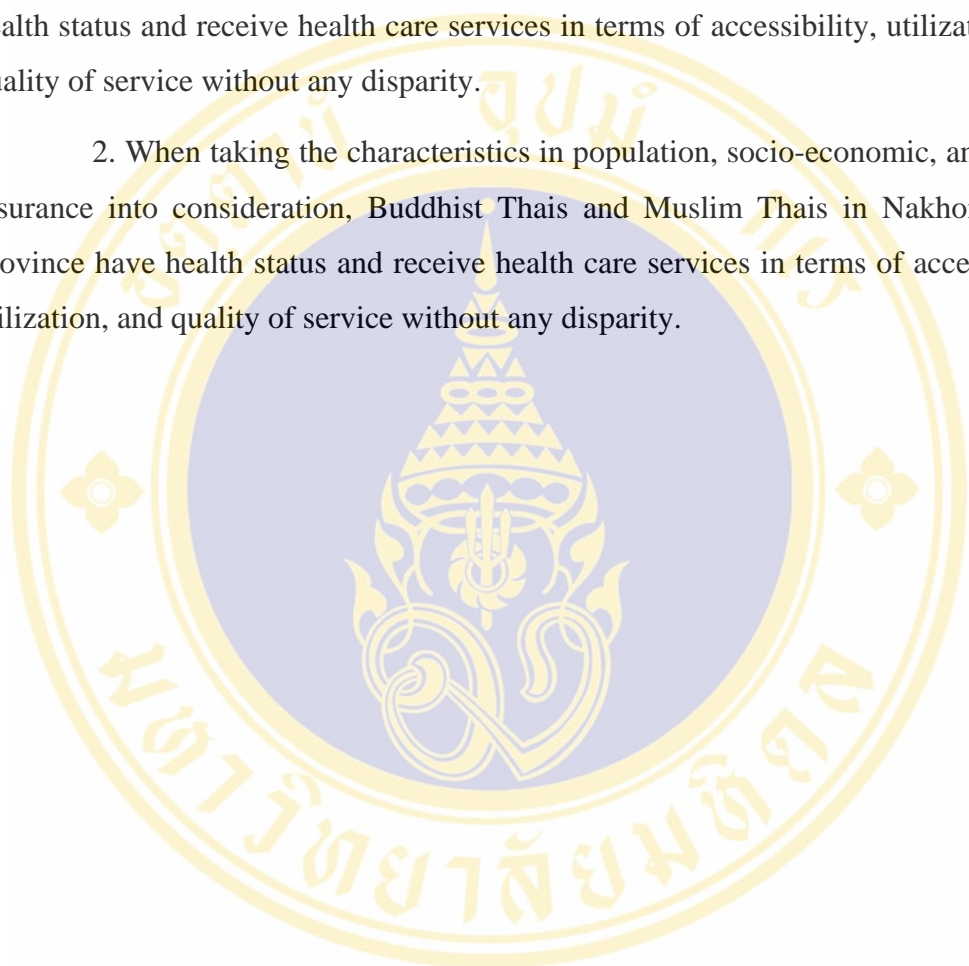
Figure 3 Conceptual framework

2.6 Research hypothesis

From literature review and conceptual framework research, the research hypothesis can be concluded as follows:

1. Buddhist Thais and Muslim Thais in Nakhon-Nayok Province have the health status and receive health care services in terms of accessibility, utilization, and quality of service without any disparity.

2. When taking the characteristics in population, socio-economic, and health insurance into consideration, Buddhist Thais and Muslim Thais in Nakhon-Nayok Province have health status and receive health care services in terms of accessibility, utilization, and quality of service without any disparity.



CHAPTER III

METHODOLOGY

This research is a cross-sectional descriptive research to explain the disparities in health status and health care in terms of accessibility, utilization, and quality of service of Buddhist Thais and Muslim Thais in Nakhon-Nayok Province and study population, socio-economic factors associated with these disparities when the Universal Coverage Program has been operated. The research methodology is as follows:

3.1 Population and Sample

3.1.1 Population

Population in the study are divided into 2 groups, i.e. Buddhist Thais and Muslim Thais in Nakhon-Nayok Province and will be selected from the persons in the households who earn the respect or are accepted as the head of the household or the representative, aged more than 18 years as the informant.

3.1.2 Sample

Multistage sampling will be performed starting from purposive sampling of area, which is Ampur Ongkarak since it is the district that most of Muslim Thais are living in (final population data in health, Ongkarak District, 2002: 4). The way of life in general of Buddhist Thais and Muslim Thais in this district is similar such as occupation, spoken language, and many aspects in culture. Only the cultures rooted from religion are different. Muslim Thais in Ampur Ongkarak have settled densely in the south and the west which is the area connected with Ampur Bangnumpraew, Chachoengsao Province, Ampur Lamlukka, Patumthani Province and Khet Nongjok, Bangkok. At here there are Thai people Muslim living more than that of other areas. As such the researcher determined the sample size and did the sampling as the following procedures:

Step 1

Selecting the study area in Tambon level of Ampur Ongkarak from all 11 Tambons, Tambons where Buddhist Thais and Muslim Thais are living together are Tambon Pra-arjarn, Tambon Buengsan, Tambon Srisakrabue, Tambon Chumpon, Tambon Klong-yai and Tambon Sai-moon. However, the researcher selected the first 4 Tambons as the areas for purposive study since most of Muslim Thais are living in these 4 Tambons at the percentage of 58.07 of population. In addition, the communities in these areas are settled along the irrigation canal, there are the roads passing all villages. Therefore, it is convenient in data collection.

Step 2

The total 4,004 households are divided into 2 groups according to the religions. There are 1,682 Buddhist Thais households, and 2,322 Muslim Thais households respectively. The sample sizes are calculated by using the criterion in determining sample size (Nipa Sriparoj, 1984: 9) as follows:

If $N < 10,000$ setting $n = 10\%$ of N
 when N refers to all households
 n refers to the number of sampling households ,

substituting with the number of households in two groups,

getting Buddhist Thais households 168 samples adjusted to 170 samples
 getting Muslim Thais households 232 sample adjusted to 230 samples.

As a result, this research used sample size in total of 400 samples.

Step 3

Dividing villages in 4 Tambons into 2 groups, i.e. the villages where the majority (more than 50%) are Buddhist Thais and Muslim Thais. There are 16 Buddhist Thais villages and 27 Muslim Thais villages. The 10 villages of each group are selected by the method of sampling without replacement, and then the sample size of each village is calculated according to the household proportion. The sample size of each village is shown in table 3.1.

Table 3.1 Sample size of Buddhist Thais and Muslim Thais separated by Tambon and villages

Items	Moo	Sample size
Tambon Pra-ar-jarn		
- Muslim Thais	6,8,12	16,20,15
- Buddhist Thais	2,10,13	18,29,9
Tambon Srisa krabue		
- Muslim Thais	1,13	20,30
- Buddhist Thais	7,8,9	16,30,16
Tambon Bueng-San		
- Muslim Thais	3,7,8	27,27,24
- Buddhist Thais	4	12
Tambon Chumpon		
- Muslim Thais	6,8	24,27
- Buddhist Thais	2,3,4	21,12,7
Total	20 villages	400 households

Step 4

The sampling households of each village are selected by the method of systematic sampling. The first household is selected by random sampling, and then the succeeding households are selected with the equal distributed interval according to the proportion of households in each village until receiving the samples as need. While conducting the survey, if there was no one at home or the person was unqualified, the researcher selected the adjacent households as the informant. In the villages where both Buddhist Thais and Muslim Thais are living in and the settlement characteristic is kindred group, the systematic sampling can not be used, and the purposive sampling will be used instead.

However in the actual survey, the researcher conducted survey in the day time both on weekdays and Saturday and Sunday. The different population groups were found according to the occupation characteristic. In weekdays most of them were old people and children, while the head of the household would go out for work

and there were no one at home in some houses. Consequently, the researcher changed the points of data collection to the shops or public pavilion where is the center of community. At there the more samples being the heads of the households were found. While the survey in holidays, Saturday and Sunday, the groups of industrial factories employee or persons working for the government /state enterprise were found. The data collection in the way will make the sample not distributed as needed and there might be a bias.

3.2 Researching Tool

The researching tool is the constructed interviewing form. The questions in it came from the related concepts, theories, and the reviews of characteristics, problem and literature in order to cover all the scopes and objectives of the research. After receiving the revision from the experts and faculty panel members, the quality of interviewing form was tested by using 30 copies of it to ask the population outside the study area at Moo 6 Tambon Buengsan, Ampur Onkaruk, Nakornnayok province. Whether the language usage correct and suitable to the sample is tested, also the confidence of tool is tested by using the formula of Coefficient alpha and received the confident value of 0.73, which is in the satisfied criterion. Then the interviewing form is used to collect data with the actual sample. The contents in the interviewing form used in the study are divided into 7 parts as follows:

Part 1 Weight and height of respondents at that time: weight is measured in Kilogram, and height is measured in Meter.

Part 2 General information: it is the questions about population and socio-economic factors. The measuring level is Nominal scale and there are 9 questions consisting of:

1. Gender divided into male and female.
2. Religion divided into Buddhism and Islam.
3. Age is the unit in year by counting the number until the birthday into full years. It is divided into 4 intervals, i.e. 18-29 years, 30-44 years, 45-59 years, and 60 years upwards.

4. Marital status divided into single, married, widow divorce separation; in case of experiencing the marriage the number of living children and studying children will be asked.
5. Education level by considering from the highest education level. There are 2 types, i.e. general education and religious education (only Islamic person).
 - General education divided into 4 levels, i.e. primary standard, secondary standard, university and illiteracy levels.
 - Religious education divided into 4 levels, i.e. foundation, higher than foundation, not attend the school, and no knowledge in religion levels.
6. Occupation that most of the time is spent for the activity divided into general work for wages, agriculture, employee in industrial factory, work for the government /state enterprise, trading and others (taking care of home/unemployment/studying).
7. Income level refers to the income of family received as the compensation from monthly work. It is ordered from small to big income and divided into 5 intervals according to income level (Income Quintile), i.e. lowest, low, medium, high, and highest.
8. Debt burden refers to the loan for expenses in family or occupation. It includes both legitimate and illegitimate debts and is divided into in debt and not in debt.
9. Debt level refers to the amount of debt of family. It is ordered and divided into 5 intervals according to the amount of debt, i.e. lowest, low, medium, high, and highest.

Part 3 Information of health insurance: it is the questions about the possession of health insurance of respondent and the members in his family. The measuring level is Nominal scale. There are 3 questions consisting of:

1. Health insurance refers to right or health insurance that head of the household can utilize when he is ill or can receive the services in health care facility, divided into Gold card (pay 30 Baht), Gold card (not pay 30 Baht) and other types of health insurance.

2. The possession of other types of right/health insurance of family members which is different from that of head of the household, divided into Yes and No.
3. The health care facility according to the right refers to the health care facility that a person can firstly utilize the service in his perception, divided into health station, district hospital, regional hospital, clinic/private hospital, and anywhere.

Part 4 Information of health status: it is questions about the assessment of health situation. The measuring level is Nominal scale. There are 3 questions consisting of:

1. The illness refers to the illness/the personal disease both by the awareness of a patient and the diagnosis from a doctor, divided into Yes and No. For the person answering Yes, he will asked further to what disease(s), he can answer more than 1 choice.
2. Duration of illness or knowing the illness from the disease in question 1, divided into not more than 12 months, 13-36 months and more than 36 months.
3. The assessment of health situation consisting of:
 - 3.1 Health situation level at the present, divided into very good, good, medium, and not good/poor.
 - 3.2 Health situation level when compared with that of in 3 years ago, divided into better than before, same as before, poorer, and not sure.
 - 3.3 Health situation level when compared with the same generation persons, divided into better than others, same as others, poorer, and not sure.

Part 5 Information of accessibility and utilization of health services: it is questions to know the opinion and behavior of services utilization during the illness including the limitations that obstruct receiving the services conveniently, rapidly and efficiently. The measuring level is Nominal scale. There are 10 questions consisting of:

1. Visiting doctor or receiving of the outpatient services during the year, divided into used to and not used to; if used to, how many services received.
2. Hospitalization during the year, divided into used to and not used to; if used to, how many hospitalization received and how many day per time.
3. Health care facility where the services have been regularly utilized during the illness; divided into private health care facility/midwifery, doctor's clinic, health station, district hospital/provincial hospital, regional hospital, private hospital and other health care facilities.
4. Consideration of health care facility before receiving the treatment; divided into deciding and not deciding; if deciding, the symptom that will be treated at the regularly used health care facility is normal illness or severe illness; and if normal illness, the patient will asked further that provided the illness is getting severe, where he will receive the services; divided into doctor's clinic, district hospital/provincial hospital, regional hospital private hospital, and other hospitals.
5. Mode of transportation to receive regularly treatment; divided into on foot/bicycle, public bus, public car/motor cycle, private car/motor cycle and how far from home the medical premise is, how much the traveling time is, how cost it is, and the reasons to utilize the services.
6. Whether the health care facility where the service is utilized is the health care facility under the right of treatment or not; if not, how far from home the health care facility under the right is, how much the traveling time is, and whether he used to utilize the service at health care facility under the right or not, and the reasons in not changing to utilize the service.
7. Satisfaction in health care facility under the right; divided into very satisfied, satisfied, not satisfied and not sure.
8. Levels of choices in utilizing the services at the better health care facility; divided into many, sufficient, few, and not at all.
9. Provision of services according to the religion principle at the health care facility where the services are regularly utilized; divided into Yes, No, and not sure.

10. Having the personal doctor who has taken care him for more than 3 years; if Yes, what is the doctor's gender, whether the doctor has domicile at the same place, and has the same religion with the patient or not.

Part 6 Information of the quality of the services: It is questions to know the quality of the services according to the perception of respondent by asking his experience when utilizing the services. The measuring level is Nominal scale. There are 11 questions consisting of:

1. Confidence in the doctor giving him the treatment, divided into a lot, medium, little/not at all.
2. Attention for listening to the problem of patient, divided into listen everything, mostly listen, and rarely listen/not listen at all.
3. Understanding in what doctor said/explained, divided into understand everything, mostly understand, rarely understand/not understand at all.
4. Involvement in making decision of treatment methods, divided into a lot, medium, little/not at all.
5. The feeling of having questions to ask but did not ask, divided into Yes and No; if yes, what are the reasons.
6. The suitability of waiting time compared to the caring time, divided into a lot, medium, little/not at all.
7. The quality of medicines received, divided into very good, good, not quite good/not good at all.
8. The attention in appointment of receiving the next services, divided into very good, good, not quite good/not good at all.
9. Feeling honored and respected from doctor/staff divided into a lot, medium, little/not at all and what are the reasons that the doctor/staff does not give the patient honor.
10. The services in general, divided into good and not good; if not good, what are the problems that the patient encounters.
11. The mistakes in treatment, divided into used to, only has been seen or heard of, not used to; if used to or only has been seen or heard of , what are the mistake, and what are the sources of mistake.

Part 7 Opinion in the services in health care facility: The measuring level is Nominal scale. There are 5 questions consisting of:

1. The refusal to the treatment because the patient deems that it is not congruent with religion principle, divided into used to not used to.
2. Whether the provision of health services at the present is congruent with the religion principle/the need of the service taker or not by taking activities from Literature Review into consideration.
3. The feeling that the staff provides the services with prejudice because the patient has different religion, divided into Yes, No and not sure.
4. The feeling that the staff provides the services with discrimination because the patient has different religion, divided into Yes, No and not sure.
5. The person who is strict with religion principle will stay in society with more difficulty than the other person, divided into agree, disagree, and not sure.

3.3 Data Collection

In this research, the researcher and 3 assistant researchers collected data. All assistant researchers were trained in the concepts, objectives and interviewing techniques. The collection time was in between 17 September – 16 October 2004. The official letter asking for assistance in data collection was issued from Graduate school, Mahidol University to Ampur Onkaruk Nakornnayok province to explain the objectives and ask for the permission in data collection. The researcher coordinated with public health officer, village headman and public health volunteers stationed in the villages in order to determine the place and time for data collection.

For controlling the quality of data, the researcher emphasized the assistant researchers to strictly interview for data collection in every step and to examine the data after finishing interview immediately by checking the completeness in every page of interviewing form before leaving from the household sample. The researcher completed examining the interviewing forms of every household before leaving from the study area.

3.4 Data Processing and Data Analysis

When interviewing to collect data up to the desired amounts, the researcher examined all questionnaires for the correctness and the completeness of data, encoded and recorded data into data collection sheet, processed data and analyzed data with a computer. The used statistical values consist of:

1. Descriptive statistics by using statistical values of percentage, mean, standard deviation, maximum and minimum value to describe the population data and socio-economic factors.
2. Cross-tab analysis by considering the relationship between the population characteristics with health status and health care services in terms of accessibility, utilization, and the quality of services. The Chi-square test will be applied. When the difference is significant, the test will be repeated by using population and socio-economic characteristics, and health insurance as the control variables.

CHAPTER IV

RESULTS

Results from this study will be presented into 4 parts as follows:

4.1 Population and Socio-economic Characteristics

4.2 Possession of Health Insurance

4.3 Disparities in Health and Health Care

4.3.1 Health status

4.3.2 Health care services

- accessibility to the services
- utilization
- quality of services

4.4 Opinion to The Provisions of Health Care Services

4.1 Population and Socio-economic Characteristics

In this study the samples in total of 400 persons were interviewed; 166 persons were Buddhist Thais, 234 persons were Muslim Thais, or in the ratio of 1: 1.4 which is near the household proportion of Buddhist Thais and Muslim Thais in the study area. The population and socio-economic characteristics are shown in table 4.1.

The female samples in this study are more than that of male almost 3 times (percentage of 72.3 and 27.8 respectively). It was found from the classification according to the religions that both Buddhist Thai group and Muslim Thai group have the proportion in percentage of male and female nearly the same amount (Buddhist Thais male in percentage of 27.7, female in percentage of 72.3, while Muslim Thais male in percentage of 27.8, female in percentage of 72.2)

For the age distribution, it was found that the samples aged between 45-59 years and 30-44 years are almost in the same amount (percentage of 30.4 and 29.9 respectively). Most of Buddhist Thais (percentage of 37.3) aged between 45-59 years,

while more than one-third of Muslim Thais (percentage of 34.2) aged between 30-44 years.

For the marital status, it was found that almost four-fifth of the samples (percentage of 79.5) get married and are still living with spouse. Muslim Thai group has the marital status at the little higher rate than Buddhist Thai group (percentage of 82.1 and 75.9 respectively). When considering from the number of living children and studying children, it was found that Muslim Thai group has living children and studying children more than those of Buddhist Thai group. The significant differences at the level of .001 and .05 respectively were found when testing correlation with χ^2 -test.

For the distribution characteristics according to the general education, it was found that almost three-fourth of the samples finished study in the primary standard, and the number of people in Muslim Thai group who finished study in the primary standard is little higher than those of Buddhist Thai group (percentage of 76.9 and 69.4 respectively). As for the religious education (only Muslim Thais group), it was found that more than half of them (percentage of 50.9) finished religious education at foundation level. Only the percentage of 2.6 answered that they had no knowledge in religion and almost all of them were the persons who had just entered to Islam.

When considering the occupation of sample according to the religions, the difference was found with statistical significance ($p < 0.05$), i.e. almost one-third (percentage of 32.5) of Buddhist Thai group were agriculturist, the lowest (percentage of 3.6) was the employees in industrial factories. Whereas in Muslim Thai group, the number of persons who belonged to the group of taking care of home was close to the group of general work for wages (percentage of 29.9 and 29.1 respectively). There were only 2.1 percent belonging to the group of work for the government/state enterprise.

For, the income of the family, it was found that both groups had the average monthly income at the close value (7,198.88 and 7,166.24 Baht/month respectively). When dividing the samples into 5 groups according to the income quintile, it was found that more than one-fourth of samples (percentage of 25.5) had the middle income (5,001-7,000 Baht/month). As for the debt loaning for the expenses in family

or the investment in the occupation, it was found that Buddhist Thai group had little more average debt to family than Muslim Thai group (48,451.81 and 44,064.10 Baht/family respectively).

It can be seen that most of the samples in this study were female, married person, finished education in the primary standard level, and had the average income between 5,001-7,000 Baht. When taking religion into account, there was statistically significant difference in terms of their children and occupation.

Table 4.1 Percentage and correlation test of samples classified according to the population and socio-economic characteristics and religion

The population and socio-economic Characteristics	Buddhist Thais	Muslim Thais	Total
Gender			
- male	27.7	27.8	27.8
- female	72.3	72.2	72.2
$\chi^2 = 0.000$			
Age			
- 18-29 years	15.1	16.2	15.8
- 30-44 years	24.7	34.2	30.3
- 45-59 years	37.3	26.1	30.8
- > 60 years	22.9	23.5	23.3
$\bar{X}_1 = 46.54$, S.D.= 15.60, min= 18, max= 78, mode= 37, $\chi^2 = 7.011$	$\bar{X}_1 = 47.3$	$\bar{X}_2 = 45.9$	
Marital status			
- single	12.0	9.8	10.8
- married	75.9	82.1	79.4
- widow/divorce/separation	12.1	8.1	9.8
$\chi^2 = 2.444$			
Number of living children ***			
- none	15.7	13.2	14.3
- 1-3 persons	60.8	41.5	49.5
- > 3 persons	23.5	45.3	36.2
$\bar{X}_1 = 3.09$, S.D.= 2.38, min= 0, max= 15, mode = 3, $\chi^2 = 20.511$	$\bar{X}_1 = 2.4$	$\bar{X}_2 = 3.5$	

Table 4.1 Percentage and correlation test of samples classified according to population and socio-economic characteristics and religion (continued)

Population and socio-economic characteristics	Buddhist Thais	Muslim Thais	Total
Number of studying children *			
- none	61.4	52.1	56.0
- 1-2 persons	33.8	35.5	34.7
- > 2 persons	4.8	12.4	9.3
$\bar{X}_1 = 0.79$, S.D.= 1.12, min= 0, max= 7, mode = 0, $\chi^2 = 7.609$	$\bar{X}_1 = 0.59$	$\bar{X}_2 = 0.92$	
General education			
- primary standard	69.9	76.9	74.0
- higher than primary standard	26.5	21.4	23.5
- illiteracy	3.6	1.7	2.5
$\chi^2 = 3.152$			
Religious education (only Muslim Thais)			
- primary level		50.9	50.9
- higher than primary level		9.8	9.7
- Not attend a school		36.8	36.8
- No knowledge in religion		2.6	2.6
Occupation *			
- general work for wages	26.3	29.1	28.0
- agriculture	32.5	23.5	27.3
- employee in industrial factory	3.6	5.1	4.5
- work for the government /state enterprise	4.8	2.1	3.3
- trading/private business	15.1	10.3	12.3
- taking care of home/unemployment/studying	17.5	29.9	24.8
$\chi^2 = 13.680$			
Average income of family			
- lowest ($\leq 3,000$ Baht/month)	21.1	18.4	19.5
- low (3,001-5,000 Baht/month)	13.9	12.8	13.3
- medium (5,001-7,000 Baht/month)	25.9	25.2	25.5
- high (7,001-10,000 Baht/month)	15.1	23.5	20.0
- highest ($> 10,000$ Baht/month)	24.7	20.1	21.8
$\bar{X}_1 = 7,171.9$, S.D.=5,614.0, min=1,500, max=60,000, mode=5,000 $\chi^2 = 4.642$	$\bar{X}_1 = 7,179.9$	$\bar{X}_2 = 7,166.2$	

Table 4.1 Percentage and correlation test of samples classified according to population and socio-economic characteristics and religion (continued)

Population and socio-economic characteristics	Buddhist Thais	Muslim Thais	Total
Debt burden			
- none	44.0	47.9	46.3
- ≤ 20,000 Baht	15.1	18.4	17.0
- 20,001-50,000 Baht	16.3	13.2	14.5
- 50,001-100,000 Baht	16.9	12.0	14.0
- > 100,000 Baht	7.8	8.5	8.3
$\bar{X}_1=45,885, S.D.=131,035, \min=0, \max=2,000,000, \chi^2=3.282$	$\bar{X}_1=48,451$	$\bar{X}_2=44,064$	
Total (number)	41.5 (166)	58.5 (234)	100.0 (400)

* Statistical significance at 0.05, *** statistical significance at 0.001

4.2 Possession of Health Insurance

Nakhon Nayok Province has participated in the universal coverage program since 2002. In Ampur Ongkarak, there are 2 hospitals participating in the program. The areas of responsibility are divided into 2 areas as follows: Tambon Bueng-San, Tambon Chumpon, Tambon Klong-yai, and Moo 5-7 of Tambon Ongkarak located in the west are arranged to be in the responsibility of Maha Chakri Sirindhorn medical center hospital, the affiliation of Faculty of Medicine Srinakharinwirot University, which is the big medical school with a lot of manpower in medical and public health. There are Muslim Thais in the percentage of 45 living in this area. While the east area is arranged to be in the responsibility of Ongkarak hospital, the affiliation of public health office Nakhon Nayok Province, which is the 60 beds community hospital. There are Muslim Thais at the percentage of 20 living here (the summary of population data in health, Ampur Ongkarak, 2002). In this study the researcher interviewed people from 2 areas for collecting data and opinions. The result from this study is shown in table 4.2.

When taking the possession of health insurance into consideration, all informants answered that they had health insurance. The majority (percentage of 58.6) had the right in health insurance in type of Gold card with 30 Baht payment, followed by Gold card free of charge (percentage of 24.8), social insurance card (percentage of

9.3) and welfare for the persons work for the government/state enterprise (percentage of 7.5) respectively. When classifying in accordance with religion, it was found that the number of Buddhist Thais having the right in health insurance in type of welfare for the persons work for the government/state enterprise, which was regarded as giving the highest benefits, was 3 times as the number of Muslim Thais (percentage of 12.7 and 3.8 respectively). As such it might be that in the past Muslims Thais in this area gave the importance of religion education higher than that of general education and preferred sending their children to have the further study in this field in the local and overseas institutes. However, when they finished their study, the earned education certificate could not be used as the evidence to work for the government /state enterprise. As well, the right of welfare for the persons work for the government/state enterprise covered to the parents and children of those persons, it would have the effect in the less number of Muslim Thai group having this kind of health insurance. Muslim Thai group received the right in health insurance in type of Gold card free of charge and social insurance card a little higher than Buddhist Thais (Gold card free of charge for Muslim Thais in the percentage of 27.4 while for Buddhist Thais in the percentage of 21.1, social insurance card for Muslim Thais in the percentage of 10.7 while for Buddhist Thais in the percentage of 7.2). When testing correlation with χ^2 -test, the statistically significant difference was found ($p < 0.01$).

For the possession of health insurance of the members in the informants' family, more than two-third (percentage of 67.0) of the samples replied that their members did not have the type of health insurance different from that of the informants. However, the interesting issue was the fact that the members in the families of Muslim Thai group had social insurance card over 2 times higher than that of Buddhist Thais (percentage of 19.9 and 8.3 respectively). As such it might result from that Muslim Thais had a lot of children, and the necessity for laboring in agriculture works was reduced due to the usage of new modern agriculture technology. Further there were a lot of industrial factories established in the nearby areas and they considered that working in the factories offered them the fixed income, as the result many young generation Muslim Thais preferred to work as the employee

in industrial factory. When testing correlation between the religion groups with χ^2 -test, the statistically significant difference was found ($p < 0.001$).

For the medical premise under the right that the samples could utilize the services at the first visit, they replied that could utilize the services at the community hospital and the medical center hospital in almost the same number (percentage of 44.0 and 40.8 respectively). Muslim Thai group could utilize the services at the medical center hospital nearly double higher than Buddhist Thai group (percentage of 50.0 and 27.7 respectively) and the statistically significant difference between religion groups was found ($p < 0.001$). As such it was likely resulted from the determination in the areas of responsibility of the hospitals under the universal coverage program.

Table 4.2 Percentage and correlation test of the possession of health insurance classified according to the religions

Possession of health insurance	Buddhist Thais	Muslim Thais	Total
Health insurance **			
- Gold card with 30 Baht payment	59.0	58.1	58.5
- Gold card free of charge (without paying 30 Baht)	21.1	27.4	24.8
- work for the government/state enterprise	12.7	3.8	7.5
- social insurance	7.2	10.7	9.3
$\chi^2 = 12.845$			
Other rights or health insurances of the members in family ***			
- do not have	79.9	58.5	67.4
- have	20.1	41.5	32.6
▪ Gold card with 30 Baht payment	6.5	9.7	8.4
▪ Gold card free of charge (without paying 30 Baht)	4.7	10.6	8.2
▪ work for the government/state enterprise	0.6	1.3	1.0
▪ social insurance	8.3	19.9	15.0
$\chi^2 = 20.111$			

Table 4.2 Percentage and correlation test of the possession of health insurance classified according to the religions

Possession of health insurance	Buddhist Thais	Muslim Thais	Total
The medical premise under the right to utilize the services in the first visit ***			
- health station	3.6	56	4.8
- the community hospital	51.8	38.3	44.0
- medical center hospital	27.7	50.0	40.8
- clinic /private hospital	3.0	1.7	2.3
- anywhere	13.9	4.3	8.3
$\chi^2 = 28.080$			
Total (number)	41.5 (166)	58.5 (234)	100.0 (400)

** Statistical significance at 0.01, *** statistical significance at 0.001

4.3 Disparities in Health and Health Care

The study in the disparities in Health and Health Care of Buddhist Thais and Muslim Thais at this time, the researcher considered the difference of health status and health care from Cross-tabulation analysis and tested correlation with Chi-square test. The independent variable was the religion and the dependent variables were health status and health care service utilization. If the significant difference was found, the test would be repeated by using the population and socio-economic factors, i.e. gender, age, marital status, education, occupation, income level and type of health insurance as the control variables. However there was limitation in the correlation analysis in some tables since observed values in many cells were less than 5 ($E_{ij} < 5$), which is the limitation of this statistical test. If the mentioned cases happened, the researcher would consider the relationship level by reading the results from the values of Monte-Carlo Sig. (2-sides) or Exact Sig. (2-sides) instead (Kallaya Wanichbancha, 2003: 309).

4.3.1 Health status

The assessment of health status in this study will be considered from the perceived illness, self-health perception and Body Mass Index: BMI. The difference of health status was found as shown in table 4.3

When assessing health status by the perceived illness, around half of the Muslim Thai group (percentage of 49.6) replied that they had personal diseases, while only around one-third of the Buddhist Thai group (percentage of 38.0) replied that they had personal disease. The most common diseases/the illness symptoms found in Muslim Thai group were associated with the behavior and the pattern of taking food including hypertension, diabetes mellitus, hyperlipidemia, cardiopathy, and nephropathy. Hypertension and diabetes mellitus in particular were found in Muslim Thai group 2 times as in Buddhist Thai group; hyperlipidemia also was found in Muslim Thai group around 5 times as in Buddhist Thai group. As such it may be that Muslim Thais in this area liked to eat highly seasoned foods and high calories. When they got old, they had less physical exercises for metabolism. Consequently, they had more chances to get fat or overweight and had more chances to get ill from these diseases. When testing correlation with χ^2 -test, the statistically significant difference between religions was found ($p < 0.05$)

When taking population and socio-economic factors as control variables, which include gender, age, marital status, education level, occupation, income level, and type of health insurance, it was found that Muslim Thais had the tendency to have personal disease more than Buddhist Thais in almost all categories. Particularly female, person aged of between 30-44 years, married person, low educated person (finished studying in primary standard level) of Muslim Thai group replied that they had personal disease more than Buddhist Thais in the same categories with statistical significance ($p \leq 0.05$) (annexed table 1). Moreover, it was also found that Muslim Thais having the above mentioned personal diseases had been sick with the diseases longer time than Buddhist Thais (mean value of Muslim Thais was 33.16 months and Buddhist Thais was 20.28 months respectively).

For the assessment of health status with Body Mass Index: BMI, the researcher measured weight and height of the samples before the interview. The researcher made calculation by using these two values and divided samples into 3 groups, i.e. thin, normal, and fat by using the criterion of Department of Health, Ministry of Public Health which set the body mass index of Thai people that the normal value should be between 18.5-24.9 kg./sq.m. (Department of Health, Ministry

of Public Health, 2002). It was found that Muslim Thai group had over body mass index (obesity) almost two times as Buddhist Thai group (percentage of 45.3 and 28.3 respectively). While more than two-third of Buddhist Thais (percentage of 66.9) had body mass index in normal level. There was statistically significant difference between the groups of religions ($p < 0.001$). When taking the population and socio-economic characteristics as the control variables, it was found that Muslim Thais had Body Mass Index above the criterion (obesity) more than Buddhist Thais in almost categories. As well Buddhist Thais had Body Mass Index in the normal level more than Muslim Thais in almost categories. The statistically significant differences of Body Mass Index between religion groups were found ($p \leq 0.05$) in the female, person aged of 30-44 years and 45-59 years, married person, low educated person, agriculturist, middle income earner and person using the right of Gold card with 30 Baht payment categories (annexed table 2).

The cause that Muslim Thais in Nakhon Nayok Province had over body mass index (obesity) more than Buddhist Thais might be resulted from cultural consumption of Muslim Thais in this area; they liked to eat highly seasoned foods and high calories. As such they might have low education in nutrition as well as lack of regular physical exercises. Consequently, they were the main reason of obesity and hyperlipidemia as mentioned above.

While the assessment of health status with self-health perception, the majority (percentage of 64.8) assessed that they had the good health status, followed by medium health status. When letting samples assess health status compared to the situation in the last 3 years, almost half of them (percentage of 47.5) replied that they had the same health status. When assessing health status compared to the same generation persons, only the percentage of 19.0 assessed that they had poorer health status. The significant difference between religion groups was not found in the assessment of health status with this method.

It can be seen that when assessing health status from the perceived illness and Body Mass Index: BMI, Buddhist Thais and Muslim Thais in Nakhon Nayok Province had different health status, which Muslim Thais had body mass index beyond criterion and had illness more than Buddhist Thais particularly in female,

person aged of 30-44 years, married person, and low educated person categories. As a result, it can be concluded that Muslim Thais in Nakhon Nayok Province had health status inferior to that of Buddhist Thais.

Table 4.3 the percentage and correlation test of samples classified according to the assessment of health status and religion

Health status	Buddhist Thais	Muslim Thais	Total
Body Mass Index: BMI ***			
thin	4.8	7.7	6.5
normal	66.9	47.0	55.3
get fat	28.3	45.3	38.3
$\bar{X}_1=24.42, S.D.=4.78, \min=12.40, \max=47.03 \chi^2=15.490$	$\bar{X}_1=23.57$	$\bar{X}_2=25.02$	
Personal disease / illness symptoms *			
- do not have	62.0	50.4	55.3
- have (possible to answer more than 1 disease)	38.0	49.6	44.7
▪ diabetes mellitus	5.4	13.2	10.0
▪ hypertension	13.9	22.2	18.8
▪ cardiopathy	3.6	5.1	4.5
▪ hyperlipidemia	2.4	10.3	7.0
▪ osteopathy	9.6	6.0	7.5
▪ nephropathy	1.2	3.0	2.3
▪ asthma/allergy	4.2	6.8	5.8
▪ cancer at various organs	0.6	0.4	0.5
▪ others	11.4	11.1	11.3
$\chi^2 = 5.304$			
Total (number)	41.5 (166)	58.5 (234)	100.0 (400)

* Statistical significance at 0.05, *** statistical significance at 0.001

4.3.2 Health care services

From the meaning of the equity in health care, the health care services refer to the equal accessibility to the services for the equal need, the equal utilization for the equal need and receiving the equal quality of the services for everybody (Whitehead, 2000). The researcher applied this concept as the guideline in the study and assessed

the difference of health care which Buddhist Thais and Muslim Thais in Nakornnayok province had received as follows:

- **Accessibility**

After reviewing the concepts and theories explaining the accessibility to the health services, the researcher classified the guidelines in the health care evaluation in the issue of the accessibility to the services by considering from geographical, financial and cultural factors. The difference of health care services is shown in table 4.4

Geographical factor

In this study the researcher selected Ampur Ongkarak as the purposive sampling of area because there are the highest number of Muslim Thais living in compared with all 4 Ampurs of Nakhon Nayok province. Ampur Ongkarak is far from Bangkok along Rungsit-Nakhon Nayok road only 40 Kilometers. It has boundary with Ampur Lamlukka Patumthani province, which is the enlarging suburban area and rapidly developing into the urban society. For more than 10 years, Ampur Ongkarak has developed many infrastructures including the projects in constructing asphalted roads passing through almost villages and made people visit each other with the convenience and also had the effect in transportation to utilize the services in a medical premise during the illness.

When considering mode of transportation to utilize the services in a medical premise regularly, almost one-third of the samples (percentage of 30.5) went to the medical premise by using private car. There were very few persons going there on foot/bicycle (percentage of 1.4) which was often the kind of transportation to utilize the services at the health station or private medical premise/midwifery near home. When taking the religion into consideration, the significant difference was not found. However the interesting point was that both Buddhist Thai group and Muslim Thai group used the public bus as the mode of transportation at quite low rate (percentage of 14.5 and 12.0 respectively). From talking with the samples during survey, almost all of them mentioned that for the mild illness or visiting doctor according to the appointment, they preferred going the hospital by public bus because of lower

expenses. However, in some villages, there was only one public bus running per day. Whereas in some villages there were many public buses passing through, the time table was uncertainty; each time of transportation they must spend a lot of time with inconvenience. Consequently, they must travel by other mode of transportation, although they must pay higher expenses.

For traveling length from home to the medical premise to utilize the services regularly, it was found that more than 90 percent of the samples stayed away from the medical premise not more than 20 Kilometers. The Buddhist Thai group replied that they stayed away from the medical premise more than Muslim Thai group (the mean value of 16.152 and 12.683 Km. respectively). However, when testing correlation the statistically significant difference was not found.

For traveling time to the medical premise to utilize the services regularly, most of the samples (percentage of 89.0) replied that their traveling time for utilizing the services was not more than 30 minutes. However, the statistically significant difference between religion groups was found ($p < 0.05$), i.e. the number of persons having the traveling time > 30 minutes in Buddhist Thai group was almost double size compared with that of Muslim Thai group (percentage of 15.1 and 8.1 respectively). When using the population and socio-economic characteristics as the control variables it was found that the number of persons having the traveling time > 30 minutes in female, person aged of 30-44 years, married person, low educated persons and persons taking care of home of Buddhist Thais was higher than the same group of Muslim Thais with statistical significance ($p \leq 0.05$) (annexed table 3). As such it might be that in Buddhist Thai group there were persons using the public bus as the mode of transportation more than those of Muslim Thai group, and they must spend time for waiting the bus and had the longer time in traveling compared with other modes of transportation.

Financial factor

In this study this factor will be considered from the cost of transportation and the chance to receive the treatment without worry about the expenses. From asking the average expenses for transportation to utilize the services in each time, it was found that almost three-fourth of the samples (percentage of 73.3) paid

transportation fee to receive the treatment not more than 100 Baht per time. The persons who spent traveling fee more than 100 Baht would be the persons who hired a car to a hospital. When taking the religion groups into consideration, it was found that Buddhist Thai group and Muslim Thai group paid the traveling fee almost without difference (mean value of Buddhist Thais 105.87 Baht, Muslim Thais 104.89 Baht).

When asking to the choices of receiving the treatment without worrying about the expenses, more than one-third of the samples (percentage of 37.0) replied that they had adequate choices, followed by no choices (percentage of 32.0). However, the noticed point was that when taking the religion groups into consideration, Muslim Thais replied that they had no choices a little more than Buddhist Thais (percentage of 34.2 and 28.9 respectively). However, the statistically significant difference between religion groups was not found.

From talking with the samples, the researcher found the interesting issue that when Muslim Thais were hospitalized, they would have other expenses such as patient's food expenses, traveling cost of care taker/relative etc. Especially in case of the elderly, child patients or the person who needed closely support from a care taker, the total expenses for each treatment would be increase in double. As such it did not include losing income that the care taker/relative must take leave from work to care the patient. This might be resulted from the culture in caring the patient of Muslim Thais, which might be different from that of Buddhist Thais or resulted from the uncertainty in the services provided by the hospital whether it would be correct and follow the Islamic principle. For example, the food of patient provided by the hospital did not follow requirement of religion, the care taker/relative must cook food from his home. In effect, the expenses in this part were increasing. The detail of these expenses will be discussed later.

Cultural factor

Nakhon Nayok province is located in the central region, almost all people use central region Thai dialect so that there is very few language barrier. Also the people in this area both Buddhist Thais and Muslim Thais adjusted themselves for living in harmony at peace with each other for long time. However most of Muslim cultures are rooted in the religious teaching principle, so that we could find the

disparity in daily way of life in many cases such as religion practicing affairs, clothing, food, cleaning, taking care of patient etc. These cultures are clearly different from the culture of Buddhist Thais who are the majority in the area.

At the present the implementation in universal coverage program and the development for passing Hospital Accreditation: HA make each hospital alert and try to change the management pattern including the provision of various services by taking more the cultural compatibility and necessity of a patient into consideration. For example, there is food separation provided for Muslim patients, a place for religion practicing affairs etc. However, there are many service takers deeming that the provided services are not compatible with their religion principle/belief. It can be seen that most of the samples (percentage of 86.6) replied that the medical premise where they utilized the services provided the services according to their necessity. The number of Muslim Thai group replying that the services provided according to their necessity were a little more than that of Buddhist Thai group (percentage of 89.1 and 81.6 respectively). However, when asking whether the provided services were compatible with the religion principle/the necessity or not, it was found that 20.7 percent of Muslim Thai group replied that they were not compatible with religion principle/the necessity. While only 4.6 percent of Buddhist Thai group replied that they were not compatible with. The difference was statistically significant ($p < 0.001$). When taking the population and socio-economic characteristics as the control variables, the number of Muslim Thais in all categories deemed that the services provided by the hospital were not compatible with religion principle/necessity was higher than that of Buddhist Thais. The statistically significant difference between religion groups was found ($p \leq 0.05$) in male and female, person aged of 45-59 years, married person, low educated person, person taking care of home, middle and high income categories, including person using the right of Gold card with 30 Baht payment (annexed table 4).

When asking which kind of activity was not compatible with religion principle/necessity, all Buddhist Thais and Muslim Thais in the samples deemed that the nursing permission for the patient's care taker/relative was not most compatible (percentage of 34.6). As such it may be that the medical center hospital issued the

regulation not to allow a relative nurse a patient at the general ward and stipulated the patient visiting time - until 8.00 pm. only, by giving the safety reasons of the staff. This thing was very contradictory with the culture of taking care of the patient of people in this area. For activities Muslim Thais deemed that they were not compatible with religion principle at the high level (more than percentage of 35) were that the patient clothing did not cover body completely (percentage of 43.9), food and cooking procedure (percentage of 39.3), the recommendation for sterilization when a patient already had 2 children (percentage of 37.6) and cleaning/cleansing the waste without using water (percentage of 37.0) respectively. Whereas Islam have clearly the requirement in these activities, the service providers might not know or not understand; as a result Muslim Thai group assessed that these activities were not yet compatible with religion principle.

For having a personal doctor /service provider who had been familiar with and taken care of a patient for more than 3 years, it was found that most of the samples (percentage of 79.7) replied that they did not have personal doctor yet. However, the point to be noticed is that when asking persons who had a personal doctor whether this doctor had the same religion with the patients or not; almost Muslim Thais (percentage of 97.9) replied that the doctor did not have the same religion. As such it might be that there are very few Muslim doctor/staff in Nakhon Nayok Province. Even in Ampur Ongkarak itself, there are Muslim public health staffs not more than 5 percent. It was likely to be resulted from the fact that Muslim Thais did like their children to have a general education.

From the result of health care services in terms of the accessibility to the services as mentioned, both Buddhist Thais and Muslim Thais could access to the health services in terms of geography and finance almost without difference. For the accessibility to the health services in terms of culture, Muslim Thais considered that the medical premise where they utilized the services already provided the services for Muslims, but there were many activities that were not compatible with the religion principle/the necessity, including there were very few service providers who were Muslim or had knowledge, understand the Islamic culture. Whereas the Buddhist Thais considered only that the prohibition in nursing from relative was not compatible

with their necessity. When considering other population characteristics, it was found that female, person aged of 45-59 years, married person, low educated person, middle and high income persons including persons using the right of Gold card with 30 Baht payment of Muslim Thai group could access to the cultural services less than the Buddhist Thais in the same categories.

Table 4.4 the percentage and correlation test of sample classified according to accessibility to the health services and religion

Accessibility to health care services	Buddhist Thais	Muslim Thais	Total
- Geography			
Traveling time for going to the medical premise where the service was regularly utilized *	n ₁ = 166	n ₁ = 234	n _t = 400
- ≤ 30 minutes	84.9	91.9	89.0
- > 30 minutes	15.1	8.1	11.0
$\bar{X}_1=23.39, S.D.=14.80, \min=1, \max=120, \text{mode}=30, \chi^2=4.778$	$\bar{X}_1=25.29$	$\bar{X}_2=22.04$	
- Culture			
Provision of services according to religion principle/necessity ***	n ₁ = 130	n ₂ = 164	n _t = 294
- not compatible	4.6	20.7	13.6
- compatible	95.4	79.3	86.4
$\chi^2=16.024$			
Personal doctor had the same religion ***/ ^E	n ₁ = 24	n ₂ = 47	n _t = 71
- no	8.3	97.9	67.6
- yes	91.7	2.1	32.4
$\chi^2=58.160$			

* Statistical significance at 0.05, *** statistical significance at 0.001

^E Exact Sig. (2-sides)

▪ Utilization

From the assessment of health status that Muslim Thais in Nakhon Nayok province had illness/personal disease more than Buddhist Thais, as a result Muslim Thais went to utilize medical care services more than Buddhist Thais. When asking the service utilization in medical care during the last year, Muslim Thai group replied that they received the treatment as the outpatient more often than Buddhist Thai group

(mean 3.97 and 2.51 time/person/year respectively). The point to be noticed is that Muslim Thai group received the regular treatment (> 5 time/year) almost twice as Buddhist Thai group (percentage of 30.3 and 16.3 respectively). This difference has correlation with statistical significance ($p < 0.01$). When taking population and socio-economic factors and health insurance as the control variables, it was found that Muslim Thais in almost all categories had the tendency to receive the treatment as the outpatient more than Buddhist Thais and there was difference between religion groups with statistical significance ($p \leq 0.05$) in female, person aged of 30-44 years, married person, low educated person, person who does general work for wages, high income earner including person using the right of Gold card with 30 Baht payment (annexed table 5).

For hospitalization, Muslim Thai group in Nakhon Nayok Province received the treatment almost three times as Buddhist Thai group (percentage of 26.9 and 10.2 respectively). For disease/the illness symptoms that the samples received the treatment, the giving birth was the highest (percentage of 27.2) followed by the infectious diseases (percentage of 14.8), the respiratory diseases (percentage of 13.6), the cardiovascular diseases (percentage of 11.1) and diabetes mellitus (percentage of 11.1) respectively. Particularly giving birth, cardiovascular diseases, and diabetes mellitus, Muslim Thais clearly received the treatment more than Buddhist Thais (annexed table 6). When testing correlation with χ^2 -test, the statistically significant difference between religion groups was found ($p < 0.001$). When taking the population and socio-economic characteristics and health insurance as the control variables, it was found that all categories of Muslim Thais also had the tendency to be hospitalized more than Buddhist Thais. There was difference between religion groups with statistical significance ($p \leq 0.05$) in female, person aged of 30-44 years, married person, low educated person, agriculturist, low and high income earner, including person using all types of health insurance (annexed table 7). However when considering the hospitalization period in each time, it was found that the average days that Muslim Thai group was hospitalized in each time would took a little longer days than that of Buddhist Thai group (mean 5.57 and 4.38 days/time respectively). However the significant difference was not found.

As for the medical premise where the samples regularly utilized the services, two-third of them (percentage of 66.7) would mainly utilize the service utilization at the medical premise of the government assigned by the area the responsibility for implementing universal coverage program. When taking religion into consideration, almost half of Buddhist Thai group (percentage of 49.3) liked to utilize the services at the health station and the community hospital, while Muslim Thai group at the percentage of 47.0 utilized the services at the medical center hospital and health station nearby their homes. The point to be noticed is that Buddhist Thais liked to receive the treatment at physician's clinic almost twice as Muslim Thais (percentage of 20.5 and 11.1). Whereas Muslim Thais would receive the treatment at private medical premise / midwifery four times as Buddhist Thai group (percentage of 16.2 and 4.8). As such it was likely resulted from public health staff working in the area where Muslim Thais living in liked to open the private medical premise to service their customers outside working hours more than those in area where Buddhist Thais living in. While physician's clinic would be located in the center of Ampur where was near the community of Buddhist Thais. The reasons for explanation in this case were that the convenience and the familiarity with service providers. Aside from this, it was found that 4 percent of samples liked to have self medication although they had the right to utilize the services without paying for the medicine. The selection for service utilization at these medical premises had difference between religion groups with statistical significance ($p < 0.01$). When taking socio-economic characteristics as the control variables, it was found that female, person aged of 30-44 years and 60 years upwards, married person, agriculturist, highest income earner and person who had health insurance of both group would select the service utilization at different medical premises with statistical significance ($p \leq 0.05$). The point to be noticed is that in the low social status category (low and lowest income), both Buddhist Thai group and Muslim Thai group preferred to utilize the services at the government medical premise such as health station, the community hospital, and the medical center hospital where were the medical premises under the right in universal coverage program. For the high social status category (high, highest income) Buddhist Thai group preferred to utilize the services at the community hospital and the medical

center hospital, which was different from Muslim Thai group who preferred to utilize the services at the private medical premise and physician's clinic (annexed table 8).

When asking that before receiving the treatment, whether a patient had selected the medical premise according to the illness characteristics or not. The number of respondents who replied "selected" and "not selected" was almost the same (percentage of 50.2% and 49.8 respectively). Almost three-fourth of the group who replied "selected" (percentage of 72.3) would receive the treatment in medical premise where they regularly used for common illness or common diseases. However if the illness was severe, they would receive the treatment at other medical premises where their capability was higher which were the medical center hospital and the community hospital at almost the same amount (percentage of 44.2 and 41.5 respectively). They would take the right in health insurance and the proximity of medical premise/could go there conveniently into consideration (percentage of 62.8 and 61.8 respectively).

From the above mentioned, it can be seen that Buddhist Thais and Muslim Thais in Nakhon Nayok Province differently utilized the services in medical care. Muslim Thais utilized the services in medical care as both outpatient and inpatient more than Buddhist Thais, particularly in Muslim Thai categories of female, person aged of 30-44 years, married person, low educated person, agriculturist, low income earner and person who had health insurance. As such it was likely resulted from their illness/personal disease perception, receiving the right in health insurance without paying too many expenses for service utilization, the availability in convenient and rapid transportation for service utilization, and the proximity to the highly capable medical premise. These things might cause Muslim Thais to utilize the services in medical premise more than Buddhist Thais.

Table 4.5 the percentage and correlation test of samples classified according to service utilization and religion

Health service utilization	Buddhist Thais	Muslim Thais	Total
Receiving the treatment as outpatient **			
- not used to	41.6	28.2	33.8
- 1-2 times	24.7	20.9	22.5
- 3-5 times	17.5	20.5	19.3
- > 5 times	16.3	30.3	24.5
$\bar{X}_1=3.37, S.D.=3.93, \min=0, \max=12, \text{mode}=0, \chi^2=4.068$	$\bar{X}_1=2.51$	$\bar{X}_2=3.97$	
Receiving the treatment as inpatient ***			
- not used to	89.8	73.1	80.0
- 1 time	8.4	23.1	17.0
- > 1 time	1.8	3.8	3.0
$\bar{X}_1=0.24, S.D.=0.52, \min=0, \max=3, \text{mode}=0, \chi^2=16.972$	$\bar{X}_1=0.12$	$\bar{X}_2=0.32$	
Medical premise where the service was regularly utilized **			
- private medical premise / midwifery	4.8	16.2	11.5
- clinic	20.5	11.1	15.0
- health station	22.9	25.2	24.3
- community hospital	26.5	20.1	22.8
- medical center hospital	18.1	21.8	20.3
- private hospital	1.8	2.6	2.3
- others (self-medication)	5.4	3.0	4.0
$\chi^2=21.019$			
In case of severe illness, medical premise where a person would go for treatment ***/ ^M	$n_1 = 54$	$n_2 = 93$	$n_t = 147$
- clinic	3.7	-	1.4
- community hospital	40.7	41.9	41.5
- provincial hospital	16.7	3.2	8.2
- medical center hospital	29.6	52.7	44.2
- private hospital	9.3	1.1	4.1
- others (large hospital in Bangkok)	-	1.1	0.7
$\chi^2=21.311$			
Percentage (number)	41.5 (166)	58.5 (234)	100 (400)

** Statistical significance at 0.001, *** statistical significance at 0.001

^M Monte-Carlo Sig. (2-sides)

- **Quality of services**

One important objective in implementing universal coverage program is to develop efficiency of service system for giving people the equitable quality of the services. There will be no discrimination among the groups of the service takers. From this policy, each medical premise adopted various standard quality improvement methods such as ISO, HA etc. with the aim to be quickly certified. However in the past the improvement of quality of the services had experienced many critical problems and obstacles in various aspects such as finance/budget, knowledge/understanding of the staff including the burden of regular works. As a result the service takers assessed that they did not receive the services with enough quality and it was also found the difference in the service takers' assessment in the quality between religion groups.

In this study the researcher considered the quality of the services that various groups of people received by taking consideration from the view point of the service taker. The quality of the services will be divided into 3 aspects, i.e. the quality of the services in clinic, the quality of the services in communication, and the quality in services, as shown in table 4.6

Quality in clinical services

As for the quality of the services in clinic, the researcher considered the confidence in the doctor who gave the treatment, the involvement in making decision of treatment, quality of medicines received, the attention in the appointment for continuing utilizing the services, including confrontation with the mistakes in treatment. In this study, there was significant difference between religion groups in the issue of confrontation with the mistakes in treatment only.

For the opinion expression towards the confrontation with the mistakes in treatment, in this study it was only the inquiry about the opinion from view point of the service taker to the results of treatment. It might be different from the view point of medical staff. From this study it was found that there was difference between religion groups with statistical significance ($p < 0.05$). In other words, Muslim Thais replied that they used to encounter or used to hear the mistakes in treatment more than

Buddhist Thais (percentage of 34.2 and 23.5 respectively). The most frequent mistake characteristic was that after the treatment, a patient did not get better from the illness (percentage of 37.8). They thought the causes of the mistake resulted from that a doctor was not good at treatment/not pay attention at the highest rate (percentage of 55.5) followed by their poverty (percentage of 36.1) and a doctor had limited time (percentage of 18.5). There were very few persons thought that the mistake resulted from the discrimination in the services (percentage of 1.7). When taking the population and socio-economic characteristics as the control variables, it was found that there was the difference between religion groups with statistical significance ($p \leq 0.05$) in the categories of get married, low educated person, agriculturist, and person using the right of Gold card with 30 Baht payment (annexed table 9). What Muslim Thais replied that they used to encounter or used to hear the mistakes in treatment more than Buddhist Thais, it might be resulted from that Muslim Thais had more illness and utilized medical services more than Buddhist Thais. Also they received the right in universal coverage program at a medical school, this might make them expect to receive the good services with high quality, but when they actually utilized the services, most of the time they received medical care from medical students, as a result they felt that they must encounter the mistakes in treatment more than other people.

Quality in communication

Although all samples in this study used Thai as the main language, this study still found the obstacles in communication between doctors/staff and patient. From the assessment of Quality of the services in communication between religion groups, there was difference with statistical significance ($p < 0.01$). In other words, when asking to the attention in listening to the problems of patient, the samples replied that they received the attention in medium and high levels almost the same amount (percentage of 49.3 and 41.0). Muslim Thai group deemed that the service providers had tendency to pay attention in listening to their illness symptoms/problems less than those of Buddhist Thais. When taking the population and socio-economic characteristics as control variables, almost categories of Muslim Thais had tendency to receive the attention in listening to the problems less than

Buddhist Thais. There was difference between religion groups with statistical significance ($p \leq 0.05$) in the categories of female, person aged of between 30-44 years, married person, high educated person, person who does general work for wages and agriculturist, high and highest income earner, including person using the right of Gold card with 30 Baht payment (annexed table 10).

For the understanding in what doctor said/explained about the illness symptoms, nearly three-fifth of the sample (percentage of 57.8) understood in what doctor said/explained at the medium level. Buddhist Thai group had the tendency to understand in what doctor said/explained more than Muslim Thai group. The statistically significant difference between religion groups was found ($p < 0.05$). When taking the population and socio-economic characteristics as control variables, Buddhist Thais had the tendency to understand the explanations more than Muslim Thais in almost categories. There was difference between religion groups with statistical significance ($p \leq 0.05$) in the categories of male, person aged of 30-44 years, high educated person, including person who does general work for wages and agriculturist (annexed table 11).

For the feeling of having questions to ask about the illness but did not ask, most of the samples (percentage of 79.0) never had this feeling. If they had any doubt or did not understand in any matter, they would ask doctor/staff providing the services about it immediately. However, the point to be noticed is that one-fifth of the samples (percentage of 21.0) still did not dare to ask by giving the reasons that they were afraid that doctor/staff would scold them at the highest rate (percentage of 60.0) followed by they could not catch the meaning /did not understand (percentage of 19.0) and they thought that even they asked, the doctor would not answer (percentage of 13.1). Muslim Thai group had the feeling of having questions to ask almost 1.5 times as Buddhist Thais (percentage of 23.9 and 16.9 respectively). However, when testing correlation, there was no difference between religion groups with statistical significance.

Quality in services

For the quality in services, this study considered from the suitability of waiting time, caring time received from doctor, the respect to a patient, and the quality of the general medical care received from staff by the patient's perception which might be different from view point of service providers.

For the suitability of waiting time and caring time received from doctor, it was found this study that one-third of the samples (percentage of 30.5) felt that it was unsuitable. Muslim Thai group had the tendency of feeling that it was unsuitable more than Buddhist Thai group. There was difference between religion groups with statistical significance ($p < 0.05$). When taking the population and socio-economic characteristics as control variables, it was found that Muslim Thais in all categories felt that the waiting time was unsuitable for the caring time received from doctor more than that of Buddhist Thais. There was difference between religion groups with significance ($p \leq 0.05$) in female, person aged of between 18-29 years, single, high educated person, work for the government/state enterprise, high and highest income earner including a person using the right of Gold card with 30 Baht payment (annexed table 12). As such it may be that the medical premise where Muslim Thais preferred to utilize the services was a large hospital, it had many rules/procedures and many service takers so that it took time for waiting. Whereas Buddhist Thais had less illness and they often utilized the services at the community hospital with smaller in size.

For feeling honored and respected from medical staff, more than half of samples (percentage of 50.8) got moderately respected, i.e. receiving medical care like other people. The point to be noticed is that Muslim Thais thought the staff did not respect them more than Buddhist Thais (percentage of 10.3 and 6.0 respectively). There was difference between religion groups with statistical significance ($p < 0.05$). When taking the population and socio-economic characteristics as control variables, almost categories of Buddhist Thais felt that the service providers respected them higher than Muslim Thai group. There was difference between religion groups with statistical significance ($p \leq 0.05$) in the categories of female, person aged of > 60 years, married person, low educated person, person who does general work for wages, person taking care of home, lowest income earner, including person using the right of

Gold card with 30 Baht payment and person using other health insurances (annexed table 13). For the causes of not getting respected, most of them thought that it was likely resulted from their poverty (percentage of 76.5), only 5.9 percent thought that it was resulted from religion which was different from that of the service providers.

When letting samples express their opinion towards the quality of the services received, most of them (percentage of 85.0) deemed that it was in good level. However Muslim Thais considered that received the poor services more than Buddhist Thais (percentage of 17.9 and 10.8 respectively). There was difference between religion groups with statistical significance ($p < 0.05$). In contrast, when taking the population and socio-economic factors as control variables, it was found that Muslim Thais in high educated group, highest income earner had the tendency to receive the better services than Buddhist Thais. There was difference between religion groups with statistical significance ($p \leq 0.05$) in female, low educated person, and low income earner (annexed table 14). The poor service characteristic the people experiences most often were impolite speaking (percentage of 50.0) followed by staff did not pay attention/deliberately overlooked (percentage of 46.7) and a patient was interrogated about expenses (percentage of 21.7).

From the assessment of quality of the services received in three aspects mentioned above, it was found that Muslim Thais felt that they received medical care with lower quality than Buddhist Thais in confrontation with the mistakes in treatment, attention in listening to the problems of patient, understanding in what doctor said/explained, suitability in time, receiving respected from medical staff, including quality of the services in general. Muslim Thai group who had tendency to receive the medical care with lower quality than others were female, the elderly, married person, low educated person, person who does general work for wages, agriculturist, low income earner and person using the right of Gold card with 30 Baht payment.

Table 4.6 Percentage and correlation test of samples classified according to quality of services and religion

Quality of services	Buddhist Thais	Muslim Thais	Total
Quality of the services in clinic			
Confrontation with the mistakes in treatment *			
- not used to	76.5	65.8	70.3
- used to happen to him or relatives	16.9	20.1	18.8
- used to hear or see what happened to others	6.6	14.1	11.0
$\chi^2= 7.051$			
Quality of the services in communication			
Understanding in what doctor said/explained *			
- high	41.0	30.8	35.0
- medium	50.0	63.2	57.8
- low/not at all	9.0	6.0	7.2
$\chi^2= 7.084$			
Quality in services			
Suitability of waiting time and the caring time received from doctor *			
- high	13.3	15.4	14.5
- medium	63.3	49.1	55.0
- low	23.5	35.5	30.5
$\chi^2= 8.385$			
Receiving respect from staff **			
- high	50.6	33.8	40.8
- medium	43.4	56.0	50.7
- low	6.0	10.3	8.5
$\chi^2= 11.848$			
Quality of services in general *			
- good	89.2	82.1	85.0
- not good	10.8	17.9	15.0
$\chi^2= 3.845$			
Total (number)	41.5 (166)	58.5 (234)	100.0 (400)

* Statistical significance at 0.05, ** statistical significance at 0.01

4.4 Opinion to The Provisions of Health Care Services

The study in the difference of health care services in the minority group in USA of IOM (Institute of Medicine) found that the minority group had tendency to receive health care services with lower quality than that of the majority group under the same health insurance and income level. As such it was resulted from the involved factors in 3 levels. Firstly the patient himself, the patient did not accept the treatment because they thought that it was not congruent with their way of life, including they did not believe in the public health service system at this moment. Secondly, health care service level - it was the organization pattern including various rules of health care facilities which did not take the necessity/limitation of the service taker into account. Lastly, health care process level – it included bias, prejudice, and discrimination of service providers which made minority group often received inequitable health care services compared with others (IOM, 2003).

From the above mentioned concepts, the researcher took them as the guideline in the study in difference of health care services between different religious groups after implementing the universal coverage program for around 3 years, the result from this study is shown in table 4.7.

For the aspects of not accept treatment /not utilize the service /not follow the doctor's instruction because a patient deemed that they were contradictory with their belief principles, it was found that only 7.5 percent replied they used to refuse the treatment /doctor's suggestion. Muslim Thai group used to refuse the treatment a little more than Buddhist Thai group (percentage of 8.5 and 6.0 respectively); however the significant difference was not found.

For the feeling that the medical staff had prejudice or negative attitude to a patient because of different religion, in this study it was found that Muslim Thai group were aware of this feeling almost 3 times as Buddhist Thais (percentage of 22.6 and 8.6 respectively). There was difference between religion groups with statistical significance ($p < 0.001$). When taking other population characteristics as control variables, it was found that almost all categories of Muslim Thais felt that the service providers had prejudice to them more than Buddhist Thais. There was difference between religion groups with statistical significance ($p \leq 0.05$) in female,

person aged of 45-59 years, married person, low educated person, merchant, middle income earner, including person using the right of Gold card with 30 Baht payment and person using other health insurances (annexed table 15).

For the feeling that the service providers gave the health care services with discrimination because of different religion, there was difference between religion groups as well. Muslim Thais had tendency to be aware of receiving the health care services with discrimination more than Buddhist Thais with statistical significance ($p < 0.05$). When taking the population characteristics as control variables, there was difference between religion groups with statistical significance ($p \leq 0.05$) in female, person aged of 45-59 years, married person, and low educated person (annexed table 16).

However when letting the samples express their opinion whether a person strictly following the religion principle will live in society with more difficulty than others or not. It was found that Muslim Thai group had tendency to agree with this question more than Buddhist Thais (percentage of 54.4 and 47.7 respectively); however there was no statistically significant difference.

Table 4.7 Percentage and correlation test of sample classified according to opinion towards services and religion

Opinion towards services	Buddhist Thais	Muslim Thais	Total
Staff had prejudice/negative attitude when giving services to a patient ***	$n_1 = 140$	$n_2 = 208$	$n_t = 348$
- no	91.4	77.4	83.0
- yes	8.6	22.6	17.0
$\chi^2 = 11.690$			
Staff gave services with discrimination *	$n_1 = 142$	$n_2 = 202$	$n_t = 344$
- no	96.5	89.1	92.2
- yes	3.5	10.9	7.8
$\chi^2 = 6.262$			

* Statistical significance at 0.05, *** statistical significance at 0.001

From the result of this study it can be concluded that when considering the opinion towards the provision of services, Muslim Thais felt that staff giving services

with prejudice to them, including giving services with discrimination more than Buddhist Thais. However, they had no choice; they must utilize the services/did not refuse the treatment or suggestion from service providers, although they felt that some services were contradictory with their belief principle/necessity. As such they wanted to recover from the illness symptoms quickly. Muslim Thai group who were aware of different health care services from Buddhist Thai group were female, person aged of 45-59, married person, and low educated person.



CHAPTER V

DISCUSSION

The objective in this study is to explain the disparities in health status and health care services in accessibility to the services, utilization, and quality of the services of Buddhist Thais and Muslim Thais in Nakhon Nayok Province. Subsequently health equity and health care services of population groups which have different religion will be assessed after the implementation of universal coverage program. The discussion of the result from this study will be done by following the objective. For better understanding in the result, the general conditions will be outlined as follows:

For the sampling, the researcher applied the method of multistage sampling. The samples will be divided into 2 groups according to the religion, i.e. Buddhist Thais and Muslim Thais. The female samples are almost 3 times as male samples, the average age is around 45 years, most of them get married and still are living with their spouses, and Muslim Thai group has the living and studying children more than Buddhist Thai group. As such it may be that Islam has a teaching principle for Muslim to have many children and prohibits the permanent birth control or sterilization (Saowanee Jitmuad, 1992: 421).

When taking the education into consideration, it was found that most of samples finished general education at the primary standard level. The number of Buddhist Thai group who finished higher than the primary standard level is a little more than that of Muslim Thai group. As for religious education, almost all people in Muslim Thai group replied that they knew and understood in the faith principle, and fundamental practicing principle; including they could practice several religious affairs, although they had never attended the school. Since the religious learning could be learned in family. Parents or guardians have a direct duty in teaching the religious knowledge to their children (Dolmanaj Baka and Wae-u-seng Madaehoh, 1993: 117).

For occupation, most of Muslim Thais were taking care of home, while Buddhist Thais would be agriculturist. As such it might be that in the first phase of data collection, the researcher collected data in area of Muslim Thai group on foot and surveyed in each home, then made an interview in the day time. Therefore, the researcher only met housewife or the elderly. However, for the data collection in Buddhist Thai group, the researcher changed the interviewing place to shops, public pavilion or a place where people were gathering. Consequently, there were more chances to meet the people in various occupations. Also most of the samples of this study were female; however according to the Islamic principle, making a living to feed a family is the main duty of male (Amporn Wangjaitham, 1989: 92). As a result, the answers in occupation characteristics of Muslim Thais had tendency to reply as housewife more than Buddhist Thais.

For income data, most of the samples in this study were agriculturist or taking care of home and their children transferred them the money. The researcher could not exactly assess their income, so the researcher must make assessment by using the figure in the past that they used to earn. For the occupation of merchant, owners did not cooperate to answer this question, they were afraid that the data would be informed to the Revenue department. As a result, the researcher must adjust the question to assess income in each occupation in accordance with the suitability. For example, the farmers would be asked how many times per year they could grow rice, how much the average output was, then the cost would be deducted and the result would be averaged as the monthly income. When dividing income data into 5 levels (income quintile) according to proportion of population, it was found that the samples at the middle income (5,001-7,000 Baht/month) would be the highest. However the division of socio-economic status by only assessing the income level may not reflect the actual socio-economic status, since there are many factors involving with economic status such as education level and occupation. An academic person at National Statistics Bureau, USA proposed that income, education and occupation data should be taken as combined variable, and the data would be distributed as cumulative frequency, adding up all scores and making division according to socio-economic status as needed (Suchat Prasitrattasin, 2003: 292-297). This method should be more reliable.

The main objective of universal coverage program is that all people will receive health insurance, and can access to the services as needed. The past result made all people in Nakhon Nayok Province had health insurance with no exception. In this study there was no one who did not have any health insurance. From the collected data, three-fifth of the samples had health insurance of Gold card with 30 Baht payment and could utilize the services at Ongkarak hospital or the medical center hospital at almost the same quantity. As such it was resulted from dividing the areas of responsibility in universal coverage program since the inception of October 2001.

When considering the benefits according to the type of health insurance, it was found that Muslim Thais had the welfare for the persons work for the government/state enterprise, which was regarded as highest benefits, almost 3 times less than Buddhist Thais. As such it was likely resulted from that in the past Muslim Thais in this area preferred sending their children to have a higher study in religion more than general education. However, the received education certificate was not recognized by Thai government, and it could not use as the evidence for the application to work for the government/state enterprise. As for the right in social insurance card which Muslim Thais used this right more than Buddhist Thais, it was likely resulted from that Muslim Thais had many children, and at the present the modern agricultural technology has been applied, so that the need in manpower of agricultural sector reduced. When the children finished their compulsory study, their parents preferred them to work as employees in the industrial factories in the nearby area because of the quite certain income; while Buddhist Thais preferred sending their children to have a further study.

5.1 Disparities in Health Status

From the review literature, the possession of good health was considered as the fundamental right that all people should receive it equitably without discrimination by the disparities in race, religion, complexion, political right, birth place, wealth, and domicile. Almost all countries have been signatories to accept this principle since 1946. The constitution of Kingdom of Thailand both in the past and at the present has guaranteed the right in health. However the inequity in health can still

found commonly. The studies in local and overseas countries pointed out that the higher social status was associated with the better health status no matter what indicator was used or how to measure it. The inequity in society led to the classes of people and the exclusion in society. As a result, there was the disparity in accessibility and health service utilization. At the same time, the position or the social status caused people in each group having risk factors to different illnesses. As such these factors might be formed by the different way of life (Siriwan Grisurapong, 2003: 14).

The government has the important task in building up the health equity by using the equity concept as the foundation principle in driving health policies such as universal coverage program which is being implemented currently. However the implementation of this program is in the transition period, it encounters many problems and obstacles including several limitations. Each medical premise tries to adjust the operating procedure to be compatible with the context of each area almost all the time (Ampol Jindawattana and Suranee Pipatrojjanakamol, 2004). It may be too fast to assess the impact of the program since it takes sometime to make assessment in some aspects, particularly the change of health status.

The assessment in health status has various indicators and may be done in multi-dimension since there are many factors related to health status such as the dimensions in risk, perception in health status, search for health services, diagnosis, treatment, incidence of disease, disability and death including socio-economic impacts in order to receive data which can reflect the health status of population with quality and reliability (Siriwan Grisurapong, 2003: 43). However this study had limitations in budget and duration of the study, the researcher chose indicators in health status that can be easily, conveniently, quickly applied and the reading of results can be done in one measurement by using the assessment from 3 methods, i.e. illness/personal disease, self-health perception and Body Mass Index: BMI.

When taking illness/personal disease into consideration, it was found that Muslim Thais had the illness/personal disease more than Buddhist Thais, and Muslim Thais got sick almost twice as Buddhist Thais with the disease related to the behavior and pattern of eating food such as hypertension, diabetes mellitus, hyperlipidemia, cardiopathy, and nephropathy, particularly female, person aged of between 30-44

years, married person, including low educated person. However, there was no difference between religion groups in the categories of income or type of health insurance. In the same token, from the assessment of health status from Body Mass Index: BMI, it was found that Muslim Thais had tendency to have body mass index beyond criterion (obesity) more than Buddhist Thais in female, married person, person aged of between 30-44 years and 45-59 years, low educated person, agriculturist, middle income earner including person using the right of Gold card with 30 Baht payment. The point to be noticed is that the married female Muslim Thais had tendency to get fat and illness with diseases related to the behavior and consumption pattern at the young age more than Buddhist Thais. As such it was likely resulted from cultural consumption of Muslims that they liked to eat highly seasoned foods and high calories; while Buddhist Thais liked to eat fibrous food. As well, there was the campaign to promote physical exercises of public sector such as aerobic dance, community sport yard etc. which was suitable for male or female Buddhist Thais; however there was limitation for female Muslim Thais to participate in these activities in the issues of clothing and the permission from their parents or husbands in advance.

Nevertheless when taking income level and type of health insurance into consideration as the cutting tool for socio-economic status, there was no difference in health status in the low socio-economic status of both religion groups. The reason may be that living together in the capitalism society opens the chance for the free resource occupation of each person. The person in high socio-economic status regardless of religions has chances in accessibility to the services, being aware of health information and receiving diagnosis better than the person in lower socio-economic status. Whereas the poor or the socially inferior must endure the illness and pay more attention in the occupation than in their health (Sen, 1994 quoted in Anand, Diderichsen, Evans, Sukolnikov & Wirth, 2001: 50-51). Although at the present all Thai people have health insurance, the benefits do not cover the income compensation or other burden expenses occurred during the treatment. Normally, the poor will conduct self-medication or let the symptoms reduce for some times. If the illness does not get better, then they will start to consider receiving the treatment from somewhere. Meaning that, the illness is in serious level. As such it might threaten his life or a disability will be left after all symptoms disappear.

The result of this study pointed out that Muslim Thais had tendency to have lower health status than Buddhist Thais. As such it may be that Muslim Thais must live under the strict requirement in religion, culture and tradition and have more limitation than Buddhist Thais. Since they are the minority group, they receive less attention or have less chance to involve in setting up the social policies in various aspects which are compatible with their way of life, including they have a few representatives participating in the consideration of the health resource allocation. The lack of opportunity is the main reason that causes Muslim Thais to encounter the risks in health more than others. Although there is no clear explanation in this issue, it may be said that persons in the lower social status must encounter the stress from the outer factors more than persons in the higher social status. The less capital and resources for utilization (Evans, Hodge & Plers, 1994 quoted in Siriwan Grisurapong, 2003: 14) will have an effect in the inferior health status in the group of persons in the lower social status.

5.2 Disparities in Health Care Services

We all know well that Muslim Thais clearly have the way of life different from other groups such as culture, customs, tradition, or regulation. It is closely connected with religious principle (Saowanee Jitmuad, 1992). The implementation in any activity involving with Muslim Thai group needs knowledge and understanding in Islamic principle too. However Muslim Thai group has the fundamental problems in the issues of poverty, lack of knowledge, illness etc. that need the attention, support, improvement and alleviation like other group (Manee Chuthai, 2001). The development or the determination in working procedure to solve the problems including the provision of services must take the cultural disparity and giving the importance to these factors into consideration in order that Muslim Thais will accept the provided services and will have the good effect to the development in the overall situations.

The health care service is a process for good health (Peter & Evan, 2001) or it can cause the different health in different person. It depends on the acceptance and the service utilization. Therefore the service utilization in health care is the important indicator to reflect the health status of person in each group. The implementation in

the current universal coverage program (paying 30 Baht for all treatments of diseases) has the main objective for the health services revolution, building up the equity in the service utilization, creating the efficient service system, increasing the options in services, including promoting the sustainable good health in people. This program causes each medical premise to adjust itself and arrange the service system to follow the principle of the program.

However the past results are considered as unfairly succeeded. From the study of National Statistical Office it was found that people using right of Gold card must encounter the problems in long waiting time, cannot utilize the service outside working hours, a medical premise did not accept a patient etc. (National Statistical Office, 2002). As such it might be resulted from the following involving factors: 1) the factor in service provider level, i.e. the implementers in each level lacked the knowledge as well as understanding and they were familiar with centralized command system, they did not bring the problems in the area for cause analysis and solve it seriously. Further there was the limited budget, each agency put the emphasis in its survival and sometimes there were conflicts among each agency. Consequently, the cooperation in carrying out the work benefiting to people must be delayed. 2) the factor in service taker level, i.e. the expectancy of service taker that after the implementation in universal coverage program, he can utilize the good quality services, but when he actually utilized the services, he received the unchanged servicing patterns – no attention from the staff, long waiting time, poor services and sometimes he must pay the additional medicines fee/treatment fee. These make people not confident that they can utilize the good services.

From reviewing the concepts about the equity in health care in the aspect of practical definition that the emphasis should be put on the accessibility to the service, quality of services, as well as the acceptance in services of groups of people and this definition set the guideline for equity health care in 3 main issues, which are accessibility to the services, service utilization and quality of the services (Whitehead, 2000).

When taking the accessibility to the services into consideration, the result from this study can be divided into 3 issues as follows:

1) Geographical factor by taking traveling length, including the difficulty in transportation for utilizing the services into consideration, it was found that Muslim Thai group was nearer the medical premise where they regularly utilized the service and spent less traveling time than Buddhist Thai group. However, the mode of transportation to utilize the services was not different. It might be that Muslim Thai group often established their homes in cluster with a mosque as the center, while Buddhist Thai group lived sparsely. The two hospitals participating in the universal coverage program in Ampur Ongkarak are located nearer Muslim Thai community than that of Buddhist Thai community. As well, the west area of Ampur Ongkarak, where many Muslim Thais are living, is connected with suburban area; it has roads for convenient transportation. Therefore, it was found that Muslim Thai group assessed that they lived nearer the medical premise and spent less traveling time for utilizing the services than Buddhist Thais.

2) Financial factor by taking the cost of transportation for utilizing the services and chances in service utilization without worry about the expenses into consideration, this study did not find the difference between religion groups; but from the conversation with people, the interesting point was found that when Muslim Thais were hospitalized, they must pay additional expenses others such as food expenses, traveling cost of relatives etc. more than Buddhist Thais since they were not convinced that they would receive the health care services according to their religion principle/necessity. Therefore they really need help from their relatives. Also there was an instruction stipulated that when anybody heard that his relatives or close friends getting sick, he should visit them to give the moral support. As such these things will increase the expenses in each time of hospitalization. The detail in this issue should receive further study in depth.

3) Cultural factor by taking the opinions towards the provision of services according to religion principle into account, it was found that most of Muslim Thais deemed that the medical premise fairly try to provide the services for them such as the separation of patient's food, the place arrangement for praying to God, the permission in visiting a patient etc. However, the services provided in many activities were still not compatible with the religion principle. It might be that Islam has

practicing principles stipulated in almost activities from birth to death or from waking up until going to bed (Saowanee Jitmuad, 1992). Even in case of the illness, Muslims still must practice the religious affairs strictly. Although some activities could be exempted, they must be compensated after the illness was alleviated, otherwise it would be regarded as demerit.

The service activities in the hospital, that Muslim Thai group deemed they were not correct according to Islamic principle, were the clothing for female patient not covering the body completely, food and cooking procedures, the suggestion for temporary birth control and cleansing the waste without using water. The persons thinking that the service activities in the hospital were not compatible with religion principle were in the categories of married person, person aged of 45-59 years, low educated person, taking care of home, including middle and high income earners. The persons in these categories often gave priority to the practices according to religion principle more than the others.

Islam has the clothing requirement that the woman must cover all parts of her body except face and hand (Saowanee Jitmuad, 1992; Wanruedee Chinchauyraeng, 1998) which is different from the clothing of general people in society. However although there is the prohibit to reveal any part of body without necessity, a doctor is allowed to examine the prohibited parts because of the necessity in treatment when a female Muslim gets sick (Saisampan, 1976: 32 quoted in Wanruedee Chinchauyraeng, 1998: 40). Since the current female patient's clothing has only 2-3 strings tightened in the front, the parts of the body that should be covered might be carelessly revealed. As a result most of the samples gave the opinion that the uniform for female patient should be redesigned. Instead the new design may have robes tightened at shoulder and the side of body to cover the body completely.

Islam gives the importance to the conditions and stipulates the operating practice for nutrition. As a result, a hospital located in Muslim community must have a particular Muslim kitchen, including Muslim chef. However some hospitals have limitation in terms of their size and readiness and cannot provide these facilities. Particularly these things will make Muslim Thais hospitalized in a hospital not located in Muslim community be in trouble. The solution to these problems may be the

request for the cooperation from the local community leaders to suggest and set guidelines as well as assess the performance periodically in order to convince Muslims that the food for patient is correct according to Islamic principle.

Islam gives the priority to the cleanness. In the cleansing process, Islam will clearly separate the clean things out of the dirty things. The dirty things will be divided into several types. Each type requires different cleansing process. The clean water will be used as the major item to clean these dirty things. The cleanness in Islam has the important equivalent to the purity. There is a short statement saying that “the cleanness is half of the faith”. As a result, all Muslims must be careful about the cleanness in their lives seriously, it is not just only afraid of diseases. Islam instructs Muslims to clean their bodies every time before praying to God. For cleaning the hospitalized persons, the issue that Muslim Thais hardly accept is the fact that cleaning by using tissue paper or other wiping things after having a bowel movement, urine including other secretions. They considered that cleaning with paper instead of water is not hygienic enough according to religion principle.

As for the issue of personal doctor, it was found that Muslim Thais had very few personal doctors with the same religion with theirs since in the past Muslim Thais in this area often gave the priority to the religious education more than general education. They believed that the possession in a lot of religious knowledge will help them to have a firm faith in God and would be compensated by going to the heaven in the next world. At the present, therefore there are very few Muslim Thais working in the professional fields, particularly the profession in medical and public health fields.

For the issue of utilization, in this study it was found that there was the clear difference between Buddhist Thais and Muslim Thais in receiving the treatment during the last year. Muslim Thais utilized the services as outpatient and inpatient more than Buddhist Thais. Muslim Thais received the treatment as outpatient regularly (>5 times) almost double as Buddhist Thais. The medical premises where most of the samples regularly utilized the services were the government health care facilities, i.e. health station, community hospital, and medical center hospital. They gave the reasons that they wanted to use the right in universal coverage program, but the point to be noticed is that Buddhist Thais had tendency to utilize the services at

private clinics; whereas Muslim Thais would utilize the services at private medical premises/midwifery premises where they offered the medical care services. It might be that the premises were near their homes, it was convenient for traveling, and they were familiar with the service providers. There were very few persons considering whether or not these medical premises offered the services according to religion principle. From talking with some people, the researcher found that some Muslim Thais had utilized the service at a private medical premise for more than 20 years, although the service provider at there was not Muslim. When considering other social factors, it was found that female, person aged of 30-44 years, married person, low educated person, person who does general work for wages, high income earner including person using the right of Gold card with 30 Baht payment of Muslim Thai group would utilize the services more than those of Buddhist Thais as the result from the perception that they had more illness.

In this issue Aday & Anderson (1975) explained the idea in utilizing the services from a medical premise that in reality the health service utilization did not depend on only personal factors or social structure factors, but also it depended on other factors, i.e. the system in provision of public health services such as the number and the type of health care facilities, the distribution and the location of health care facilities. These factors would give people convenience to access and select the service utilization. Besides, the severity level of diseases had the effect on selecting a health care facility. In case of the common illness, both samples of Buddhist Thais and Muslim Thais mainly selected to utilize the services at health station, clinic, private medical premise, and drugstores near their homes. When the illness became severe or was in the serious condition and it needed the health care services with high technology, long treatment time, and the high expenses were required, most of the samples would utilize the government services according to the right of health insurance that they had. This statement is congruent with the result from this study in the patterns of illness treatment, which found that when a person got sick, firstly he would select self-medication methods such as purchasing medicines or utilizing services from medical premises near his home; when he did not recover from the illness or the symptoms were aggravated, he would go to hospital (Santad Sermsri et al., 2003:1).

Islam has teaching principle that illness is a test of God. When a person gets sick, he must receive the medical treatment in hurry without neglect, otherwise he will be in dismay. As well he must not let himself in despair. The person who gives the treatment must be skillful in that disease or illness. The method of treatment must not be a method different from religion principle or mixing with forbidden thing including it must not be the method of pleading from other things except God. Therefore when Muslim Thais got illness or abnormal symptom, he would have the treatment in hurry. Further they lived near a medical premise, could go there easily and had the right in health insurance without worry about the expenses. These things played a major role to make Muslim Thais have experiences in utilizing medical care more than Buddhist Thais. However, when considering service utilization of different income earners, there was no difference in the category of low socio-economic status. When considering the difference in utilization in the concept of “the equal service utilization for the equal need”, it must be carefully interpreted since the difference in utilization rate among the groups of population might not mean that this difference is inequity. It is only an indication for further study why the utilization rate is different.

The quality of the services is another important factor in considering the difference of health care service in accordance with the concept of “the equal service quality for everybody”, which most of people regard that everybody should have equal chance in equitably utilizing the good quality services without under any social influence (Bernard et al., 1987 quoted in Siriwan Grisurapong, 2003: 13). This study found that opinions towards the quality of the services received between religion groups were different in the issues of the attention in listening to the problems, understanding in what doctor said/explained, the suitability of caring time, the respect to a patient, and confrontation with the mistakes in treatment. Muslim Thais had tendency to receive these services with inferior quality to Buddhist Thais. In the case like this, Yotin Sawaengdee et al. (2000: Thor-To) explained that it was likely resulted from the arrangement in service system, i.e. a doctor determined the time for a patient and the patient had no chance to negotiate, especially the provision of services in the government medical premises. Although service providers knew well that the good quality would satisfy a patient and their relatives at most, but the limitation in 1) the number of doctors providing services 2) the number of nurses

providing services 3) cost and budget 4) medical devices and equipment 5) management system in the unit 6) vehicle 7) building etc. led to non-satisfaction in the service utilization of the patient. For example, the number of doctors is insufficient with the number of patients led to the non-satisfaction of the patient in terms of a little caring time, quick treatment, little time in diagnosis, little time for asking patient about symptom or no time for patient to ask the severity of disease and the symptom from doctor (Bassett et al, 1997; Kazmi, 1995). These limitations resulted in the treatment of “Problem-based” type. The doctor giving the treatment will firstly start solving the problem from “suffering” of sick people, meaning “giving the treatment according to the symptoms” (Tongjan Hongladarom , 1995; Hunt, 1989). Provided the doctor has longer time in diagnosis, talking with patient about the symptoms of disease will make the patient more satisfied with the treatment. (Piyawan Prakunkongchai, 1990; Singh et al., 1996)

In the issue of the honor given by the staff, there was difference between religion groups in this study. Muslim Thai group thought that they received the poor practices from staff in the issues of no attention/deliberately overlooking, and getting insulted during the treatment including the impolite manners of service providers during waiting for receiving the treatment. The persons experienced these situations were female, low educated person, and low income earner who belonged to the low socio-economic status group. It can be considered that these persons are taken advantage in the quality of services which is resulted from the social class division. It can be commonly found in the government hospitals where the poor must use their services without any alternative. Further the patient has culture and belief differing from those of the service provider, when the service provider did not follow their request or provided services lately, the patient may think that the staff had the bias and provided services with discrimination.

For the experiences in the mistakes of treatment, the wrong treatment aggravating the symptom and the wrong medicines received were the experiences that the samples used to encounter or hear that they happened to other people at the highest rate, particularly in Muslim Thai group. As such it was resulted from the fact that they had more illness and utilized more services. However the result from this

study was only the inquiry about the opinion in view point of the service taker. The service taker thought that if he did not recover from illness or the symptom did not get better, it might be resulted from the wrong treatment, which was different from the view point of a professional person in health.

When a person was sick and received the treatment in a medical premises, the first thing that a patient wanted was visiting a doctor to receive the treatment and asking the doctor how bad the illness was, how long the treatment would take. Misunderstanding in the culture of patient played a major role in building up the difficulty in the assessment of the illness and had an effect in the poor treatment and poor quality of the services. Learning and understanding the cultures of each other would help a doctor in the assessment of the illness, the diagnosis, and prognosis. At the same time, the patient would understand in what the doctor explained about the disease and the suggestion on how to practice for getting good result from the treatment; in effect it would be good of the health of the patient. The training and giving knowledge in the culture of local people to the service providers are likely to be good choices in improving the quality of the services in order to build up the equity to a person having different culture.

When considering the overall picture of the result from this study, it can be seen that Muslim Thais as the minority group received the health care services different from Buddhist Thais in both the accessibility to the services and the quality of the services and led to the inferior health status, although there was the implementation in universal coverage program having major principle that everybody must receive equal health care services. The involving factors in this case are likely resulted from the cultural difference. Moreover, the change in financial system and the requirement of health system such as rules, regulations and the things related to the policy implementation always had the negative impact towards the capability of minority group to have the quality health care.

The findings in this study are congruent with the experience study in health care service utilization in the revolution of health system of Israel. It was found that Arabian raced Israel females who were the minority group would assess that they had inferior health status to other groups, must receive health care services from health

care facilities at the primary level and felt less satisfied in the services, but they had more illnesses that required hospitalization. These were the result from the culture differing from the majority in 3 issues, i.e. 1) the disclosure of body and social characteristics in front of the practitioner 2) the difficulty in communication with male doctor 3) the family requirement in health care (Elnekeve & Gross, 2003). As for the study in the behavior to look for the health services of the aborigine in Mexico, it was found that the aborigine had tendency to have positive behavior towards the modern health care services. Although the cultural obstacle in utilizing the prevention of disease and health promotion was not found, the ethnical difference had the negative connection with the hospitalization and the acceptance to follow the doctor's instruction, including the dental services. The possession of health insurance was a important thing and had the effect in utilizing the health services of aborigine (Paqueo & Gonzalez, 2003).

However Smedley, Stith & Nelsen (IOM, 2002) explained the cause of disparities in health care of minority group that it resulted from 3 parts, i.e. 1) factors in the service taker level including the characteristics of minority group, the refusal to the treatment and the bad feeling towards the health care services 2) factors in the level of the health service system including the pattern of organization, financial system, location of agency, the service delivery etc. which was often different from health care system that the minority group got used to it 3) factors in the level of health care process including prejudice towards the minority group, stereotype as well as the uncertainty of the illness. The first thing that needed change was the prejudice or the bias of service providers. In this study, the researcher found that Muslim Thais felt the prejudice and discrimination in the services of staff due to the difference in religion more than Buddhist Thais.

From all information received in this study, the equity in health and health care can be analyzed according to the definition that it was difference in health resulted from the determinants in socio-economic status (Whitehead, 1992; Whitehead, 2001; Braveman & Tarimo, 2001). The disparity in socio-economic status did not be considered only in the aspects of wealth, power or reputation, but it also

included the disparity in gender, age, geographical situation, race, or ethnicity, including religion (Barry, 1990).



CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The study in the disparities in health and health care, a case study in Buddhist Thais and Muslim Thais in Nakhon Nayok Province has a objective to study health status and health care in terms of the accessibility to the services, the utilization and the quality of the services of people who has disparity in religion including the changes of these situations after the implementation of universal coverage program which will make us know the disparity of health care of people in various groups. This information can be applied as the guideline in planning, implementing and creating health policies, including the distribution and allocation of the resources to match with the needs and building up the highest equity for people in each group.

This study is a survey research in the type of cross-sectional study. The data were collected by using the constructed interviewing form. The populations in the study were the chief of households or the representatives aged from 18 years upwards in Nakhon Nayok Province divided into 2 groups according to the religions, i.e. Buddhist Thais and Muslim Thais. The study areas were determined by the purposive samplings. The researcher chose Ampur Ongkarak as the study area since there were Muslim Thais living in this Ampur at the highest number and chose Tambon Pra-ar-jarn, Tambon Buengsan, Tambon Srisa-krabue, Tambon Chumpon since Buddhist Thais and Muslim Thais lived in these 4 Tambons almost the same number. The sample size was determined by using the criterion of Nipa Sriapiroj (1994). Then the villages of these 4 Tambons were divided into 2 groups by taking the religion of the majority in those villages into consideration. The researcher obtained 16 Buddhist Thai villages and 27 Muslim Thai villages. In each group, 10 villages were selected by random sampling. The selection of household in each village was based on the calculation according to the size of the village and the systematic random sampling was applied. The researcher and 4 assistances collected data from 27 September - 26

October 2004 and obtained samples in total of 400 persons, i.e. Buddhist Thais of 166 persons and Muslim Thais of 234 persons, which was close to the proportion of Buddhist Thais and Muslim Thais in the study area. When the researcher finishing examining all questionnaires for the correctness and the completeness of data, the obtained data was processed by computer and correlation analysis between religion groups was done by Chi-square test. In case that the statistically significant difference was found, the test was repeated by using the population and socio-economic factors and type of health insurance as the control variables.

The important results from this study can be concluded as follows:

The samples in this study were female almost 3 times as male, the number of persons aged of 30-44 years and 45-59 years was almost the same amount, nearly four-fifth of the samples got married and still lived with their spouse. Muslim Thai group had more living children and studying children than Buddhist Thai group. For education, almost three-fourth of samples finished primary standard level. There were persons with the occupation of general work for wages, agriculturist, and taking care of home almost the same number. The average income was 7,130 Baht/month. More than half of the samples were in debt for money loaned for the expenses in family.

For the possession of health insurance, all samples had health insurance. Most of them received the right in health insurance in type of Gold card (30 Baht). Muslim Thai group had the right in health insurance in type of Gold card free of charge a little higher than Buddhist Thai group and they could utilize the services at the medical center hospital where it was a high capability medical premise more than Buddhist Thai group. As such it followed the division of the area under the responsibility of universal coverage program.

When considering health status by taking the perceived illness and Body Mass Index: BMI into consideration, there was difference, i.e. Muslim Thai group had tendency to have illness with the diseases caused by behavior consumption and physical exercises such as diabetes mellitus, hypertension, cardiopathy, hyperlipidemia, more than Buddhist Thai group. In the same token, when assessing health status from Body Mass Index: BMI, it also was found that Muslim Thai group had over body mass index (obesity) more than Buddhist Thai group, particularly in

female and persons aged of between 30-44 years and 45-59 years including the married person. As such it might be resulted from disparity of the cultural food consumption that Muslim Thais in this area preferred to eat high calories food. When they got older and had fewer activities for metabolism, fat would be accumulated in the bodies more and more. Consequently, they had the risky chance to have diseases caused from food consumption behavior and insufficient physical exercises more than Buddhist Thais.

For health care services that both groups received after the implementation of universal coverage program, the accessibility to the services, the utilization and the quality of the services were considered. For the accessibility to the services, in this study there was no difference in terms of geographical and financial factors, but there was difference in terms of cultural factors. Muslim Thai group deemed that some services in hospital were not fully compatible with Islamic principle. As such it was likely resulted from that the service providers did not truly know or understand the culture of Muslims. Moreover, there were very few Muslim public health staffs in this area, so there were few chances that Muslims would take part in setting up rules, regulations, including procedures of the medical premises that were compatible with the culture of Muslims.

For the health service utilization, during the last year three-fourth of the samples in this study had never utilized the services by giving the reasons that they had no illness. For the persons used to utilize the services, the Muslim Thai group regularly (more than 5 times/year) utilized the medical care services more than Buddhist Thai group, particularly in female and married person, As such it was resulted from that Muslim Thai group had more illnesses/personal diseases than Buddhist Thai group.

For the medical premise where the service was regularly utilized when the samples had little illness, both groups mainly utilized the services of the medical premises near their home. Muslim Thai group preferred to utilize the services at the private medical premise more than Buddhist Thai group, while Buddhist Thai group preferred to utilize the services at the clinic. Both groups gave the reasons of the proximity to their homes/convenient traveling and spending few expenses. However,

if the illness aggravated, both groups would utilize the services at the medical premise under the right in health insurance.

For the opinion towards the quality of the services received, the difference was found. Muslim Thai group had tendency to receive the health care with less quality than that of Buddhist Thai group in the issues of confrontation with the mistakes in treatment, understanding in what doctor said/explained, the suitability of the waiting time and the caring time received from doctor, feeling honored from service providers including the quality of the services in general. As such it was resulted from that Muslim Thais felt that the staffs providing services had prejudice and discrimination towards them.

The differences in health status and health care services that Buddhist Thais and Muslim Thais received were considered by using the income and type of health insurance factors as the separator of socio-economic status. In this study, there was no difference in health status and health care services in the accessibility to the services, the utilization and the quality of the services in low socio-economic status group (LSES), but in high socio-economic status group (HSES), the differences in health status and health care services were assessed.

6.2 Recommendations

The study in the disparities in health and health care: case study of Buddhist Thais and Muslim Thais in Nakhon Nayok Province has recommendations received from the result as follows:

1. From the finding that Muslim Thais had body mass index beyond the criterion and had tendency to get fat at the young age more than Buddhist Thais which made them risky to the illnesses caused from food consumption behavior and physical exercises more than others, therefore the persons associated with the health care in each level should look for the health care guideline especially emphasizing in this group. As such the arrangement of activities for health promotion such as the campaign of physical exercises, the provision of nutrition knowledge as well as the procedures for screening diseases should take the cultural disparity in the local area into consideration. The health care concept according to Islamic principle may be

applied as the guideline for implementation to continuously build up the acceptance and the cooperation in the activities. This thing will reduce the burden in health expenses that may be incurred in future.

2. From the finding that Muslim Thais deemed that the some services provided in a hospital was not compatible with Islamic principle such as the patient's clothing not cover the body completely, the patient's food did be cooked according to Islamic principle, the cleansing waste without using water including the suggestion in permanent birth control which Islam has requirement in these issues clearly. Therefore the medical premise where Muslims utilize the services should provide the services compatible with Islamic principle. The local religious leader might be consulted in various issues to build up the acceptance from all parties to reduce the conflict that might occur.

3. From the finding that Muslim Thais felt that the staff providing the services had prejudice and offered services with discrimination more than Buddhist Thais, therefore the staff providing the services should be reminded to offer services by taking the cultural disparity into consideration and being aware of providing the services to people with honor and dignity of human being equally, without class division including the service providers should be trained and educated to have knowledge and understand the local culture where the services are given.

4. From the finding that there were very few Muslim health personnel working in the areas where many Muslim Thais were living in, therefore Muslim Thais should be promoted to be professional in health personnel. For example, they will be given the special quota for study under the condition that when they finish study, they must come back to work in their own domiciles in order to have the personnel who have knowledge and understand Islamic culture with the proportion suitable to the number of Muslims in this area.

6.3 Recommendations for Further Study

1. For the quality of services, in this study the researcher specifically focused on the view point of the service taker. For further study the view point of service providers should be studied in order to know the real problems in services.

2. It was found that in this study female Muslim Thais had the body mass index beyond the criterion since the young age and had tendency to have illness related with the behavior and the pattern of taking food more than Buddhist Thai group. Therefore the study in depth to the factors having effect to have body mass index beyond criterion of Muslim Thai group should be done.

3. When considering the accessibility to the services in terms of finance, this study considered only the cost of transportation to utilize the services, however there are other expenses incurred when receiving the treatment such as food expenses, traveling cost of a person nursing a patient/ a person taking a patient for treatment, including the income lost during the treatment. These expenses should be combined in the medical care expenses to reflect the real expenses in further study.

4. The number of samples should be increased in further study so that the problem of the observed value less than 5 ($E_{ij} < 5$) which is the limitation of correlation test by using Chi-square test will not happen.

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Annexed Table 1 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and illness

Population and socio-economic characteristics		Illness		χ^2
		No	Yes	
Sex				
Male	Buddhist	60.9 (28)	39.1 (18)	1.469
	Muslim	49.2 (32)	50.8 (33)	
Female	Buddhist	62.5 (75)	37.5 (45)	3.835*
	Muslim	50.9 (86)	49.1 (83)	
Age				
18-29	Buddhist	84.0 (21)	16.0 (4)	0.061
	Muslim	81.6 (31)	18.4 (7)	
30-44	Buddhist	85.4 (35)	14.6 (6)	8.096**
	Muslim	60.0 (48)	40.0 (32)	
45-59	Buddhist	59.7 (37)	40.3 (25)	1.821
	Muslim	47.5 (29)	52.5 (323)	
>60	Buddhist	26.3 (10)	73.7 (28)	0.881
	Muslim	18.2 (10)	81.8 (45)	
Marital Status				
Single	Buddhist	80.0 (16)	20.0 (4)	0.048
	Muslim	82.6 (19)	17.4 (4)	
Married	Buddhist	62.7 (79)	37.3 (47)	4.957*
	Muslim	50.0 (96)	50.0 (96)	
Widow/divorce/separation	Buddhist	40.0 (8)	60.0 (12)	2.820
	Muslim	15.8 (3)	84.2 (16)	
General education				
Primary standard	Buddhist	56.0 (65)	44.0 (51)	4.165*
	Muslim	43.9 (79)	56.1 (101)	
Higher than primary	Buddhist	81.8 (36)	18.2 (8)	0.825
	Muslim	74.0 (37)	26.0 (13)	
Illiteracy	Buddhist	33.3 (2)	66.7 (4)	0.278
	Muslim	50.0 (2)	50.0 (2)	
Occupation				
General work for wage	Buddhist	59.1(26)	40.9 (18)	0.016
	Muslim	60.3 (41)	39.7 (27)	
Agriculture	Buddhist	61.1 (33)	38.9 (21)	2.102
	Muslim	47.3 (26)	52.7 (29)	
Industrial employee	Buddhist	66.7 (4)	33.3 (2)	1.000
	Muslim	41.7 (5)	58.3 (7)	
Government official	Buddhist	87.5 (7)	12.5 (1)	1.311
	Muslim	60.0 (3)	40.0 (2)	
Merchant	Buddhist	72.0 (18)	28.0 (7)	1.009
	Muslim	58.3 (14)	41.7 (10)	
Elder/unemployment/studying	Buddhist	51.7 (15)	48.3 (14)	0.880
	Muslim	41.4 (29)	58.6 (41)	

Annexed Table 1 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and illness (continued).

Population and socio-economic characteristics		Illness		χ^2
		No	Yes	
Income level				
Lowest	Buddhist	42.9 (15)	57.1 (20)	0.876
	Muslim	32.6 (14)	67.4 (29)	
Low	Buddhist	60.9 (14)	39.1 (9)	0.621
	Muslim	50.0 (15)	50.0 (15)	
Medium	Buddhist	69.8 (30)	30.2 (13)	1.568
	Muslim	57.6 (34)	42.4 (25)	
High	Buddhist	76.0 (19)	24.0 (6)	2.828
	Muslim	56.4 (31)	43.6 (24)	
Highest	Buddhist	62.5 (25)	37.5 (15)	1.149
	Muslim	51.1 (24)	48.9 (23)	
Health Insurance				
Gold card (30 Baht)	Buddhist	72.4 (71)	27.6 (27)	3.301
	Muslim	61.0 (83)	39.0 (53)	
Gold card (without 30 Baht)	Buddhist	31.4 (11)	68.6 (24)	0.264
	Muslim	26.6 (17)	73.4 (47)	
Other	Buddhist	63.6 (21)	36.4 (12)	0.787
	Muslim	52.9 (18)	47.1 (16)	

* Statistical significance at 0.05, ** Statistical significance at 0.01

Annexed Table 2 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and Body Mass Index level.

Population and socio-economic characteristics		Body Mass Index			χ^2			
		Thin	Normal	Fat				
Sex Male	Buddhist	6.5 (3)	73.9 (34)	19.6 (9)	3.312			
	Muslim	4.6 (3)	60.0 (39)	35.4 (23)				
	Female	Buddhist	4.2 (5)	64.2 (77)		31.7 (38)	14.075***	
		Muslim	8.9 (15)	42.0 (71)		49.1 (83)		
Age 18-29	Buddhist	8.0 (2)	80.0 (20)	12.0 (3)	1.338			
	Muslim	18.4 (7)	71.1 (27)	10.5 (4)				
	30-44	Buddhist	-	73.2 (30)		26.8 (11)	11.145**	
		Muslim	6.3 (5)	42.5 (34)		51.3 (41)		
	45-59 ^M	Buddhist	6.5 (4)	53.2 (33)		40.3 (25)		10.518**
		Muslim	1.6 (1)	29.5 (18)		68.9 (42)		
	>60	Buddhist	5.3 (2)	73.7 (28)		21.1 (8)	2.909	
		Muslim	9.1 (5)	56.4 (31)		34.5 (19)		
Marital Status Single	Buddhist	10.0 (2)	75.0 (15)	15.0 (3)	2.837			
	Muslim	26.1 (6)	69.6 (16)	4.3 (1)				
	Married	Buddhist	3.2 (4)	69.0 (87)		27.8 (35)	18.133***	
		Muslim	4.7 (9)	44.7 (86)		50.5 (97)		
	Widow/divorce	Buddhist	10.0 (2)	45.0 (9)		45.0 (9)		0.292
		Muslim	15.8 (3)	42.1 (8)		42.1 (8)		
General education Primary standard	Buddhist	5.2 (6)	61.2 (71)	33.6 (39)	9.776**			
	Muslim	6.1 (11)	42.8 (77)	51.1 (92)				
	Higher than primary	Buddhist	4.5 (2)	79.5 (35)		15.9 (7)	3.674	
		Muslim	12.0 (6)	62.0 (31)		26.0 (13)		
	Illiteracy	Buddhist	-	83.3 (5)		16.7 (1)		1.964
		Muslim	25.0 (1)	50.0 (2)		25.0 (3)		
Occupation General work for wage	Buddhist	6.8 (3)	63.6 (28)	29.5 (13)	5.702			
	Muslim	7.4 (5)	41.2 (28)	51.5 (35)				
	Agriculture ^M	Buddhist	3.7 (2)	74.1 (40)	22.2 (12)	8.617 *		
		Muslim	1.8 (1)	49.1 (27)	49.1 (27)			
	Industrial employee	Buddhist	-	83.3 (5)	16.7 (1)	1.286		
		Muslim	16.7 (2)	75.0 (9)	8.3 (1)			
	Government official	Buddhist	-	87.5 (7)	12.5 (1)	2.015		
		Muslim	20.0 (1)	60.0 (3)	20.0 (1)			
	Merchant	Buddhist	4.0 (1)	48.0 (12)	48.0 (12)	1.267		
		Muslim	8.3 (2)	33.3 (8)	58.3 (14)			
	Elder/unemployment/studying	Buddhist	6.9 (2)	65.5 (19)	27.6 (8)	1.991		
		Muslim	10.0 (7)	50.0 (35)	40.0 (28)			

Annexed Table 2 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and Body Mass Index level (continued).

Population and socio-economic characteristics		Body Mass Index level			χ^2
		Thin	Normal	Fat	
Income level					
Lowest	Buddhist	-	74.3 (26)	25.7 (9)	5.380
	Muslim	9.3 (4)	53.5 (23)	37.2 (16)	
Low	Buddhist	8.7 (2)	69.6 (16)	21.7 (5)	3.017
	Muslim	3.3 (1)	53.3 (16)	43.3 (13)	
Medium	Buddhist	4.7 (2)	60.5 (26)	34.9 (15)	8.063*
	Muslim	8.5 (5)	32.2 (19)	59.3 (35)	
High	Buddhist	8.0 (2)	72.0 (18)	20.0 (5)	3.223
	Muslim	10.9 (6)	50.9 (28)	38.2 (21)	
Highest	Buddhist	5.0 (2)	62.5 (25)	32.5 (13)	1.348
	Muslim	4.3 (2)	51.1 (24)	44.7 (21)	
Health Insurance					
Gold card (30 Baht)	Buddhist	4.1 (4)	63.3 (62)	32.7 (32)	11.252**
	Muslim	8.1 (11)	41.2 (56)	50.7 (69)	
Gold card (without 30 Baht)	Buddhist	5.7 (2)	65.7 (23)	28.6 (10)	2.375
	Muslim	6.3 (4)	50.0 (32)	43.7 (28)	
Other	Buddhist	6.1 (2)	78.8 (26)	15.2 (5)	1.662
	Muslim	8.8 (3)	64.7 (22)	26.5 (9)	

* Statistical significance at 0.05, ** Statistical significance at 0.01, *** Statistical significance at 0.001

^M Monte-Carlo Technique Sig.(2-sides)

Annexed Table 3 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and traveling time.

Population and socio-economics characteristics		Traveling Time		χ^2
		≤ 30 minutes	> 30 minutes	
Sex				
Male	Buddhist	87.0 (40)	13.0 (6)	0.135
	Muslim	89.2 (58)	10.8 (7)	
Female	Buddhist	84.2 (101)	15.8 (19)	5.588*
	Muslim	92.9 (157)	7.1 (12)	
Age				
18-29	Buddhist	88.0 (22)	12.0 (3)	0.018
	Muslim	86.8 (33)	13.2 (5)	
30-44 ^E	Buddhist	87.8 (36)	12.2 (5)	4.675*
	Muslim	97.5 (78)	2.5 (2)	
45-59	Buddhist	85.5 (53)	14.5 (9)	0.629
	Muslim	90.2 (55)	9.8 (6)	
>60	Buddhist	78.9 (30)	21.1 (8)	1.808
	Muslim	89.1 (49)	10.9 (6)	
Marital Status				
Single	Buddhist	85.0 (17)	15.0 (3)	0.045
	Muslim	82.6 (19)	17.4 (4)	
Married	Buddhist	84.9 (107)	15.1 (19)	4.961*
	Muslim	92.7 (178)	7.3 (14)	
Widow/divorce	Buddhist	85.0 (17)	15.0 (3)	1.004
	Muslim	94.7 (18)	5.3 (1)	
General Education				
Primary standard	Buddhist	82.8 (96)	17.2 (20)	9.320**
	Muslim	93.9 (169)	6.1 (11)	
Higher than primary	Buddhist	90.9 (40)	9.1 (4)	0.546
	Muslim	86.0 (43)	14.0 (7)	
Illiteracy	Buddhist	83.3 (5)	16.7 (1)	0.104
	Muslim	75.0 (3)	25.0 (1)	
Occupation				
General work for wage	Buddhist	90.9 (40)	9.1 (4)	0.998
	Muslim	95.6 (65)	4.4 (3)	
Agriculture	Buddhist	87.0 (47)	13.0 (7)	3.129
	Muslim	96.4 (53)	3.6 (2)	
Industrial employee	Buddhist	83.3 (5)	16.7 (1)	0.281
	Muslim	91.7 (11)	8.3 (1)	
Government official	Buddhist	100.0 (8)	-	3.782
	Muslim	60.0 (3)	40.0 (2)	
Merchant	Buddhist	80.0 (20)	20.0 (5)	0.091
	Muslim	83.3 (20)	16.7 (4)	
Elder/unemployment/studying	Buddhist	72.4 (21)	27.6 (8)	4.933*
	Muslim	90.0 (63)	10.0 (7)	

Annexed Table 3 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and traveling time (continued).

Population and socio-economics characteristics		Travel time		χ^2
		≤ 30 minutes	> 30 minutes	
Income level				
Lowest	Buddhist	80.0 (28)	20.0 (7)	2.928
	Muslim	93.0 (40)	7.0 (3)	
Low	Buddhist	91.3 (21)	8.7 (2)	0.279
	Muslim	86.7 (26)	13.3 (4)	
Medium	Buddhist	86.0 (37)	14.0 (6)	1.448
	Muslim	93.2 (55)	6.8 (4)	
High	Buddhist	92.0 (23)	8.0 (2)	0.689
	Muslim	96.4 (53)	3.6 (2)	
Highest	Buddhist	80.0 (32)	20.0 (8)	0.838
	Muslim	87.2 (41)	12.8 (6)	
Health Insurance				
Gold card (30 Baht)	Buddhist	88.8 (87)	11.2 (11)	1.546
	Muslim	93.4 (127)	6.6 (9)	
Gold card (Free)	Buddhist	80.0 (28)	20.0 (7)	3.155
	Muslim	92.2 (59)	7.8 (5)	
Other	Buddhist	78.8 (26)	21.2 (7)	0.482
	Muslim	85.3 (29)	14.7 (5)	

* Statistical significance at 0.05, ** Statistical significance at 0.01

^E Exact Sig. (2-sides)

Annexed Table 4 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and provision of religion principle/necessity.

Population and socio-economics characteristics		Provision of religion principle		χ^2	
		Not compatible	Compatible		
Sex					
	Male	Buddhist	3.0 (1)	97.0 (32)	6.807*
		Muslim	24.5 (12)	75.5 (37)	
Female	Buddhist	5.2 (5)	94.8 (72)	9.247**	
	Muslim	19.1 (22)	80.9 (93)		
Age	18-29	Buddhist	5.6 (1)	94.4 (17)	1.576
		Muslim	19.0 (4)	81.0 (17)	
	30-44	Buddhist	10.0 (3)	90.0 (27)	1.953
		Muslim	22.0 (13)	78.0 (46)	
	45-59	Buddhist	3.7 (1)	98.2 (54)	12.332***
		Muslim	25.0 (11)	75.0 (33)	
	>60	Buddhist	3.7 (1)	96.3 (26)	2.198
		Muslim	15.0 (6)	85.0 (34)	
Marital Status	Single ^E	Buddhist	5.9 (1)	94.1 (16)	1.885
		Muslim	23.0 (3)	76.9 (10)	
	Married	Buddhist	5.1 (5)	94.9 (93)	10.637***
		Muslim	20.0 (27)	80.0 (108)	
	Widow/divorce	Buddhist	-	100.0 (15)	4.306
		Muslim	25.0 (4)	75.0 (12)	
General education	Primary standard	Buddhist	4.3 (4)	95.7 (88)	12.439***
		Muslim	21.2 (28)	78.9 (105)	
	Higher than primary	Buddhist	6.1 (2)	93.9 (31)	0.076
		Muslim	21.4 (6)	78.6 (22)	
	Illiteracy	Buddhist	-	100.0 (5)	-
		Muslim	-	100.0 (3)	
Occupation	General work for wage	Buddhist	5.1 (2)	94.9 (37)	2.934
		Muslim	17.0 (8)	83.0 (39)	
	Agriculture	Buddhist	9.5 (4)	90.5 (38)	0.716
		Muslim	15.8 (6)	84.2 (32)	
	Industrial employee	Buddhist	-	100.0 (5)	-
		Muslim	-	100.0 (9)	
	Government official	Buddhist	-	100.0 (6)	5.143
		Muslim	66.7 (2)	33.3 (1)	
	Merchant	Buddhist	-	100.0 (17)	4.533
		Muslim	23.5 (4)	76.5 (13)	
	Elder/unemployment/studying	Buddhist	-	100.0 (21)	7.324**
		Muslim	28.0 (14)	72.0 (36)	

Annexed Table 4 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and provision of religion principle/necessity (continued).

Population and socio-economics characteristics		Provision of religion principle		χ^2
		Not compatible	Compatible	
Income level				
Lowest	Buddhist	3.7 (1)	96.3 (26)	0.174
	Muslim	6.1 (2)	93.9 (31)	
Low	Buddhist	11.8 (2)	88.2 (15)	2.762
	Muslim	34.8 (8)	65.2 (15)	
Medium	Buddhist	2.9 (1)	97.1 (34)	8.161**
	Muslim	26.8 (11)	73.2 (30)	
High	Buddhist	-	100.0 (18)	4.554*
	Muslim	21.6 (8)	78.4 (29)	
Highest	Buddhist	6.1 (2)	93.9 (31)	1.790
	Muslim	16.7 (5)	83.3 (25)	
Health Insurance				
Gold card (30 Baht)	Buddhist	3.6 (3)	96.4 (80)	17.797***
	Muslim	26.8 (26)	73.2 (71)	
Gold card (Free)	Buddhist	4.3 (1)	95.7 (22)	1.163
	Muslim	12.5 (6)	87.5 (42)	
Other	Buddhist	8.3 (2)	91.7 (22)	0.060
	Muslim	10.5 (2)	89.5 (17)	

* Statistical significance at 0.05, ** Statistical significance at 0.01, *** Statistical significance at 0.001

^E Exact Sig. (2-sides)

Annexed Table 5 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and receiving treatment as OPD cases.

Population and socio-economic characteristics		Receiving treatment as OPD case				χ^2	
		Never	1-2	3-5	> 5		
Sex Male	Buddhist	500(23)	21.7(10)	174(8)	109(5)	6.570	
	Muslim	323(21)	18.5(12)	200(13)	292(19)		
Female	Buddhist	383(46)	25.8(31)	175(21)	183(22)	8.128*	
	Muslim	266(45)	21.9(37)	207(35)	30.8(52)		
Age 18-29 30-44 ^M 45-59 >60	Buddhist	44.0(11)	24.0(6)	20.0(5)	12.0(3)	2.358	
	Muslim	26.3(11)	36.8(14)	21.1(8)	15.8(6)		
	Buddhist	53.7(22)	31.7(13)	9.8(4)	4.9(2)	14.669**	
	Muslim	36.3(29)	15.0(12)	21.3(17)	27.5(22)		
	Buddhist	45.2(28)	24.2(15)	16.1(10)	14.5(9)	4.549	
	Muslim	31.1(19)	19.7(12)	24.6(15)	24.6(15)		
	Buddhist	21.1(8)	18.4(7)	26.3(10)	34.2(13)	3.612	
	Muslim	14.5(8)	20.0(11)	14.5(8)	50.9(28)		
Marital Status Single Married Widow/divorce	Buddhist	35.0(7)	30.0(6)	35.0(7)	-	4.951	
	Muslim	39.1(9)	34.8(8)	13.0(3)	13.0(3)		
	Buddhist	43.7(55)	23.8(30)	14.3(18)	18.3(23)	11.529**	
	Muslim	29.7(57)	18.8(36)	20.8(40)	30.7(59)		
	Buddhist	35.0(7)	25.0(5)	20.0(4)	20.0(4)	9.014*	
	Muslim	-	26.3(5)	26.3(5)	47.4(9)		
General education Primary standard Higher than primary Illiteracy	Buddhist	41.4(48)	24.1(28)	17.2(20)	17.2(20)	13.436**	
	Muslim	27.2(49)	17.2(31)	22.8(41)	32.8(59)		
	Buddhist	43.2(19)	27.3(12)	20.5(9)	9.1(4)	3.593	
	Muslim	34.0(17)	30.0(15)	14.0(7)	22.0(11)		
	Buddhist	33.3(2)	16.7(1)	-	50.0(3)	3.750	
	Muslim	-	75.0(3)	-	25.0(1)		
	Occupation General work for wage Agriculture Industrial employee Government official Merchant Elder/unemployment/studying	Buddhist	52.3(23)	25.0(11)	11.1(5)	11.4(5)	10.278*
		Muslim	29.4(20)	17.6(12)	26.5(18)	26.5(18)	
Buddhist		38.9(21)	31.5(17)	14.8(8)	14.8(8)	6.522	
Muslim		29.1(16)	18.2(10)	21.8(12)	30.9(17)		
Buddhist		33.3(2)	16.7(1)	16.7(1)	33.3(2)	1.125	
Muslim		16.7(2)	33.3(4)	25.0(3)	25.0(3)		
Buddhist		50.0(4)	25.0(2)	12.5(1)	12.5(1)	3.705	
Muslim		-	60.0(3)	20.0(1)	20.0(1)		
Buddhist		48.0(12)	16.0(4)	20.0(5)	16.0(4)	3.530	
Muslim		29.2(7)	33.3(8)	12.5(3)	25.0(6)		
Buddhist		24.1(7)	20.7(6)	31.0(9)	24.0(7)	3.814	
Muslim		30.0(21)	17.1(12)	15.7(11)	37.1(26)		

Annexed Table 5 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and receiving treatment as OPD cases (continued).

Population and socio-economic characteristics		Receiving treatment as OPD case				χ^2
		Never	1-2	3-5	>5	
Income level						
Lowest	Buddhist	28.6(10)	22.9(8)	22.9(8)	25.7(9)	2.383
	Muslim	20.9(9)	20.9(9)	16.3(7)	41.9(18)	
Low	Buddhist	43.5(10)	13.0(3)	21.7(5)	21.7(5)	6.572
	Muslim	20.0(6)	30.0(9)	10.0(3)	40.0(12)	
Medium	Buddhist	44.2(19)	30.2(13)	14.0(6)	11.6(5)	7.230
	Muslim	33.9(20)	15.3(9)	27.1(16)	23.7(14)	
High ^M	Buddhist	60.0(15)	20.0(5)	8.0(2)	12.0(3)	9.067*
	Muslim	29.1(16)	16.4(9)	28.6(13)	30.9(17)	
Highest	Buddhist	37.5(15)	30.0(12)	20.0(8)	12.5(5)	1.210
	Muslim	31.9(15)	27.7(13)	19.1(9)	21.3(10)	
Health Insurance						
Gold card (30 Baht)	Buddhist	49.0(48)	23.5(23)	20.4(20)	7.1(7)	10.740*
	Muslim	36.0(49)	19.9(27)	22.1(30)	22.1(30)	
Gold card (Free)	Buddhist	28.6(10)	14.3(5)	14.3(5)	42.9(15)	0.462
	Muslim	15.6(10)	14.1(9)	20.3(13)	50.0(32)	
Other	Buddhist	33.3(11)	39.4(13)	18.1(4)	15.2(5)	0.546
	Muslim	20.6(7)	38.2(13)	14.7(5)	26.5(9)	

* Statistical significance at 0.05, ** Statistical significance at 0.01, *** Statistical significance at 0.001

^M Monte-Carlo Technique Sig.(2-sides)

Annexed Table 6 Illness/disease received treatment as IPD case.

Illness/disease	Buddhist	Muslim	Total
Respiratory system	3 (16.7)	8 (12.7)	11 (13.6)
Delivery	4 (22.2)	18 (28.6)	22 (27.2)
Infection disease	3 (16.7)	9 (14.3)	12 (14.8)
Accident	1 (5.6)	2 (3.2)	3 (3.7)
Circulatory system	1 (5.6)	8 (12.7)	9 (11.1)
Orthopedics System	1 (5.6)	3 (4.8)	4 (4.9)
Urinary system	2 (11.1)	7 (11.1)	9 (11.1)
Diabetes Mellitus	1 (5.6)	5 (7.9)	6 (7.4)
Digestive system	-	1 (1.6)	1 (1.2)
Tumor and carcinoma	-	2 (3.2)	2 (2.5)
Others	2 (11.2)	-	2 (2.4)
Total (%)	18 (21.9)	64 (78.1)	82 (100.0)

Annexed Table 7 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and receiving treatment as IPD cases.

Population and socio-economic characteristics		Receiving Treatment as IPD case			χ^2
		Never	1	> 1	
Sex					
Male	Buddhist	93.5 (43)	4.3 (2)	2.2 (1)	5.661
	Muslim	78.5 (51)	20.0 (13)	1.5 (1)	
Female	Buddhist	88.3 (106)	10.0 (12)	1.7 (2)	12.383**
	Muslim	71.0 (121)	24.3 (42)	4.7 (8)	
Age					
18-29	Buddhist	64.0 (16)	32.0 (8)	4.0 (1)	1.893
	Muslim	73.7 (28)	26.3 (10)	-	
30-44 ^M	Buddhist	97.6 (40)	2.4 (1)	2.4 (3)	15.796***
	Muslim	65.0 (52)	30.0 (24)	4.7 (9)	
45-59	Buddhist	93.5 (58)	4.8 (3)	-	3.042
	Muslim	83.6 (51)	11.5 (7)	-	
>60	Buddhist	92.1 (35)	5.3 (2)	-	45.820
	Muslim	72.7 (40)	23.6 (13)	-	
Marital Status					
Single	Buddhist	80.0 (16)	20.0 (4)	-	0.048
	Muslim	82.6 (19)	17.4 (4)	-	
Married	Buddhist	90.5 (114)	7.1 (9)	2.4 (3)	14.833***
	Muslim	72.9 (140)	22.4 (43)	4.7 (9)	
Widow/divorce	Buddhist	95.0 (19)	5.0 (1)	-	6.059*
	Muslim	63.2 (12)	36.8 (7)	-	
General Education					
Primary standard	Buddhist	93.1 (108)	5.2 (6)	1.7 (2)	18.841***
	Muslim	72.8 (131)	22.2 (40)	5.0 (9)	
Higher than primary	Buddhist	79.5 (35)	18.2 (8)	2.3 (1)	1.547
	Muslim	76.0 (38)	24.0 (12)	-	
Illiteracy	Buddhist	100.0 (6)	-	-	3.750
	Muslim	50.0 (2)	50.0 (2)	-	
Occupation					
General work for wage	Buddhist	90.9 (40)	9.1 (4)	-	5.417
	Muslim	73.5 (50)	23.5 (16)	2.9 (2)	
Agriculture ^M	Buddhist	92.6 (50)	5.6 (3)	1.9 (1)	7.132 *
	Muslim	74.5 (41)	23.6 (13)	1.9 (1)	
Industrial employee	Buddhist	83.3 (5)	-	16.7 (1)	4.875
	Muslim	58.3 (7)	41.7 (5)	-	
Government official	Buddhist	87.5 (7)	12.5 (1)	-	1.311
	Muslim	60.0 (3)	40.0 (2)	-	
Merchant	Buddhist	88.0 (22)	8.0 (2)	4.0 (1)	1.380
	Muslim	75.0 (18)	16.7 (4)	8.3 (2)	
Elder/unemployment/studying	Buddhist	86.2 (25)	13.8 (4)	-	2.466
	Muslim	74.3 (52)	20.0 (14)	5.7 (4)	

Annexed Table 7 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and receiving treatment as IPD cases (continued).

Population and socio-economic characteristics		Receiving Treatment as IPD case			χ^2
		Never	1	> 1	
Income level					
Lowest	Buddhist	91.4 (32)	5.7 (2)	2.9 (1)	5.569
	Muslim	69.8 (30)	18.6 (8)	11.6 (5)	
Low ^M	Buddhist	95.7 (22)	4.3 (1)	-	10.228**
	Muslim	56.7 (17)	36.7 (11)	6.7 (2)	
Medium	Buddhist	88.4 (38)	9.3 (4)	2.3 (1)	1.255
	Muslim	81.4 (48)	16.9 (10)	1.7 (1)	
High	Buddhist	92.0 (23)	4.0 (1)	4.0 (1)	7.260*
	Muslim	67.3 (37)	30.9 (17)	1.8 (1)	
Highest	Buddhist	85.0 (34)	15.0 (6)	-	0.065
	Muslim	83.0 (39)	17.0 (8)	-	
Health Insurance					
Gold card (30 Baht)	Buddhist	88.8 (87)	10.2 (10)	1.0 (1)	5.977*
	Muslim	76.5 (104)	19.9 (27)	3.7 (5)	
Gold card (Free)	Buddhist	94.3 (33)	2.9 (1)	2.9 (1)	8.096
	Muslim	70.3 (45)	23.4 (15)	6.3 (4)	
Other ^M	Buddhist	87.9 (29)	9.1 (3)	3.0 (1)	7.347*
	Muslim	64.7 (22)	35.3 (12)	-	

* Statistical significance at 0.05, ** Statistical significance at 0.01, *** Statistical significance at 0.001

^M Monte-Carlo Technique Sig.(2-sides)

Annexed Table 8 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and medical premise.

Population and socio-economic characteristics		Medical premise							χ^2	
		Mid-wifery	Clinic	Health station	Com. Hosp.	Med. center	Priv. Hosp.l	Others		
Sex Male	Buddhist	6.5(3)	19.6(9)	21.7(10)	26.1(12)	15.2(7)	-	10.9(5)	11.077	
	Muslim	20.0(13)	16.9(11)	16.9(11)	20.0(13)	20.0(13)	4.6(3)	1.5(1)		
	Female ^M	Buddhist	4.2(5)	20.8(25)	23.3(28)	19.2(23)	19.2(23)	2.5(3)	3.3(4)	17.439**
		Muslim	14.8(25)	8.9(15)	28.4(48)	22.5(38)	22.5(38)	1.8(3)	3.6(6)	
Age 18-29	Buddhist	4.0(1)	20.0(5)	24.0(6)	24.0(6)	20.0(5)	4.0(1)	4.0(1)	3.666	
	Muslim	10.5(4)	10.5(4)	39.5(15)	15.8(6)	15.8(6)	5.3(2)	2.6(1)		
	30-44 ^M	Buddhist	4.9(2)	24.4(10)	17.1(7)	19.5(8)	29.3(12)	-	4.9(2)	19.368**
		Muslim	22.5(18)	5.0(4)	33.8(27)	17.5(14)	17.5(14)	1.3(1)	2.5(2)	
	45-59	Buddhist	6.5(4)	17.7(11)	29.0(18)	25.8(16)	14.5(9)	1.6(1)	4.8(3)	6.865
		Muslim	18.0(11)	9.8(6)	21.3(13)	23.0(14)	16.4(10)	4.9(3)	6.6(4)	
	>60 ^M	Buddhist	2.6(1)	21.1(8)	18.4(7)	36.8(14)	0.5(4)	2.6(1)	7.9(3)	17.354**
		Muslim	9.1(5)	21.8(12)	7.3(4)	23.6(13)	38.2(21)	-	-	
Marital Status Single	Buddhist	-	15.0(3)	25.0(5)	30.0(6)	30.0(6)	-	-	7.585	
	Muslim	8.7(2)	4.3(1)	43.5(10)	13.0(3)	21.7(5)	8.7(2)	-		
	Married	Buddhist	4.8(6)	23.8(30)	20.6(26)	23.8(30)	19.0(24)	2.4(3)	5.6(7)	18.836**
		Muslim	18.2(35)	12.0(23)	24.5(47)	19.8(38)	19.8(38)	12.1(4)	3.6(7)	
	Widow/div. ^M	Buddhist	10.0(2)	5.0(1)	35.0(7)	40.0(8)	-	-	10.0(2)	13.714*
		Muslim	5.3(1)	10.5(2)	10.5(2)	31.6(6)	42.1(8)	-	-	
General education Primary	Buddhist	6.9(8)	19.8(23)	23.3(27)	25.9(30)	16.4(19)	1.7(2)	6.0(7)	13.992*	
	Muslim	16.1(29)	8.9(16)	23.9(43)	23.3(42)	22.8(41)	1.7(3)	3.3(6)		
	> Primary ^M	Buddhist	-	25.0(11)	18.2(8)	27.3(12)	25.0(11)	2.3(1)	2.3(1)	16.214*
		Muslim	18.0(9)	18.0(9)	30.0(15)	8.0(4)	18.0(9)	6.0(3)	2.0(1)	
	Illiteracy	Buddhist	-	-	50.0(3)	33.3(2)	-	-	-	4.097
		Muslim	-	-	25.0(1)	25.0(1)	25.0(1)	-	-	
Occupation General work	Buddhist	15.9(7)	20.5(9)	27.3(12)	25.0(11)	6.8(3)	-	4.5(2)	10.520	
	Muslim	25.0(17)	7.4(5)	36.8(25)	13.2(9)	14.7(10)	1.5(1)	1.5(1)		
	Agriculture ^M	Buddhist	-	22.2(12)	25.9(14)	25.9(14)	22.2(12)	1.9(1)	1.9(1)	14.822 **
		Muslim	21.8(12)	12.7(7)	21.8(12)	20.0(11)	21.8(12)	1.8(1)	-	
	Ind. employee	Buddhist	-	16.7(1)	-	33.3(2)	33.3(2)	16.7(1)	-	7.350
		Muslim	8.3(1)	-	50.0(6)	25.0(3)	8.3(1)	8.3(1)	-	
	Gov. official	Buddhist	-	25.0(2)	-	25.0(2)	50.0(4)	-	-	4.550
		Muslim	-	20.0(1)	-	-	40.0(2)	40.0(2)	-	
	Merchant	Buddhist	4.0(1)	16.0(4)	16.0(4)	24.0(6)	24.0(6)	4.0(1)	12.0(3)	0.749
		Muslim	8.3(2)	12.5(3)	20.8(5)	20.8(5)	20.8(5)	4.2(1)	12.5(3)	
	Elder/unemp./studying	Buddhist	-	20.7(6)	27.6(8)	31.0(9)	10.3(3)	-	10.3(3)	9.131
		Muslim	8.6(6)	14.3(10)	15.7(11)	27.1(19)	30.0(21)	-	4.3(3)	

Annexed Table 8 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and medical premise (continued).

Population and socio-economic characteristics		Medical premise							χ^2
		Mid-wifery	Clinic	Health station	Com. Hosp.	Med. center	Priv. Hosp.	Others	
Income level									
Lowest	Buddhist	2.9(1)	20.0(7)	22.9(8)	34.3(12)	5.7(2)	2.9(1)	11.4(4)	6.153
	Muslim	2.3(1)	9.3(4)	34.9(15)	30.2(13)	16.3(7)	-	7.0(3)	
Low	Buddhist	13.0(3)	26.1(6)	7.4(4)	13.0(3)	26.1(6)	-	4.3(1)	7.074
	Muslim	10.0(3)	3.3(1)	26.7(8)	16.7(5)	36.7(11)	3.3(1)	3.3(1)	
Medium	Buddhist	2.3(1)	186(8)	34.9(15)	30.2(13)	9.3(4)	-	4.7(2)	11.192
	Muslim	22.0(13)	10.2(6)	25.4(15)	23.7(14)	11.9(7)	3.4(2)	3.4(2)	
High	Buddhist	8.0(2)	28.0(7)	20.0(5)	12.0(3)	28.0(7)	4.0(1)	-	7.572
	Muslim	18.2(10)	7.3(4)	27.3(15)	14.5(8)	25.5(14)	5.5(3)	1.8(1)	
Highest ^M	Buddhist	2.5(1)	15.0(6)	15.0(6)	32.5(13)	27.5(11)	2.5(1)	5.0(2)	14.176*
	Muslim	23.4(11)	23.4(11)	12.8(6)	14.9(7)	25.5(12)	-	-	
Health Insurance									
Gold card ^M	Buddhist	7.1(7)	21.4(21)	26.5(26)	30.6(30)	12.2(12)	-	2.0(2)	18.945**
	Muslim	19.9(27)	8.8(12)	29.4(40)	20.6(28)	14.0(19)	2.2(3)	5.1(7)	
Gold card (Free) ^M	Buddhist	2.9(1)	20.0(7)	25.7(9)	25.7(9)	14.3(5)	2.9(1)	8.6(3)	17.062**
	Muslim	12.5(8)	15.6(10)	12.5(8)	20.3(13)	39.1(25)	-	-	
Other ^M	Buddhist	-	18.2(6)	9.1(3)	15.2(5)	39.4(13)	6.1(2)	12.1(4)	14.051*
	Muslim	8.8(3)	11.4(4)	32.4(11)	17.6(6)	20.6(7)	8.8(3)	-	

* Statistical significance at 0.05, ** Statistical significance at 0.01, *** Statistical significance at 0.001

^M Monte-Carlo Technique Sig.(2-sides)

Annexed Table 9 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and confronting mistake in treatments.

Population and socio-economics characteristics		Confronting mistake in treatments			χ^2
		Never	Happen	Used to see	
Sex					
Male	Buddhist	73.9 (34)	19.6 (9)	6.5 (3)	2.649
	Muslim	66.2 (43)	16.9 (11)	16.9 (11)	
Female ^M	Buddhist	77.5 (99)	15.8 (19)	6.7 (8)	5.218
	Muslim	65.7 (111)	21.3 (36)	13.0 (22)	
Age					
18-29	Buddhist	76.0 (19)	20.0 (5)	4.0 (1)	1.254
	Muslim	76.3 (29)	13.2 (5)	10.5 (4)	
30-44 ^M	Buddhist	78.0 (32)	14.6 (6)	7.3 (3)	3.227
	Muslim	62.5 (50)	21.3 (17)	16.3 (13)	
45-59	Buddhist	74.2 (46)	19.4 (12)	6.5 (4)	4.968
	Muslim	60.7 (37)	19.7 (12)	19.7 (12)	
>60 ^M	Buddhist	78.9 (30)	13.2 (5)	7.9 (3)	1.585
	Muslim	69.1 (38)	23.6 (13)	7.3 (4)	
Marital Status					
Single	Buddhist	75.0(15)	20.0(4)	5.0(1)	3.076
	Muslim	82.6(19)	4.3(1)	13.0(3)	
Married	Buddhist	95.4(95)	18.3(23)	6.3(8)	6.469*
	Muslim	64.6(124)	20.3(39)	15.1(29)	
Widow/divorce/sep. ^M	Buddhist	85.0(17)	5.0(1)	10.0(2)	6.097*
	Muslim	57.9(11)	36.8(7)	5.3(1)	
General education					
Primary standard	Buddhist	75.9(88)	17.2(20)	6.9(8)	6.326*
	Muslim	62.8(113)	22.8(41)	14.4(26)	
Higher than primary	Buddhist	77.3(34)	15.9(7)	6.8(3)	1.780
	Muslim	76.0(38)	15.9(5)	14.0(7)	
Illiteracy	Buddhist	83.3(5)	16.7(1)	-	0.104
	Muslim	75.0(3)	25.0(1)	-	
Occupation					
General work for wage	Buddhist	65.9(29)	20.5(9)	13.6(6)	0.548
	Muslim	61.8(42)	26.5(18)	11.8(8)	
Agriculture	Buddhist	75.9(41)	20.4(11)	3.7(2)	8.082*
	Muslim	63.6(35)	14.5(8)	21.8(12)	
Industrial employee	Buddhist	83.3(5)	16.7(1)	-	0.161
	Muslim	75.0(9)	25.0(3)	-	
Government official	Buddhist	87.5(7)	-	12.5(1)	0.677
	Muslim	100.0(5)	-	-	
Merchant	Buddhist	84.0(21)	16.0(4)	-	3.402
	Muslim	70.8(24)	16.7(4)	12.5(3)	
Elder/unemployment/studying	Buddhist	82.8(24)	10.0(3)	6.9(2)	3.879
	Muslim	65.7(46)	20.0(14)	13.9(10)	

Annexed Table 9 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and medical premise (continued).

Population and socio-economics characteristics		Confronting mistake in treatments			χ^2
		Never	Happen	Used to see	
Income level					
Lowest	Buddhist	80.0 (28)	14.3 (5)	5.7 (2)	1.009
	Muslim	72.1 (31)	23.3 (10)	4.7 (2)	
Low	Buddhist	87.0 (20)	13.0 (3)	-	5.550
	Muslim	60.0 (18)	26.7 (8)	13.3 (4)	
Medium	Buddhist	69.8 (30)	18.6 (8)	11.6 (5)	1.952
	Muslim	59.3 (35)	18.6 (11)	22.0 (13)	
High	Buddhist	84.0 (21)	8.0 (2)	8.0 (2)	4.582
	Muslim	60.0 (33)	23.6 (13)	16.4 (9)	
Highest	Buddhist	70.0 (28)	25.0 (10)	5.0 (2)	3.659
	Muslim	78.7 (37)	10.6 (5)	10.6 (5)	
Health Insurance					
Gold card (30 Baht)	Buddhist	74.5(73)	19.4(19)	6.1(6)	7.555*
	Muslim	63.2(86)	18.4(25)	18.4(25)	
Gold card (Free)	Buddhist	82.9(29)	8.6(3)	8.6(3)	2.664
	Muslim	68.8(44)	20.3(13)	10.9(7)	
Other	Buddhist	75.8(25)	18.2(6)	6.1(2)	0.937
	Muslim	70.6(24)	26.5(9)	2.9(1)	

* Statistical significance at 0.05, ** Statistical significance at 0.01

^M Monte-Carlo Technique Sig.(2-sides)

Annexed Table 10 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and attention in listening patient problems.

Population and socio-economic characteristics		Attention in listening patient problems			χ^2
		High	Medium	Low	
Sex					
Male	Buddhist	43.5 (20)	50.0 (23)	6.5 (3)	0.746
	Muslim	35.4 (23)	56.39 (37)	7.7 (5)	
Female	Buddhist	53.3 (64)	37.5 (45)	9.2 (11)	11.155**
	Muslim	33.7 (57)	54.4 (92)	11.8 (20)	
Age					
18-29	Buddhist	60.0 (15)	28.0 (7)	12.0 (3)	3.541
	Muslim	36.8 (14)	50.0 (19)	13.2 (5)	
30-44	Buddhist	53.7 (22)	39.0 (16)	7.3 (3)	13.117***
	Muslim	21.3 (17)	63.8 (51)	15.0 (12)	
45-59	Buddhist	48.4 (30)	45.2 (28)	6.5 (4)	2.561
	Muslim	34.4 (21)	55.7 (34)	9.8 (6)	
>60	Buddhist	44.7 (17)	44.7 (17)	10.5 (4)	1.833
	Muslim	50.9 (28)	45.5 (25)	3.6 (2)	
Marital Status					
Single	Buddhist	45.0 (9)	50.0 (10.0)	5.0 (1)	1.036
	Muslim	34.8 (8)	52.2(12)	9.3 (3)	
Married	Buddhist	54.0 (68)	38.1 (48)	7.9 (10)	15.585***
	Muslim	31.8 (61)	57.3 (110)	10.9 (21)	
Widow/divorce/separation	Buddhist	35.0 (7)	50.0 (10)	15.0 (3)	2.394
	Muslim	57.9 (11)	36.8 (7)	5.3 (1)	
General education					
Primary standard	Buddhist	47.4 (55)	44.8 (52)	7.8 (9)	4.971
	Muslim	34.4 (62)	55.6 (100)	10.0 (18)	
Higher than primary	Buddhist	63.6 (28)	27.3 (12)	9.1 (4)	9.516**
	Muslim	32.0 (16)	54.0 (27)	14.0 (7)	
Illiteracy	Buddhist	16.7 (1)	66.7 (4)	16.7 (1)	1.667
	Muslim	50.0 (2)	50.0 (2)	-	
Occupation					
General work for wage	Buddhist	40.9 (18)	40.9 (18)	18.2 (8)	7.067 *
	Muslim	25.0 (17)	66.2 (45)	8.8 (6)	
Agriculture	Buddhist	59.3 (32)	37.0 (20)	3.7 (2)	7.736 *
	Muslim	34.5 (19)	52.7 (29)	12.7 (7)	
Industrial employee	Buddhist	33.3 (2)	50.0 (3)	16.7 (1)	0.300
	Muslim	33.3 (4)	58.3 (7)	8.3 (1)	
Government official	Buddhist	62.5 (5)	37.5 (3)	-	0.442
	Muslim	80.0 (4)	20.0 (1)	-	
Merchant	Buddhist	48.0 (12)	48.0 (12)	4.0 (1)	1.409
	Muslim	37.5 (9)	50.0 (12)	12.5 (3)	
Elder/unemployment/studying	Buddhist	51.7 (15)	41.4 (12)	6.9 (2)	1.574
	Muslim	38.6 (37.5)	50.0 (35)	11.4 (8)	

Annexed Table 10 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and attention in listening patient problems (continued).

Population and socio-economic characteristics		Attention in listening patient problems			χ^2
		High	Medium	Low	
Income level					
Lowest	Buddhist	40.0 (14)	48.6 (17)	11.4 (4)	0.890
	Muslim	34.9 (15)	58.1 (25)	7.0 (3)	
Low	Buddhist	39.1 (9)	52.2 (12)	8.7 (2)	0.330
	Muslim	40.0 (12)	46.7 (14)	13.3 (4)	
Medium	Buddhist	39.6 (21)	41.9 (18)	9.3 (4)	0.998
	Muslim	39.0 (23)	49.2 (29)	11.9 (7)	
High	Buddhist	68.0 (17)	28.0 (7)	4.0 (1)	8.693 **
	Muslim	32.7 (18)	58.2 (32)	9.1 (5)	
Highest	Buddhist	57.5 (23)	35.0 (14)	7.5 (3)	9.186**
	Muslim	25.5 (12)	61.7 (29)	12.8 (6)	
Health Insurance					
Gold card (30 Baht)	Buddhist	49.0 (48)	44.9 (44)	6.1 (6)	13.127***
	Muslim	26.5 (36)	61.0 (83)	12.5 (17)	
Gold card (Free)	Buddhist	54.3 (19)	34.3 (12)	11.4 (4)	1.469
	Muslim	43.8 (28)	46.9 (30.)	6 (9.4)	
Other	Buddhist	51.5 (17)	36.4 (12)	12.1 (4)	1.254
	Muslim	47.1 (16)	47.7 (16)	5.9 (2)	

* Statistical significance at 0.05, ** Statistical significance at 0.01, *** Statistical significance at 0.001

Annexed Table 11 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and understand in what doctor explained.

Population and socio-economic characteristics		Understand in what doctor explained.			χ^2
		High	Medium	Low	
Sex					
Male	Buddhist	45.7 (21)	41.3 (19)	13.0 (6)	5.915*
	Muslim	27.7 (18)	64.6 (42)	7.7 (5)	
Female	Buddhist	39.2 (47)	53.3 (64)	7.5 (9)	2.629
	Muslim	32.0 (54)	62.7 (106)	5.3 (9)	
Age					
18-29	Buddhist	36.0 (9)	52.0 (13)	12.0 (3)	0.300
	Muslim	36.8 (14)	55.3 (21)	7.9 (3)	
30-44	Buddhist	41.5 (17)	43.9 (18)	14.6 (6)	7.780 *
	Muslim	22.5 (18)	70.0 (56)	7.5 (6)	
45-59	Buddhist	43.5 (27)	53.2 (33)	3.2 (2)	2.663
	Muslim	29.5 (18)	65.6 (40)	4.9 (3)	
>60	Buddhist	39.5 (15)	50.0 (19)	10.5 (4)	1.824
	Muslim	40.0 (22)	56.4 (31)	3.6 (2)	
Marital Status					
Single ^M	Buddhist	45.0 (9)	45.0 (9)	10.0 (2)	2.697
	Muslim	26.1 (6)	69.6 (16)	4.3 (1)	
Married	Buddhist	43.7 (55)	49.2 (62)	7.1 (9)	5.679
	Muslim	31.3 (60)	62.5 (120)	6.3 (12)	
Widow/divorce/separation	Buddhist	20.0 (4)	60.0 (12)	20.0 (4)	2.176
	Muslim	31.6 (6)	63.2 (12)	5.3 (1)	
General education					
Primary standard	Buddhist	37.9 (44)	52.6 (61)	9.5 (11)	3.011
	Muslim	31.7 (57)	62.2 (112)	6.1 (11)	
Higher than primary	Buddhist	50.0 (22)	40.9 (18)	9.1 (4)	7.026*
	Muslim	26.0 (13)	68.0 (34)	6.0 (3)	
Illiteracy	Buddhist	33.3 (2)	66.7 (4)	-	0.278
	Muslim	50.0 (2)	50.0 (2)	-	
Occupation					
General work for wage	Buddhist	38.6 (17)	43.2 (19)	18.2 (8)	6.436*
	Muslim	26.5 (18)	57.1 (45)	7.4 (5)	
Agriculture ^M	Buddhist	50.0 (27)	44.4 (24)	5.6 (3)	5.963*
	Muslim	27.3 (15)	65.5 (36)	7.3 (4)	
Industrial employee	Buddhist	33.3 (2)	50.0 (3)	16.7 (1)	0.321
	Muslim	41.7 (5)	50.0 (6)	8.3 (1)	
Government official	Buddhist	50.0 (4)	50.0 (4)	-	2.377
	Muslim	20.0 (1)	60.0 (3)	20.0 (1)	
Merchant	Buddhist	29.2 (7)	76.0 (19)	4.0 (1)	1.425
	Muslim	44.8 (13)	70.8 (17)	-	
Elder/unemployment/studying	Buddhist	37.1 (26)	48.3 (14)	6.9 (2)	0.975
	Muslim		58.6 (41)	4.3 (3)	

Annexed Table 11 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and understand in what doctor explained (continued).

Population and socio-economic characteristics		Understand in what doctor explained			χ^2
		High	Medium	Low	
Income level					
Lowest	Buddhist	40.0 (14)	54.3 (19)	5.7 (2)	1.651
	Muslim	30.2 (13)	67.4 (29)	2.3 (1)	
Low	Buddhist	34.8 (8)	56.5 (13)	8.7 (2)	0.365
	Muslim	36.7 (11)	50.0 (15)	13.3 (4)	
Medium	Buddhist	46.5 (20)	41.9 (18)	11.6 (5)	4.007
	Muslim	39.0 (23)	57.6 (34)	3.4 (2)	
High	Buddhist	36.0 (9)	48.0 (12)	16.0 (4)	2.267
	Muslim	25.5 (14)	65.5 (36)	9.1 (5)	
Highest	Buddhist	42.5 (17)	52.5 (21)	5.0 (2)	3.820
	Muslim	23.4 (11)	72.3 (34)	4.3 (2)	
Health Insurance					
Gold card (30 Baht)	Buddhist	38.8 (38)	52.0 (51)	9.2 (9)	4.803
	Muslim	27.9 (38)	66.2 (90)	5.9 (8)	
Gold card (Free)	Buddhist	45.7 (16)	45.7 (16)	8.6 (3)	2.124
	Muslim	32.8 (21)	60.9 (39)	6.3 (4)	
Other	Buddhist	42.4 (14)	48.5 (16)	9.1 (3)	0.479
	Muslim	38.2 (13)	55.9 (19)	5.9 (2)	

* Statistical significance at 0.05, ** Statistical significance at 0.01, *** Statistical significance at 0.001

^M Monte-Carlo Technique Sig.(2-sides)

Annexed Table 12 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and suitability of waiting time.

Population and socio-economic characteristics		Suitability of waiting time			χ^2
		High	Medium	Low	
Sex					
Male	Buddhist	8.7 (4)	63.0 (29)	28.3 (13)	2.945
	Muslim	16.9 (11)	47.7 (31)	35.4 (23)	
Female	Buddhist	15.0 (18)	63.3 (76)	21.7 (26)	6.871*
	Muslim	14.8 (25)	49.7 (84)	35.5 (60)	
Age					
18-29 ^M	Buddhist	-	7.60 (19)	24.0 (6)	6.987 *
	Muslim	10.5 (4)	44.7 (17)	44.7 (17)	
30-44	Buddhist	12.2 (5)	61.0 (25)	26.8 (11)	5.622
	Muslim	15.0 (12)	38.8 (31)	46.3 (37)	
45-59	Buddhist	17.7 (11)	61.3 (38)	21.0 (13)	0.473
	Muslim	16.4 (10)	57.4 (35)	26.2 (16)	
>60	Buddhist	15.8 (6)	60.5 (23)	23.7 (9)	0.096
	Muslim	18.2 (10)	58.2 (32)	23.6 (13)	
Marital Status					
Single ^M	Buddhist	-	80.0 (16)	20.0 (4)	6.473*
	Muslim	8.7 (2)	43.5 (10)	47.8 (11)	
Married	Buddhist	15.1 (19)	61.9 (78)	23.0 (29)	5.763
	Muslim	16.7 (32)	49.0 (94)	34.4 (66)	
Widow/divorce/separation	Buddhist	15.0 (3)	55.0 (11)	30.0 (6)	0.174
	Muslim	10.5 (2)	57.9 (11)	31.6 (6)	
General education					
Primary standard	Buddhist	16.4 (19)	58.6 (68)	25.0 (29)	2.487
	Muslim	16.1 (29)	50.6 (91)	33.3 (60)	
Higher than primary	Buddhist	6.8 (3)	70.5 (31)	22.7 (10)	7.611*
	Muslim	14.0 (7)	42.0 (21)	44.0 (22)	
Illiteracy	Buddhist	-	100.0 (6)	-	1.667
	Muslim	-	75.0 (3)	25.0 (1)	
Occupation					
General work for wage	Buddhist	9.1 (4)	59.1 (26)	31.8 (14)	3.096
	Muslim	16.2 (11)	42.6 (29)	41.2 (28)	
Agriculture	Buddhist	20.4 (11)	61.1 (33)	18.5 (10)	1.156
	Muslim	12.7 (7)	67.3 (37)	20.0 (11)	
Industrial employee	Buddhist	-	66.7 (4)	33.3(2)	1.250
	Muslim	8.3 (1)	41.7 (5)	50.0 (6)	
Government official ^M	Buddhist	-	87.5 (7)	12.5 (1)	6.134 *
	Muslim	20.0 (1)	20.0 (1)	60.0 (3)	
Merchant	Buddhist	8.0 (2)	76.0 (19)	16.0 (4)	3.562
	Muslim	16.7 (4)	50.0 (12)	33.3 (8)	
Elder/unemployment/studying	Buddhist	17.2 (5)	55.2 (16)	27.6 (8)	1.212
	Muslim	17.1 (12)	44.3 (31)	38.6 (27)	

Annexed Table 12 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and suitability of waiting time (continued).

Population and socio-economic characteristics		Suitability of waiting time			χ^2
		High	Medium	Low	
Income level					
Lowest	Buddhist	11.4 (4)	54.3 (19)	34.3 (12)	2.210
	Muslim	23.3 (10)	51.2 (22)	25.6 (11)	
Low	Buddhist	17.4 (4)	6.5 (13)	26.1 (6)	1.385
	Muslim	10.0 (3)	50.0 (15)	40.0 (12)	
Medium	Buddhist	16.3 (7)	58.1 (25)	25.6 (11)	1.652
	Muslim	11.9 (7)	50.8 (30)	37.3 (22)	
High	Buddhist	-	80.0 (20)	20.0 (5)	8.586*
	Muslim	14.5 (8)	47.3 (26)	38.2 (21)	
Highest	Buddhist	17.5 (7)	70.0 (28)	12.5 (5)	6.818*
	Muslim	17.0 (8)	46.8 (22)	36.2 (17)	
Health Insurance					
Gold card (30 Baht)	Buddhist	11.2 (11)	65.3 (64)	23.5 (23)	8.318*
	Muslim	16.2 (22)	46.3 (63)	37.5 (51)	
Gold card (Free)	Buddhist	11.4 (4)	60.0 (21)	28.6 (10)	0.334
	Muslim	15.6 (10)	57.8 (37)	26.6 (17)	
Other	Buddhist	21.2 (7)	60.6 (20)	18.2 (6)	5.376
	Muslim	11.8 (4)	44.1 (15)	44.1 (15)	

* Statistical significance at 0.05

^M Monte-Carlo Technique Sig.(2-sides)

Annexed Table 13 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and respect from staff.

Population and socio-economic characteristics		Respect from staff			χ^2
		High	Medium	Low	
Sex					
Male	Buddhist	47.8 (22)	45.7 (21)	6.5 (3)	3.359
	Muslim	30.8 (20)	61.5 (40)	7.7 (5)	
Female	Buddhist	51.7 (62)	42.5 (51)	5.8 (7)	8.826*
	Muslim	34.9 (59)	53.8 (91)	11.2 (19)	
Age					
18-29	Buddhist	48.0 (12)	44.0 (11)	8.0 (2)	1.200
	Muslim	34.2 (13)	55.3 (21)	10.5 (4)	
30-44	Buddhist	43.9 (18)	43.9 (18)	12.2 (5)	4.754
	Muslim	25.0 (20)	62.5 (50)	12.5 (10)	
45-59	Buddhist	46.8 (29)	48.4 (30)	4.8 (3)	1.498
	Muslim	36.1 (22)	59.0 (36)	3 (4.9)	
>60	Buddhist	65.8 (25)	34.2 (13)	-	7.431*
	Muslim	43.6 (24)	43.6 (24)	12.7 (7)	
Marital Status					
Single	Buddhist	65.0 (13)	25.0 (5)	10.0 (2)	5.372
	Muslim	30.4 (7)	56.5 (13)	13.0 (3)	
Married	Buddhist	50.8 (64)	42.9 (54)	6.3 (8)	8.497*
	Muslim	34.4 (66)	56.8 (109)	8.9 (17)	
Widow/divorce/separation	Buddhist	35.0 (7)	65.0 (13)	-	4.782
	Muslim	31.6 (6)	47.4 (9)	21.1 (4)	
General education					
Primary standard	Buddhist	50.0 (58)	44.0 (51)	6.0 (7)	8.053*
	Muslim	33.9 (61)	55.6 (100)	10.6 (19)	
Higher than primary	Buddhist	52.3 (23)	43.2 (19)	4.5 (2)	3.970
	Muslim	32.0 (16)	62.0 (31)	6.0 (3)	
Illiteracy	Buddhist	50.0 (3)	33.3 (21)	16.7 (1)	2.222
	Muslim	50.0 (2)	-	50.0 (2)	
Occupation					
General work for wage	Buddhist	54.5 (24)	36.4 (16)	9.1 (4)	10.415 **
	Muslim	25.0 (17)	64.7 (44)	10.3 (7)	
Agriculture	Buddhist	40.7 (22)	55.6 (30)	3.7 (2)	0.553
	Muslim	34.5 (19)	60.0 (33)	5.5 (3)	
Industrial employee	Buddhist	33.3 (2)	50.0 (3)	16.7 (1)	2.121
	Muslim	41.7 (5)	58.3 (7)	-	
Government official	Buddhist	50.0 (4)	50.0 (4)	-	0.124
	Muslim	60.0 (3)	40.0 (2)	-	
Merchant	Buddhist	56.0 (14)	36.0 (9)	8.0 (2)	1.047
	Muslim	41.7 (10)	45.8 (11)	12.5 (3)	
Elder/unemployment/studying	Buddhist	62.1 (18)	34.5 (10)	3.4 (1)	6.740*
	Muslim	35.7 (25)	48.6 (34)	15.7 (11)	

Annexed Table 13 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and respect from staff (continued).

Population and socio-economic characteristics		Respect from staffs			χ^2
		High	Medium	Low	
Income level					
Lowest	Buddhist	68.6 (24)	28.6 (10)	2.9 (1)	10.351**
	Muslim	32.6 (14)	55.8 (24)	11.6 (5)	
Low	Buddhist	47.8 (11)	47.8 (11)	4.3 (1)	4.973
	Muslim	30.0 (9)	43.3 (13)	26.7 (8)	
Medium	Buddhist	41.9 (18)	48.8 (21)	9.3 (4)	0.511
	Muslim	35.6 (21)	55.9 (33)	8.5 (5)	
High	Buddhist	44.0 (11)	48.0 (12)	8.0 (2)	4.369
	Muslim	21.8 (12)	70.9 (39)	7.3 (4)	
Highest	Buddhist	50.0 (20)	45.0 (18)	5.0 (2)	0.046
	Muslim	48.9 (23)	46.8 (22)	4.3 (2)	
Health Insurance					
Gold card (30 Baht)	Buddhist	44.9 (44)	46.9 (46)	8.2 (8)	6.870*
	Muslim	28.7 (39)	58.1 (79)	13.2 (18)	
Gold card (Free)	Buddhist	54.3 (19)	45.7 (16)	-	4.296
	Muslim	40.6 (26)	50.0 (32)	9.4 (6)	
Other	Buddhist	63.6 (21)	30.3 (10)	6.1 (2)	6.720*
	Muslim	41.2 (14)	58.8 (20)	-	

* Statistical significance at 0.05, ** Statistical significance at 0.01

Annexed Table 14 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and perceived quality of services.

Population and socio-economic characteristics		Quality of services		χ^2
		Good	Not good	
Sex				
Male	Buddhist	87.0 (40)	13.0 (6)	0.313
	Muslim	83.1 (54)	16.9 (11)	
Female	Buddhist	90.0 (108)	10.0 (12)	3.857*
	Muslim	81.7 (138)	18.3 (31)	
Age				
18-29	Buddhist	76.0 (19)	24.0 (6)	0.287
	Muslim	81.6 (31)	18.4 (7)	
30-44	Buddhist	87.8 (36)	12.2 (5)	2.276
	Muslim	76.3 (61)	23.8 (19)	
45-59	Buddhist	90.3 (56)	9.7 (6)	0.740
	Muslim	85.2 (52)	14.8 (9)	
>60	Buddhist	97.4 (37)	2.6 (1)	2.913
	Muslim	87.3 (48)	12.7 (7)	
Marital Status				
Single	Buddhist	90.0 (18)	10.0 (2)	0.487
	Muslim	82.6 (19)	17.4 (4)	
Married	Buddhist	87.3 (110)	12.7 (16)	1.441
	Muslim	82.3 (158)	17.7 (34)	
Widow/divorce	Buddhist	100.0 (20)	-	4.692*
	Muslim	78.9 (15)	21.1 (4)	
General Education				
Primary standard	Buddhist	92.2 (107)	7.8 (9)	7.038**
	Muslim	81.1 (146)	18.9 (34)	
Higher than primary	Buddhist	84.1 (37)	15.6 (7)	0.300
	Muslim	88.0 (44)	12.0 (6)	
Illiteracy	Buddhist	66.7 (4)	33.3 (2)	0.278
	Muslim	50.0 (2)	50.0 (2)	
Occupation				
General work for wage	Buddhist	86.4 (38)	13.6 (6)	0.880
	Muslim	79.4 (54)	20.6 (14)	
Agriculture	Buddhist	88.9 (48)	11.1 (6)	0.123
	Muslim	90.9 (50)	9.1 (5)	
Industrial employee	Buddhist	83.3 (5)	16.7 (1)	1.870
	Muslim	50.0 (6)	50.0 (6)	
Government official	Buddhist	87.5 (7)	12.5 (1)	0.133
	Muslim	80.0 (4)	20.0 (1)	
Merchant ^E	Buddhist	96.0 (24)	4.0 (1)	2.144
	Muslim	83.3 (20)	16.7 (4)	
Elder/unemployment/studying	Buddhist	89.7 (26)	10.3 (3)	0.737
	Muslim	82.9 (58)	17.1 (12)	

Annexed Table 14 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and perceived quality of services (continued).

Population and socio-economic characteristics		Quality of services		χ^2
		Good	Not good	
Income level				
Lowest	Buddhist	94.3 (33)	5.7 (2)	3.688
	Muslim	79.1 (34)	20.9 (9)	
Low ^E	Buddhist	95.7 (22)	4.3 (1)	5.596 *
	Muslim	70.0 (21)	30.0 (9)	
Medium	Buddhist	83.7 (36)	16.3 (7)	0.008
	Muslim	83.1 (49)	16.9 (10)	
High	Buddhist	92.0 (23)	8.0 (2)	2.273
	Muslim	78.2 (43)	21.8 (12)	
Highest	Buddhist	85.0 (34)	15.0 (6)	2.988
	Muslim	95.7 (46)	4.3 (2)	
Health Insurance				
Gold card (30 Baht)	Buddhist	87.8 (86)	12.2 (12)	1.978
	Muslim	80.9 (110)	19.1 (26)	
Gold card (Free)	Buddhist	91.4 (32)	8.6 (3)	0.640
	Muslim	85.9 (55)	14.1 (9)	
Other	Buddhist	90.9 (30)	9.1 (3)	1.743
	Muslim	79.4 (27)	20.6 (7)	

* Statistical significance at 0.05, ** Statistical significance at 0.01

^E Exact Sig. (2-sides)

Annexed Table 15 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and perceived prejudice services.

Population and socio-economic characteristics		Prejudice services		χ^2
		No	Yes	
Sex				
Male	Buddhist	82.5 (33)	17.5 (7)	1.661
	Muslim	71.2 (42)	28.8 (17)	
Female	Buddhist	95.0 (95)	5.0 (5)	11.346***
	Muslim	79.9 (119)	20.1 (30)	
Age				
18-29	Buddhist	94.4 (17)	5.6 (1)	2.007
	Muslim	79.3 (23)	20.7 (6)	
30-44	Buddhist	78.4 (29)	21.6 (8)	0.092
	Muslim	80.8 (59)	19.2 (14)	
45-59	Buddhist	98.1 (51)	1.9 (1)	16.050***
	Muslim	69.1 (38)	30.9 (17)	
>60	Buddhist	93.9 (31)	6.1 (2)	3.003
	Muslim	80.4 (41)	19.6 (10)	
Marital Status				
Single	Buddhist	85.7 (12)	14.3 (2)	0.536
	Muslim	75.0 (12)	25.0 (4)	
Married	Buddhist	91.9 (102)	8.1 (9)	10.407***
	Muslim	77.1 (135)	22.9 (40)	
Widow/divorce	Buddhist	93.3 (14)	6.7 (1)	0.878
	Muslim	82.4 (14)	17.6 (3)	
General Education				
Primary standard	Buddhist	94.1 (95)	5.9 (6)	14.672***
	Muslim	75.8 (125)	24.2 (40)	
Higher than primary	Buddhist	82.4 (28)	17.6 (6)	0.004
	Muslim	82.1 (32)	17.9 (7)	
Illiteracy	Buddhist	100.0 (5)	-	-
	Muslim	100.0 (4)	-	
Occupation				
General work for wage	Buddhist	83.8 (31)	16.2 (6)	0.217
	Muslim	80.0 (48)	20.0 (12)	
Agriculture	Buddhist	89.6 (43)	10.4 (5)	1.338
	Muslim	81.3 (39)	8.8 (9)	
Industrial employee	Buddhist	100.0 (6)	-	1.125
	Muslim	83.3 (10)	16.7 (2)	
Government official	Buddhist	100.0 (4)	-	2.667
	Muslim	50.0 (2)	50.0 (2)	
Merchant ^E	Buddhist	100.0 (23)	-	9.684**
	Muslim	65.2 (15)	34.8 (8)	
Elder/unemployment/studying	Buddhist	93.5 (21)	4.5 (1)	3.699
	Muslim	77.0 (47)	23.0 (14)	

Annexed Table 15 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and perceived prejudice services (continued).

Population and socio-economic characteristics		Prejudice services		χ^2
		No	Yes	
Income level				
Lowest	Buddhist	96.6 (28)	3.4 (1)	2.677
	Muslim	84.2 (32)	15.8 (6)	
Low ^E	Buddhist	76.2 (16)	23.8 (5)	1.116
	Muslim	62.1 (18)	37.9 (11)	
Medium	Buddhist	94.6 (35)	5.4 (2)	4.607*
	Muslim	78.0 (39)	22.0 (11)	
High	Buddhist	90.5 (19)	9.5 (2)	1.536
	Muslim	78.0 (39)	22.0 (11)	
Highest	Buddhist	93.8 (30)	6.3 (2)	2.674
	Muslim	80.5 (33)	19.5 (8)	
Health Insurance				
Gold card (30 Baht)	Buddhist	90.1 (73)	9.9 (8)	6.086*
	Muslim	76.5 (91)	23.5 (28)	
Gold card (Free)	Buddhist	90.0 (27)	10.0 (3)	1.057
	Muslim	81.7 (49)	18.3 (11)	
Other	Buddhist	96.6 (28)	3.4 (1)	6.444*
	Muslim	72.4 (21)	27.6 (8)	

* Statistical significance at 0.05, ** Statistical significance at 0.01, *** Statistical significance at 0.001

^E Exact Sig. (2-sides)

Annexed Table 16 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and perceived discrimination services.

Population and socio-economic characteristics		Discriminated services		χ^2
		No	Yes	
Sex				
Male	Buddhist	87.2 (34)	12.8 (5)	0.700
	Muslim	80.7 (46)	19.3 (11)	
Female	Buddhist	100.0 (103)	-	8.176**
	Muslim	92.4 (134)	7.6 (11)	
Age				
18-29	Buddhist	94.7 (18)	5.3 (1)	0.084
	Muslim	92.6 (25)	7.4 (2)	
30-44	Buddhist	91.9 (34)	8.1 (3)	0.246
	Muslim	94.4 (69)	5.6 (4)	
45-59	Buddhist	100.0 (55)	-	12.461***
	Muslim	79.6 (43)	20.4 (11)	
>60	Buddhist	96.8 (30)	3.2 (1)	1.280
	Muslim	90.0 (45)	10.0 (5)	
Marital Status				
Single	Buddhist	93.3 (14)	6.7 (1)	1.034
	Muslim	100.0 (15)	-	
Married	Buddhist	96.4 (108)	3.6 (4)	7.007**
	Muslim	87.1 (149)	12.9 (22)	
Widow/divorce	Buddhist	100.0 (15)	-	-
	Muslim	100.0 (16)	-	
General Education				
Primary standard	Buddhist	98.1 (101)	1.9 (2)	7.657**
	Muslim	88.8 (143)	11.2 (18)	
Higher than primary	Buddhist	91.2 (31)	8.8 (3)	0.079
	Muslim	89.2 (33)	10.8 (4)	
Illiteracy	Buddhist	100.0 (5)	-	-
	Muslim	100.0 (4)	-	
Occupation				
General work for wage	Buddhist	100.0 (30)	-	3.519
	Muslim	91.2 (52)	8.8 (5)	
Agriculture	Buddhist	92.2 (47)	7.8 (4)	0.003
	Muslim	91.8 (45)	8.2 (4)	
Industrial employee	Buddhist	100.0 (6)	-	1.125
	Muslim	83.3 (10)	16.7 (2)	
Government official	Buddhist	100.0 (4)	-	1.556
	Muslim	66.7 (2)	33.3 (1)	
Merchant	Buddhist	95.5 (21)	4.5 (1)	2.877
	Muslim	78.3 (18)	21.7 (5)	
Elder/unemployment/studying	Buddhist	100.0 (21)	-	1.933
	Muslim	91.4 (53)	8.6 (5)	

Annexed Table 16 Percentage and correlation test of samples classified according to population and socio-economic characteristics, religion and perceived discrimination services (continued).

Population and socio-economic characteristics		Discriminated services		χ^2
		No	Yes	
Income level				
Lowest	Buddhist	100.0 (29)	-	3.337
	Muslim	89.2 (33)	10.8 (4)	
Low	Buddhist	94.7 (18)	5.1 (1)	1.139
	Muslim	84.6 (22)	15.4 (4)	
Medium	Buddhist	97.4 (37)	2.6 (1)	0.626
	Muslim	93.8 (45)	6.3 (3)	
High	Buddhist	100.0 (21)	-	2.753
	Muslim	88.0 (44)	12.0 (6)	
Highest	Buddhist	91.4 (32)	8.6 (3)	0.263
	Muslim	87.8 (36)	12.2 (5)	
Health Insurance				
Gold card (30 Baht)	Buddhist	95.2 (79)	4.8 (4)	3.759
	Muslim	87.0 (100.0)	13.0 (15)	
Gold card (Free)	Buddhist	100.0 (29)	-	1.554
	Muslim	94.8 (55)	5.2 (3)	
Other	Buddhist	96.7 (29)	3.3 (1)	2.080
	Muslim	86.2 (25)	13.8 (4)	

* Statistical significance at 0.05, ** Statistical significance at 0.01

5. ท่านจบการศึกษาสายสามัญชั้นสูงสุด ระดับใด
- [] 1. ประถมศึกษา (ป.1-6) [] 2. มัธยมศึกษาตอนต้น (ม.1-3)
- [] 3. มัธยมศึกษาตอนปลาย (ม.4-6, ปวช.) [] 4. อนุปริญญา/ปวส.
- [] 5. ปริญญาตรี [] 6. สูงกว่าปริญญาตรี
- [] 7. อ่านไม่ออก/เขียนไม่ได้ [] 8. อื่นๆ (ระบุ).....
- 5.1 (กรณีนับถือศาสนาอิสลาม) ท่านจบการศึกษาสายศาสนาชั้นสูงสุด ระดับใด
- [] 1. ระดับ 1-4 (เทียบเท่าภาคบังคับ) ระยะเวลาศึกษา..... ปี
- [] 2. ระดับ 5-7 (เทียบเท่ามัธยมศึกษาตอนต้น) ระยะเวลาศึกษา..... ปี
- [] 3. ระดับ 6-8 (เทียบเท่ามัธยมศึกษาตอนปลาย) ระยะเวลาศึกษา..... ปี
- [] 4. ระดับสูงกว่า 8 (เทียบเท่าปริญญาตรีหรือสูงกว่า) ระยะเวลาศึกษา..... ปี
- [] 5. ไม่ได้เรียนในโรงเรียน [] 6. ไม่มีความรู้ทางศาสนา
6. อาชีพหลักของท่าน (ที่ใช้เวลาส่วนใหญ่ในการทำงานนั้นๆ) คือ
- [] 1. รับจ้างทั่วไป [] 2. เกษตรกรรม (ทำสวน/ทำไร่/ทำนา/เลี้ยงสัตว์)
- [] 3. ลูกจ้างโรงงานอุตสาหกรรม [] 4. ทำงานบริษัทเอกชน
- [] 5. รับราชการ/รัฐวิสาหกิจ [] 6. ค้าขาย/ทำธุรกิจส่วนตัว/อาชีพอิสระ
- [] 7. พ่อบ้าน/แม่บ้าน [] 8.ว่างงาน
- [] 9. กำลังศึกษาอยู่ [] 10. อื่นๆ (ระบุ).....
7. ในปัจจุบัน ท่านมีรายได้ ประมาณ บาท/ปี (เฉลี่ยเดือนละ.....บาท)
- (กรณีประกอบอาชีพด้านเกษตรกรรมให้ตามรายได้ทั้งหมดต่อปี แล้วนำมาเฉลี่ยเป็นรายเดือน)
- 7.1 ครอบครัวของท่านมีรายได้ประมาณ บาท/ปี (เฉลี่ยเดือนละ..... บาท)
- 7.2 ปัจจุบันครอบครัวของท่านมีภาระหนี้สินหรือไม่ [] 1. ไม่มี [] 2. มี
- 7.3 ถ้ามี เป็นวงเงินประมาณ..... บาท

ส่วนที่ 3 ข้อมูลหลักประกันสุขภาพ

1. ปัจจุบัน ท่านใช้สิทธิหรือมีหลักประกันสุขภาพในการรักษาพยาบาล ประเภทใด
- [] 1. บัตรทอง (จ่าย 30 บาท) [] 2. บัตรทอง (ไม่ต้องจ่าย 30 บาท) [] 3. บัตรประกันสังคม
- [] 4. ข้าราชการ/รัฐวิสาหกิจ [] 5. ประกันชีวิตเอกชน [] 6. สวัสดิการบริษัท
- [] 7. อื่นๆ (ระบุ).....
2. สมาชิกในครอบครัวของท่านมีสิทธิในการรักษาพยาบาลประเภทอื่นๆ อีกหรือไม่
- [] 1. ไม่มี (ข้ามไปตอบข้อ 3) [] 2. มี
- 2.1 สิทธินั้นคือ

ชื่อเล่น	ความสัมพันธ์กับตัวท่าน	ประเภทหลักประกันสุขภาพ						
		บัตรทอง 30 บาท		ประกันสังคม	ข้าราชการ/รัฐวิสาหกิจ	ประกันชีวิต	สวัสดิการบริษัท	อื่นๆ
		จ่ายเงิน	ไม่จ่ายเงิน					

3. สถานพยาบาลตามสิทธิที่ท่านสามารถไปใช้บริการได้เป็นลำดับแรก คือ
- | | | |
|--|--|---|
| <input type="checkbox"/> 1.สถานีนอนามัย | <input type="checkbox"/> 2.โรงพยาบาลอำเภอ | <input type="checkbox"/> 3.โรงพยาบาลจังหวัด |
| <input type="checkbox"/> 4.ศูนย์การแพทย์ | <input type="checkbox"/> 5.คลินิกแพทย์ | <input type="checkbox"/> 6.โรงพยาบาลเอกชน |
| <input type="checkbox"/> 7.รับการรักษาที่ใดก็ได้ | <input type="checkbox"/> 8.อื่นๆ (ระบุ)..... | |

ส่วนที่ 4 ข้อมูลสถานะสุขภาพ

1. ท่านมีโรคประจำตัวหรืออาการเจ็บป่วยอย่างใดอย่างหนึ่งที่ได้รับการวินิจฉัยจากแพทย์หรือไม่
- | | |
|---|-------------------------------|
| <input type="checkbox"/> 1.ไม่มี (ข้ามไปตอบข้อ 2) | <input type="checkbox"/> 2.มี |
|---|-------------------------------|
- 1.1 ถ้ามี โรคหรืออาการนั้นคือ (ตอบได้มากกว่า 1 ข้อ)
- | | | |
|--|--|-------------------------------------|
| <input type="checkbox"/> 1.เบาหวาน | <input type="checkbox"/> 2.ความดันโลหิตสูง | <input type="checkbox"/> 3.โรคหัวใจ |
| <input type="checkbox"/> 4.ไขมันในเลือดสูง | <input type="checkbox"/> 5.กระดูกและข้อ | <input type="checkbox"/> 6.โรคไต |
| <input type="checkbox"/> 7.หอบหืด/ภูมิแพ้ | <input type="checkbox"/> 8.มะเร็ง..... | <input type="checkbox"/> 9.อื่นๆ |
- 1.2 ระยะเวลาที่ป่วย หรือทราบว่าเป็นป่วยจากโรคข้างต้น ปีเดือน
2. ท่านคิดว่า ขณะนี้ตัวท่านมีสถานะสุขภาพอยู่ในระดับใด
- | | | | |
|----------------------------------|-------------------------------|--------------------------------------|---|
| <input type="checkbox"/> 1.ดีมาก | <input type="checkbox"/> 2.ดี | <input type="checkbox"/> 3.ไม่ค่อยดี | <input type="checkbox"/> 4.ไม่ดี/แย่มาก |
|----------------------------------|-------------------------------|--------------------------------------|---|
3. เมื่อเทียบกับ 3 ปีที่ผ่านมา ท่านคิดว่าสุขภาพของท่านเปลี่ยนแปลงอย่างไร
- | | | | |
|-----------------------------------|---------------------------------------|----------------------------------|-------------------------------------|
| <input type="checkbox"/> 1.ดีขึ้น | <input type="checkbox"/> 2.เหมือนเดิม | <input type="checkbox"/> 3.แย่ลง | <input type="checkbox"/> 4.ไม่แน่ใจ |
|-----------------------------------|---------------------------------------|----------------------------------|-------------------------------------|
4. เมื่อเทียบกับคนอายุรุ่นราวเดียวกัน ท่านคิดว่าสุขภาพของท่าน เป็นอย่างไร
- | | | | |
|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|
| <input type="checkbox"/> 1.ดีกว่า | <input type="checkbox"/> 2.พอๆกัน | <input type="checkbox"/> 3.แยกว่า | <input type="checkbox"/> 4.ไม่แน่ใจ |
|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|

ส่วนที่ 5 ข้อมูลการเข้าถึงและใช้บริการสุขภาพ

1. ในรอบปีที่ผ่านมานี้ ท่านเคยไปหาหมอหรือไปรับการรักษา หรือไม่
- | | |
|-----------------------------------|--|
| <input type="checkbox"/> 1.ไม่เคย | <input type="checkbox"/> 2.เคย (..... ครั้ง) |
|-----------------------------------|--|
2. ในรอบปีที่ผ่านมานี้ ท่านเคยเจ็บป่วยจนต้องเข้านอนรักษาตัวในโรงพยาบาลหรือไม่
- | | |
|-----------------------------------|--|
| <input type="checkbox"/> 1.ไม่เคย | <input type="checkbox"/> 2.เคย (..... ครั้ง) |
|-----------------------------------|--|
- 2.1 อาการเจ็บป่วย คือ
- 2.2 ระยะเวลาที่นอนรักษาตัวในโรงพยาบาล วัน (เรียงตามลำดับการเจ็บป่วย)
3. สถานพยาบาลที่ท่านมักจะไปใช้บริการเป็นประจำ เมื่อเจ็บป่วย คือ
- | | |
|--|--|
| <input type="checkbox"/> 1.สถานพยาบาล/ผดุงครรภ์เอกชน | <input type="checkbox"/> 2.คลินิกแพทย์ |
| <input type="checkbox"/> 3.สถานีนอนามัย | <input type="checkbox"/> 4.โรงพยาบาลอำเภอ |
| <input type="checkbox"/> 5.โรงพยาบาลจังหวัด | <input type="checkbox"/> 6.ศูนย์การแพทย์ |
| <input type="checkbox"/> 7.โรงพยาบาลเอกชน | <input type="checkbox"/> 8.อื่นๆ (ระบุ)..... |
4. ในการไปใช้บริการตามข้อ 3 ท่านเลือกพิจารณาสถานพยาบาลตามลักษณะอาการเจ็บป่วยหรือไม่
- | | |
|--|----------------------------------|
| <input type="checkbox"/> 1.ไม่เลือก (ข้ามไปตอบข้อ 5) | <input type="checkbox"/> 2.เลือก |
|--|----------------------------------|
- 4.1 ถ้าเลือก อาการเจ็บป่วยที่ทำให้ท่านไปใช้สถานพยาบาลในข้อ 3. คือ
- | | |
|---|---|
| <input type="checkbox"/> 1.อาการเจ็บป่วยธรรมดาหรือโรคทั่วไป | <input type="checkbox"/> 2.อาการเจ็บป่วยรุนแรงหรือป่วยหนัก (ข้ามไปตอบข้อ 5) |
|---|---|

- 4.2 ในกรณีเลือกอาการเจ็บป่วยธรรมดา แต่ถ้ามีอาการรุนแรงหรือป่วยหนัก ท่านจะไปใช้บริการที่ใด
- [] 1.คลินิกแพทย์ [] 2.โรงพยาบาลอำเภอ
- [] 3.โรงพยาบาลจังหวัด [] 4.ศูนย์การแพทย์
- [] 5.โรงพยาบาลเอกชน [] 6.อื่นๆ (ระบุ).....
5. ท่านเดินทางไปสถานพยาบาลที่ใช้บริการเป็นประจำ โดยวิธีใด
- [] 1.เดิน [] 2.จักรยาน [] 3.มอเตอร์ไซค์รับจ้าง
- [] 4.มอเตอร์ไซค์ส่วนตัว [] 5.รถยนต์รับจ้าง [] 6.รถยนต์ส่วนตัว
- [] 7.รถโดยสารประจำทาง [] 8.อื่นๆ (ระบุ).....
- 5.1 สถานพยาบาลแห่งนั้น อยู่ห่างจากบ้านท่าน กม. ใช้เวลาเดินทาง นาที
- 5.2 เสียค่าใช้จ่ายในการเดินทาง ประมาณ บาท/ครั้ง
- 5.3 เหตุผลที่ไปใช้บริการสถานพยาบาลที่ใช้เป็นประจำคือ (ตอบได้มากกว่า 1 ข้อ)
- [] 1.เวลาเปิดบริการสะดวก [] 2.อยู่ใกล้/เดินทางสะดวก [] 3.บริการดี มีคุณภาพ
- [] 4.มีอุปกรณ์/เครื่องมือครบถ้วน [] 5.รู้สึกคุ้นเคย/ชอบพอกับเจ้าหน้าที่ [] 6.ค่ารักษาไม่แพง
- [] 7.มีบริการตามหลักศาสนา [] 8.ใช้สิทธิ์การรักษา [] 9.อื่นๆ (ระบุ).....
6. สถานพยาบาลที่ท่านไปใช้บริการเป็นประจำกับสถานพยาบาลตามสิทธิ์การรักษาเป็นสถานพยาบาลแห่งเดียวกันหรือไม่
- [] 1.ไม่ใช่ [] 2.ใช่ (ข้ามไปตอบข้อ 7)
- 6.1 สถานพยาบาลตามสิทธิ์อยู่ห่างจากบ้านท่าน..... กม. ใช้เวลาเดินทางประมาณ..... นาที
- 6.2 ท่านเคยเปลี่ยนไปใช้บริการสถานพยาบาลตามสิทธิ์การรักษาหรือไม่
- [] 1.ไม่เคย [] 2.เคย (ข้ามไปตอบข้อ 8)
- 6.3 ถ้าไม่เคย มีเหตุผลคือ (ตอบได้มากกว่า 1 ข้อ)
- [] 1.เวลาเปิดบริการไม่สะดวก [] 2.อยู่ไกล/เดินทางลำบาก
- [] 3.บริการไม่ดี ไม่มีคุณภาพ [] 4.มีบริการ/เครื่องมือไม่ครบถ้วน
- [] 5.เจ้าหน้าที่พูดจาไม่ดี/ไม่สุภาพ [] 6.ค่ารักษาแพง/ค่าใช้จ่ายสูง
- [] 7.ยังไม่มีการเจ็บป่วย [] 8.อื่นๆ (ระบุ).....
7. ท่านรู้สึกพอใจสถานพยาบาลตามสิทธิ์การรักษานั้น หรือไม่
- [] 1.ไม่พอใจ [] 2.พอใจ [] 3.พอใจมาก [] 4.ไม่แน่ใจ
8. ท่านคิดว่า ท่านมีโอกาสเลือกที่จะเข้ารับการรักษาในสถานพยาบาลเมื่อเจ็บป่วย ระดับใด
- [] 1.ไม่มีทางเลือก [] 2.มีน้อย [] 3.มีพอสมควร [] 4.มีมากมาย
9. สถานพยาบาลที่ท่านไปใช้บริการเป็นประจำ มีการจัดบริการตามหลักศาสนาของท่าน หรือไม่
- [] 1.ไม่มี [] 2.มี [] 3.ไม่ทราบ/ไม่แน่ใจ
10. ท่านมีหมอกคนใดคนหนึ่งที่คุณเลื่อมใส/รักยกกันเป็นประจำ หรือไม่ [] 1.ไม่มี (ข้ามไปตอบส่วนที่ 6) [] 2.มี
- 10.1 ถ้ามี เพศของหมอกคนนั้นคือ [] 1.ชาย [] 2.หญิง
- 10.2 หมอกคนนั้นเป็นคนบ้านเดียวกับท่านหรือไม่ [] 1.ไม่ใช่ [] 2.ใช่ [] 3.ไม่ทราบ/ไม่แน่ใจ
- 10.3 หมอกคนนั้นนับถือศาสนาเดียวกับท่านหรือไม่ [] 1.ไม่ใช่ [] 2.ใช่ [] 3.ไม่ทราบ/ไม่แน่ใจ

ส่วนที่ 6 คุณภาพบริการ

1. เมื่อไปหาหมอ ท่านมีความเชื่อมั่นในตัวหมอที่รักษาอาการเจ็บป่วยให้ท่านหรือไม่ ระดับใด
 1.มาก 2.ปานกลาง 3.น้อย 4.ไม่เลย
2. เมื่อไปหาหมอ ท่านคิดว่าหมอฟังสิ่งที่ท่านพูดหรือไม่ ระดับใด
 1.ฟังทุกเรื่อง 2.ฟังเป็นส่วนใหญ่ 3.ฟังน้อยมาก 4.ไม่ฟังเลย
3. เมื่อไปหาหมอ ท่านฟังสิ่งที่หมอพูดหรืออธิบาย เข้าใจหรือไม่ ระดับใด
 1.เข้าใจทุกเรื่อง 2.เข้าใจเป็นส่วนใหญ่ 3.เข้าใจน้อยมาก 4.ไม่เข้าใจเลย
4. เมื่อไปหาหมอ ท่านมีโอกาสตัดสินใจเกี่ยวกับการรักษาร่วมกับหมอหรือไม่ ระดับใด
 1.มาก 2.ปานกลาง 3.น้อย 4.ไม่เลย
5. เมื่อไปหาหมอ ท่านมีคำถามที่อยากถามหมอ แต่ไม่ได้ถามหรือไม่
 1.ไม่มี (ข้ามไปตอบข้อ 4) 2.มี
 เหตุผลที่ไม่ถามคือ 1.ฟังไม่รู้เรื่อง/ไม่เข้าใจ 2.กลัวถูกดู 3.ถึงถามหมอก็ไม่ตอบ
 4.อื่นๆ (ระบุ).....
6. เมื่อไปหาหมอ ท่านคิดว่าเวลาที่รอพบหมอกับเวลาที่เข้าพบหมอ เหมาะสมกันหรือไม่ ระดับใด
 1.มาก 2.ปานกลาง 3.น้อย 4.ไม่เลย
7. ท่านคิดว่า ยาที่ท่านได้รับมีคุณภาพดีหรือไม่ ระดับใด
 1.ดีมาก 2.ดี 3.ไม่ค่อยดี 4.ไม่ดีเลย
8. ในการนัดหมายให้เข้ารับบริการครั้งต่อไป เจ้าหน้าที่อธิบายให้ท่านเข้าใจอย่างชัดเจนหรือไม่ ระดับใด
 1.ชัดเจนดีมาก 2.ชัดเจนดี 3.ไม่ค่อยชัดเจน 4.ไม่ชัดเจนเลย
9. เมื่อไปหาหมอ ท่านคิดว่า หมอ/พยาบาล/เจ้าหน้าที่ ปฏิบัติต่อท่านด้วยความเคารพนับถืออย่างคนที่มิเกียรติระดับใด
 1.มาก (ข้ามไปตอบข้อ 10) 2.ปานกลาง 3.น้อย 4.ไม่เลย
- 9.1 กรณีที่ไม่ได้รับการปฏิบัติด้วยความเคารพนับถือและมีเกียรติ ท่านคิดว่าเป็นเพราะ (ตอบได้มากกว่า 1 ข้อ)
 1.เป็นคนจน 2.แต่งกายไม่ดี/ไม่เหมาะสม 3.มีความรู้ต่ำ
 4.นับถือศาสนาต่างกัน 5.อื่นๆ (ระบุ).....
10. ในภาพรวมแล้ว ท่านได้รับการปฏิบัติด้วยดีจากเจ้าหน้าที่หรือไม่
 1.ดี (ข้ามไปตอบข้อ 11) 2.ไม่ดี
- 10.1 ถ้าไม่ดี ท่านต้องพบกับ
 1.การใช้คำพูดดูหมิ่นดูแคลน 2.การใช้คำพูดหยาบคาย/ไม่สุภาพ
 3.ไม่ให้ความสนใจ/เมินเฉย 4.ถูกแบ่งแยก/แสดงความรังเกียจ
 5.ถูกซักถามเรื่องค่าใช้จ่าย 6.อื่นๆ (ระบุ).....
11. ท่านเคยเผชิญกับความผิดพลาดในการรักษาหรือไม่
 1.ไม่เคย (ข้ามไปตอบส่วนที่ 7) 2.เคย 3.ได้ยินหรือเคยเห็นเกิดกับคนอื่นๆ

- 11.1 ถ้าเคย หรือเคยไต่ถาม ความผิดพลาดนั้นคือ
 1. ได้ยาผิด 2. รักษาผิดทำให้อาการแย่ลง 3. อื่นๆ (ระบุ).....
- 11.2 ท่านคิดว่า ต้นเหตุของความผิดพลาดนั้นน่าจะเกิดจากอะไร (ตอบได้มากกว่า 1 ข้อ)
 1. เป็นคนจน 2. เป็นคนไม่มีความรู้
 3. หมอไม่เก่ง/ไม่สนใจ 4. มีเวลาจำกัด
 5. ไม่มีงบประมาณ 6. คิดว่าไม่ใช่พวกเดียวกัน
 7. อื่นๆ (ระบุ).....

ส่วนที่ 7 ความคิดเห็นต่อการจัดบริการตามหลักศาสนา

1. ท่านเคยปฏิเสธการรักษา/ไม่เข้ารับการรักษา/ไม่ปฏิบัติตามคำสั่งของหมอ เพราะเห็นว่าไม่ตรงกับหลักความเชื่อทางศาสนาหรือไม่
 1. ไม่เคย 2. เคย
2. ท่านคิดว่า การบริการสุขภาพที่เป็นอยู่ในปัจจุบัน ตรงตามหลักศาสนา/ความจำเป็นของท่าน หรือไม่
 1. ไม่ตรง 2. ตรง 3. ไม่แน่ใจ
- 2.1 ในเรื่องใดบ้าง (ถ้าผู้ตอบเป็นมุสลิมให้ถามทุกข้อ, ถ้าเป็นพุทธให้ถามข้อที่มีเครื่องหมาย #)

รายการ	ความคิดเห็น		
	ไม่ตรง (1)	ตรง (2)	ไม่แน่ใจ (3)
ก. การวางตัวตามบทบาทเพศ (ห้ามอยู่ตามลำพังกับเพศตรงข้าม)
ข. การปกปิดร่างกาย/การแต่งกาย
ค. การรักษาความสะอาดและชำระร่างกาย
ง. การนมาซ/สวดมนต์ #
จ. อาหารและโภชนาการ
ฉ. การเฝ้าไข้ #
ช. การคลอด
ซ. พิธีรับขวัญเด็กเกิดใหม่
ฌ. การเขียนเขียนให้กำลังใจ #
ฎ. วิธี/ขั้นตอนการรักษา #
ฏ. ยาที่ใช้รักษา
ฐ. การวางแผนครอบครัว
ฑ. การมอบรถหรืออวัยวะที่ผ่าตัดให้ญาตินำกลับไปฝัง
ท. การดูแลผู้ป่วยหนัก #
ฒ. การจำหน่ายเมื่อผู้ป่วยเสียชีวิต
ณ. อื่นๆ (ระบุ).....

3. ท่านคิดว่า การที่หมอ/พยาบาล/เจ้าหน้าที่ให้บริการแก่ท่านมีความรู้สึกเชิงลบ เช่น รำคาญ เบื่อหน่าย ไม่อยากพูดคุยด้วย ไม่ชอบหน้า ฯลฯ เพราะเห็นว่าท่านเป็นคนมุสลิม/พุทธ ใช่หรือไม่
1. ไม่ใช่ 2. ใช่ 3. ไม่แน่ใจ
4. ท่านคิดว่า การที่หมอ/พยาบาล/เจ้าหน้าที่ให้บริการแบบแบ่งแยก เช่น ดูแลแบบไม่เต็มใจ ไม่สนใจ เดินหนี/หลบหน้า คำว่า/ต่อว่า แสดงความรังเกียจ ฯลฯ เพราะเห็นว่าท่านเป็นคนมุสลิม/พุทธ ใช่หรือไม่
1. ไม่ใช่ 2. ใช่ 3. ไม่แน่ใจ
5. ท่านเห็นด้วยหรือไม่ว่า ในปัจจุบัน คนที่ถือปฏิบัติตามหลักศาสนาอย่างเคร่งครัด จะอยู่ในสังคมได้ยากลำบากกว่าคนอื่น ๆ
1. ไม่เห็นด้วย 2. เห็นด้วย 3. ไม่แน่ใจ

ขอขอบคุณที่ให้ความร่วมมือในการตอบแบบสัมภาษณ์

BIOGRAPHY

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