CHAPTER ONE INTRODUCTION

1.1 BACKGROUND

It is the truth that human beings cannot avoid sicknesses throughout their lifetime. They have to choose some ways to fight with them. Some ways are sciencebased, but some are ritual-based or beyond the realm of science. Additionally, some are between the mentioned; that is, they are tangible but not standardized or made legal by state. The researcher has been countlessly stimulated by the last kind "Street Dentists" while walking along Maha Rat Road to study in Thammasat University. Many advertising boards or placards persuaded passers-by to get services of denture making, influencing onlookers to stop and read for more details. Effectively, some asked for brochures. According to the researcher's observation, they asked and got the name cards in case of their own or others' need.

Their interesting hook was transparency. Every broker declares the price of two hundred baht per tooth and half an hour waiting time. Consequently, some people considered they should better get dentures from street dentists than dentists for less charge and time. Accepting these overt advantages, the researcher followed to observe their working sites and found many malpractices. For example, they used contaminated instruments, wore no gloves and many more. After being attacked with unfavorable practices, the researcher investigated more information about the non-dentists or illegal denturists, dental technicians who make, fit, and repair dentures directly for the public (Denturist, 2008).

First, Komchadluek newspaper on December 2, 2005 reported that in Chula Academic Exhibition 2005, Mr. Thaksit Charatsangphaisarn, a third-year dental student suggested people consult and make dentures from dentists ("เดือนฟันปลอมเดื่อน เสี่ยง พิดเชื้อ," 2548, น. 11). He warned people that quick-made dentures from illegal denturists might be inadaptable to oral tissues, so its instability might cause chronic ulcers. Besides, if a rubber sucker was attached to the tissue-side of the denture, it could cause an abnormal palatal mass after long-time use. In brief, making decent dentures took time and a few appointments. This was also emphasized by Dr. Ittipol Soongkaeg, a doctor in Nongkhai province in Daily News on May 25, 2008 (ทำฟันเถื่อน ระวังเสี่ยงติดเชื้อ, 2551).

Second, Komchadluek on August 28, 2005 reported that Pol. Lt. Col. Jakrit Burarak, arrested an illegal Chinese denturists in Tak province because many people in Tak and Kampaengphet province complained of gum inflammation after illegal dental treatments (คำรวจรวบหมอฟันเถื่อนขณะรักษาคนไข้, 2548).

Third, from the government public relations, Dr. Somchai Rojanaratanangul, a doctor in Sukhothai health department described that there was a woman coming to the hospital with a severe gum infection caused by a denture made by a Taiwanese pseudo-dentist. The false teeth were tied to the cervix of all natural teeth, so to remove and to clean the teeth was impossible. Moreover, the materials might cause cancer. This was against the law due to misleading people, doing dental malpractices, and giving treatments without any licenses (กรมประชาสัมพันธ์, สำนักงาน ประชาสัมพันธ์จังหวัดสุโขทัย, ม.ป.ป.). Also, from Thaisouthtoday.com, Dr. Jirapan Taepan, a doctor in Ranong health department acknowledged the same event occurring in his local area (Thaisouth team, 2547).

Next, illegal denturists had significantly made a great number of problems to our society without any health benefits. Krungthepthurakit on May 12, 2008 preported that the Dental Council president Pisal Thepsitta and associated authorities warned consumers about trendy fake tooth arrangement ("ทันคนพทยสภา" เดือนวัยวุ่น คัคฟันแฟชั่น ศารพัดโรค, 2551). He affirmed that it was an unneeded treatment and vulnerable to get infectious disease such as Viral Hepatitis, Tetanus, and AIDS. Additional hazards were toxic materials, gum destruction, tooth alignment distortion, and eventually death. Unnecessarily, this malpractice was done without dental indication. Authorities tried to eliminate this service to protect consumers especially teenagers induced by cute and cool images of colorful rubber bands and wires. The fraudulent advertising was openly circulated in the mall, city center, and the Internet. The illegal performers made massive money while endangering victims. A proclamation in 2006 announced to prohibit the toxic materials by the Office of the Consumer Protection Board proved unsuccessful because the counterfeiter replaced them by hygienic dental materials and continued the endangered deceptive orthodontic operation (กณะกรรมการคุ้มกรองผู้บริโภค, 2549). An obstacle to arrest was the quack's alertness. They were not guilty if not proved they were inserting materials into customers' mouths. Thus, a trap had to be set up for a red-handed catch. These catches were taken into the Subcommittee of Dental Consumer Protection Board's matters executed by Dr.Thongchai Vachirarojpaisarn according to the policy of the Dental Council on February 11, 2008 (ทันดนพทยสภา, 2551).

There were some suggestions of how to decrease the illegal denturists. One of these was diminishing the access to dental materials and instruments. State should allow only legal providers and dentists with licenses to possess them. Dr. Thongchai Vachirarojpaisarn from the Department of Community Dentistry of Chulalongkorn University verbally informed the researcher that Food and Drug Administration (FDA) had established rules to control the procession of dental materials (Chulalongkorn University, Graduate School of Dentistry, 2008). Yet, for micromotors and other instruments, FDA could not prohibit ownership because they were general devices for general people (Thongchai Vachirarojpaisarn, personal communication, October 9, 2008).

In conclusion, the researcher perceived from the information mentioned above that many authorities had been alerted by people while trying to solve the health threatening problems.

On the contrary, the Consumer protection Act of 1979, section 4(2) declared that people had the right to enjoy freedom in the choice of goods or services (Office of the Consumer Protection Board, 1979, section 4(2). Therefore, some people considered street denturists should exist as an alternative for citizens' freedom of denture making choices besides dentists. This was encouraged by media of which content exhibited positive attitudes toward the outlaw denturists. They portrayed the sense of sympathy for both non-dentists and service receivers. However, news reporters hardly told readers about disadvantages customers themselves should be aware of and think over.

From the Manager Online on February 7, 2006, a news reporter presented an article of illegal street denturists on the aspect of "The Unethical or the Poor Supporters" ("ทำฟันเถื่อน"...ผิดจรรยาบรรณหรือวิถีแห่งความจน, 2549). Mr. Aun had worked as a roadside denture maker for more than fourteen years before quitting this job for dentists. He claimed that his dentures were cheap and hygienic. Most of his customers including teenagers were low income persons, so he kindly offered a discount in case of money insufficiency. He wore gloves and used disposable plastic glasses. He promoted his after-wear free services, convenience, friendly relation, relaxing atmosphere, negotiable cost, and speediness. He had also made trendy imitative toothaligned appliances. Although customers knew that he was not a dentist, they believed that he could make good dentures. Word-of-mouth phenomenon played role in buyers' decision making. The reporter finally expressed significant opinions that 'Street Denturists' were a resort for the poor, and some graduated dental novices might be less skillful than these illegal denturists. Furthermore, low income people could not afford legal dental services.

On state side, Sutha Jeanmaneechokechai, the chief of the Dental Health Division, stated that the second-class dentists had trained their successors to work in certain areas (חגשטעדענ, הסאידעאמדודידעקע, 2551). In rural areas many illegal denturists proposed home-delivered service, whereas the outlaws in cities worked in shophouses or stalls. The amount of 9000 dentists throughout Thailand was not enough especially in upcountry areas, so people's demand for these illegal services increased both willingly and reluctantly. He insisted that these services were dangerous for health because of lack of knowledge, malpractices, and improper materials. Until now, the number of illegal denturists had not really been investigated.

One more article was from the Bangkok Post on June 21, 2007 by Pichaya Svasti. This article's topic, 'Professional or artisan? The choice is yours', proposed somewhat vaguely while it clearly described the scene of Thai traditional denture making options on Maha Rat Road about the shophouses , stalls, brokers, placards, and illegalization (Pichaya Svasti, 2007) The reporter made an in-depth interview with Wanpen Phetnual, a female unregistered craftswoman. She let her customer choose false teeth's color. Her work included only false or fashionable teeth; no other dental treatments were performed due to aseptic reasons. The customers could wait, see, and participate until dentures were finished and satisfying. Even a customer who always trusted dentists was welcomed to get dentures repaired instead of too long a waiting line at a hospital. Wanpen said mostly her customers preferred dentists, but

chose her when they wanted to wear dentures. She and three siblings were trained from her late father, a military doctor claiming to be pioneer denturists in the area of Sanam Luang and Thaprachan since 1985. She affirmed her denture had life-time warranty. Declaring cheap price despite her high income, she dared to confirm her technique and materials were similar to dentists', but economy grade, so wealthy but frugal people came as well.

Pichaya Svasti stated more about convenient home-delivered dentures which were again claimed to be hygienic. Amazingly, installments were accepted. Moreover, dentist Suphaluk Lertnanorut's research was mentioned for her findings. Her findings mentioned that Thai denturists worked within limits of non-therapeutic treatments, whereas those in some countries performed like quacks, ones who practiced medicine or dentistry without adequate preparation or proper qualification by undertaking oral surgery including extractions on roadsides as well (Quack, n.d.). In the findings, dentists in Bangkok were so abundant that scarcity did not push people to get this alternative. The reporter claimed that street denturists considered themselves craftspersons, not doctors. They always ask some customers with cavities or gingivitis to see dentists before returning for dentures. She mentioned dentist Suphaluk Lertnanorut's thesis about the street denturists' origin in the late Ayutthaya period, why and how they were outlawed, and how they survived as a part of Thai cultural health among many hindrances. Additionally, Pichaya Svasti referred to a comment by Dr. Komart Chungsathiansup of the Foundation for Consumers that Thai dentists did not engage to serve the indigent; they monopolized dental works and adopted modern technology (Consumerthai, 2551).

The last article pointed out that many Thais with missing teeth were waiting to have dentures. A news release form the Information and Public Relations of Ministry of Health on March 10, 2007 by Dr. Morakot Kornkasem informed about thirteen programs for seven million elders to celebrate His Majesty King Bhumibol's Eightieth Birthday Anniversary (กระทรวงสาธารณสุข, สำนักงานสารนิเทศและประชาสัมพันธ์, 2550). More than two million of the needy have no dentures. They themselves have not enough money to acquire dentures, so one of these projects targeted free dentures for 80,000 persons of over sixty years old. This free-denture program was operated only throughout the year 2007. Therefore, undoubtedly, citizens' need for dentures was growing while millions of poor old people experiencing nutrition and mastication problem still had minute chances for the dentures.

On the whole, after the two sides of information were revealed, the reader was reluctant to decide whether street denturists should be extinct from our country due to their malpractice or they should be improved on their flaws because it seemed both sides tried to protect ones' own interest more than to be moral.

Actually, non-dentists should not do any kind of either dental therapy or rehabilitation. Some people focused on the fact that dentists themselves did not make dentures. From US DENTURIST.com, it expressed that dentists were well trained in dentistry; but they had been trained not much in the fitting and fabrication of dentures (The denture book, denturists- the solution to America's denture crisis, has been released and is now available, 2007). In other words, dentists were go-betweens who ordered skilled dental technicians to construct dentures. However, in fact, dentists had to take full responsibilities for all steps for patients' safety and healthy based on scientific knowledge got from hard learning for at least six years in qualified institutes. They had to diagnose patients and plan carefully for more than only making dentures because they needed to create the most safe, healthy, effective dentures. Well-done dentures were elaborately constructed by dentists not by short-time trainees or skillful street denturists. Dentists' denture making could not be as cheap, quick, and negotiable as some people wanted. Denture making was not an easy work for all general persons who wanted only to earn high income from low investment on acquiring knowledge. This was why the state promulgated the Dental Act to protect people from the unqualified and unsafe services. Dentists wanted them to be extinct because the Consumer Protection Act (1979), section 4(3) stated that citizens had the right to expect safety in the use of goods or services. Plus, dentists wanted people to recognize that it was not worthy to save money instead of to save life (Office of the Consumer Protection Board, 1979, section 4(3).

On the other hand, some people said that street denturists should exist to serve specific people who required just chewing food. They really did not want excellent dentures, but cheap and quick ones from friendly denture makers though they risked unhealthiness. They should have the right to receive direct denture care from other alternatives since the monopoly by dentists would eliminate their freedom of opportunities to obtain affordable dentures. In other words, wearing street denturists' dentures was better than wearing no denture due to the fact that lack of dentures impaired the quality of nutrition or the digestive system as the result of ineffective mastication.

Suppose that denturists were trained by state agencies under a very serious knowledge-based control and became not illegal to make dentures, many persons may predict that more poor people would wear dentures healthily. The researcher does not support these street denturists to do wrong practices further. But, this study indirectly aimed to ask some authorities to reconsider about how some Thai people could benefit by a safe and high quality denture care system from this Thai dental cultural group.

Therefore, the researcher grasped this opportunity to deal with the research topic 'Street Dentists'. The most significant reason was to reveal some aspects affecting people's dental health due to the researcher's own realization of responsibility as a dental professional. Besides, most dentists have done physical researches more than social researches, and very few studies were done about street denturists, a meaningful section of cultural dental health.

There were many points of view to investigate about them. However, considering the most manageable angle of street denturists within the time restriction, the researcher limited the scope of this research topic to be 'Knowledge about Dentistry of Street Dentists in Bangkok'. Due to the fact that some Thais with missing teeth have opted for street dentists instead of considerable dentists in Bangkok, they might be aware of the risks of getting unfavorable results. The required basic knowledge of street dentists should be investigated. As well as social awareness of the amount of required knowledge, the researcher also planned to collect information about the help street denturists needed from authorities. The findings might lead to an improvement of current denture health care.

1.2 STATEMENT OF THE PROBLEMS

This study focuses on the questions as follows:

- 1.2.1 Where have street dentists obtained knowledge about dentistry from?
- 1.2.2 How much knowledge about dentistry do they possess?

- 1.2.3 What are their working problems?
- 1.2.4 What help do they need?

1.3 OBJECTIVES OF THE STUDY

This study consists of one main objective, three sub-objectives including knowledge and two sub-objectives including problems and suggestions as follows:

Main objective

• To investigate the level of knowledge of street dentists about dentistry.

Sub-objectives

- To identify the sources of their knowledge;
- To explore their knowledge about making proper dentures;
- To discover if they know about the disinfection techniques;
- To probe their working problems; and
- To acknowledge the help needed from the associated authorities.

1.4 DEFINITION OF TERMS

To examine the level of knowledge of street dentists in Bangkok, the following definitions and variables are structured to make clear of the boundary and measurement of this research.

Independent Variables

The independent variables of this study are factors affecting the knowledge scores of street dentists about proper denture making and aseptic techniques such as training methods and working period as denturists.

Dependent Variables

The dependent variables of this study are knowledge scores of street dentists about proper denture making and aseptic techniques.

Independent variables					
Variable	Conceptual definition	Operational definition	Indicator		
Street dentists	The false-tooth makers who work in shophouses or at stalls near roadsides	The illegal denture makers or repairers working without licenses	No degree of dentistry, and no license		
Bangkok	The capital city of Thailand	Bangkok and nearby towns	Bangkok, Nonthaburi, Samutprakarn, and Pathum Thani		
Age	The duration that one has been living since birth	The number of complete years counted from birth date	The number of complete years		
Sex	The condition of being male or female	Gender: male or female	Male, and Female		
Native province	The home-town province of street dentists	The home-town province of street dentists	The name of Thai province		
Education	A formal activities of instructing that impart knowledge or skill	The level of last formal degree	Lower than Bachelor, Bachelor, and Higher than bachelor.		
Marital status	The condition of being married or unmarried	The condition of being married or others	Single, Married, Divorced/Separated, Widow and Others.		
Work history	The past work one did for a living	The kind of the last job done before becoming street dentists	Labor, Private sector employee, Government employee, Self-employed, and Others.		
Training Method	To be made proficient with specialized instruction and practice	To be made proficient with specialized instruction and practice	Dentist assistant, Ancestor, Relative, Employed denturist, and Others		
Working period as denturists	The duration that one has been working as street denturists	The number of complete years counted from working as a street denturists	The number of complete years		
Income	The amount of money which a person receives monthly	The amount of money gained monthly (Baht)	The monthly income calculating from the number of teeth used and its price. (Baht)		

Table 1. Definition of Terms and Indicators

Table 1. (Continued)

Dependent variables					
Variable	Conceptual definition	Operational definition	Indicator		
Knowledge	The information and understanding that people have gained through learning or experience.	The information and understanding about denture making, and hygienic technique indicated by the number of correct answers.	Scores of correct answers of each question about denture making and hygienic techniques including proper suggestion to wearers.		
Dentistry	The science concerned with the diagnosis, prevention, and treatment of diseases of the teeth, gums, and related structures of the mouth including the repair or replacement of defective teeth.	The science-based knowledge dealing with making dentures with hygienic technique and proper care.	Knowledge of how to make dentures with hygienic procedures and proper suggestions to wearers.		
Denture	A set of false teeth that artificially replaces missing teeth	A set of removable false teeth made to replace the missing teeth	A set of removable false teeth		
Decent denture	An artificial-tooth set that satisfies the wearers	An artificial-tooth set made correspond to principles of dentistry	An artificial -tooth set made on science-based knowledge		
Denture making	All steps to create dentures	All steps to create dentures	Denture making prohibition, Oral examination, Type of dentures, Dental curative needed, Salivary condition, Tooth arrangement, Tooth selection, Tooth-model articulation, Denture-base making, Denture correcting, Denture repairing, and Others		

Table 1. (Continued)

Dependent variables						
Variable	Conceptual definition	Operational definition	Indicator			
Hygienic	Tending to promote or preserve health	Sanitary condition such as using clean or disposable things	Hand-and-mouth decontamination, Imprint washing, Instrument sanitization, Disposable-thing using, Impression trays disinfection, Denture cleansing, Non-wearing period suggestion, Denture maintenance, and Others			
Infection	An incident in which an infectious disease is transmitted	A disease caused by contaminated instruments or materials or improper operations	Sore throat, AIDS, Hepatitis, Tetanus, and Others			
Problem	A state of difficulty that needs to be resolved	Problems from dentures and service	Customers pain, Ulcer, Trauma, Infection, Dissatisfaction, and Others			
Authorities	The official power to make decisions or to control other people	Official groups or departments with power to control street dentists	Dental Council, Dental Health Division, Foundation for Consumers, Ministry of Public Health, Medical Registration Division, Others			





1.5 SCOPE OF THE STUDY

This research concerned the level of knowledge about dentistry of one hundred street dentists in Bangkok and the nearby areas. The knowledge was limited to two major perspectives, denture making and hygienic techniques. In addition, this research also collected information about problems from their working. Moreover, help required to improve their working was revealed.

The literature reviewed was about the origin of illegal street dentists, their existence both in Thailand and other countries, the mechanism and reasons to make them illegal, the concept explaining how they and people develop existing relation, and the denturists' curriculum in registered colleges. All of this literature might help to consider some loopholes to catch sight of possible ways to amend the problems when uniting with this study's findings. The research design was descriptive, quantitative, and cross-sectional method using the purposive with snowball sample technique.

The instrument was a fifteen-minute, self-administered questionnaire consisting of thirty closed-ended and open-ended questions. The questions included private information, knowledge about denture making and hygiene, working problems, and help needed from some related authorities. The data analysis used the Statistic Package for Social Sciences (SPSS) program version 14.0 to attain the findings. The research was conducted from November 2008 to February 2009.

1.6 SIGNIFICANCE OF THE STUDY

The result of this study, evaluation of the knowledge of dentistry of street dentists, can be used by other researchers to study other respects such as

1. To study different aspects for some improvement on Thai traditional dental alternative.

2. To sensitize concerned parties to develop more projects to serve needy populations.

1.7 ORGANIZATION OF THE STUDY

The study, "Knowledge about Dentistry of Street Dentists in Bangkok", is divided into five chapters as follows:

Chapter One is the introduction including the background, statement of the problems, objectives of the study, definition of terms, scope of the study, and significance of the study.

Chapter Two provides a review of literature, theory, and previous study.

Chapter Three describes the research methodology including samples,

materials used for data collection, procedures and data analysis.

Chapter Four reveals the results and findings from the data analyzed from the questionnaire.

Chapter Five summarizes the study, and shows the discussion, conclusions, and recommendations for further research.