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**STREET DENTISTS: KNOWLEDGE ABOUT DENTISTRY  
OF STREET DENTISTS IN BANGKOK**

**MS. NAPIT WATTANATHAWORN**

**Adviser: Dr. Supanee Jivasak-Apimas**

**A RESEARCH PAPER SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARTS  
IN  
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LANGUAGE INSTITUTE, THAMMASAT UNIVERSITY  
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## ABSTRACT

This study mainly aimed to investigate the knowledge about dentistry of “Street Dentists” in Bangkok. The purpose of this study was to identify the sources of their knowledge, to explore their knowledge about making proper dentures and disinfection techniques, to know their work problems, and to acknowledge the help needed from the associated authorities.

The reason to study their knowledge was that street dentists will continue their existence among illegalization, whereas this denture making alternative has affected people harmfully.

This study was carried out among 23 street dentists in Bangkok and suburbs. Selection used the purposive with snowball sample technique. The research design used was descriptive, quantitative, and cross-sectional method. The instrument designed was 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 related authorities. The data collected was analyzed by using the Statistic Package for Social Sciences (SPSS) program version 14.0 for descriptive statistics.

The research started in November 2008 and finished in February 2009. The research findings showed that the major sources of knowledge were their families and hired street dentists. Next, most of them passed the set level of knowledge of denture making and hygienic techniques, but none of them got full score. Then, they wanted no more knowledge of dentistry and no help from the associated authorities. Additionally, the unexpected findings during data collection were that their real practices were not the same as their answers, and many samples resisted questionnaires, some were willing to answer verbally. Also, a trained representative had to be provided to obtain data. In sum, this research may be advantageous to Thai society in discovering the significant information before someone decides to make dentures from this alternative. Likewise, it is desperate to educate them to be legal denturists like in other countries owing to their rejection of more knowledge.

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I would like to take this opportunity to express appreciation to lots of my supporters. First, Dr. Somsook Khongpun made me fall in love with studying English language when I got lost. Second, all of the instructors have given me invaluable guidance and advice. Third, my classmates and the administrative staff of the Language Institute have fulfilled my heart with happiness and friendly relationships hardly found anywhere else nowadays. Next, Dr. Supanee Jivasak-Apimas has sacrificed effort, knowledge, and opportunity to help and advise all her students warmly. She has shown me what a can-do teacher is by sharing experience with us, giving us encouragement and pressure, and tracking us ways of thinking.

In addition, special thanks to Dentist Suphaluk Lertnanorut who provided me with more details in her research “Street Denturists”. Also, I would like to thank Dr. Thongchai Vachirarojpaisarn, the chief of Department of Community Dentistry of Chulalongkorn University, for giving me a lot of information and advice useful for doing this research. Besides, I appreciate Ms. Suda Khamghodgaew who volunteered invaluable help for this data collection. Lastly, I would like to express my great appreciation to my beloved parents who gave me innate strength and satisfyingly allowed me to leave my main career behind.

After all, I would like to apologize for any accidental mistakes occurring in this study. However, I hope that the findings of this study will be useful and worth trying to involve with the sensitive issue “Street Dentists” in Thai cultural society.

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Napit Wattanathaworn  
February 2009

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## **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 science-based, 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 (“เดือนฟันปลอมเดือน เลี้ยงติดเชื้” 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 (สำรวจรวบรวมฟันเถื่อนขณะรักษาคอนไซ้, 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, สำนักงานประชาสัมพันธ์จังหวัดสุโขทัย, 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 reported that the Dental Council president Pisal Thepsitta and associated authorities warned consumers about trendy fake tooth arrangement ("ทันตแพทยสภา" เตือนวัยรุ่น ดัดฟันแฟชั่น สารพัดโรค, 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 (คณะกรรมการคุ้มครองผู้บริโภค, 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 (ทันตแพทยสภา, 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 tooth-aligned 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 (กรมอนามัย, กองทันตสาธารณสุข, 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 from 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.

**Table 1. Definition of Terms and Indicators**

<b>Independent variables</b>			
<b>Variable</b>	<b>Conceptual definition</b>	<b>Operational definition</b>	<b>Indicator</b>
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 dentist, 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)

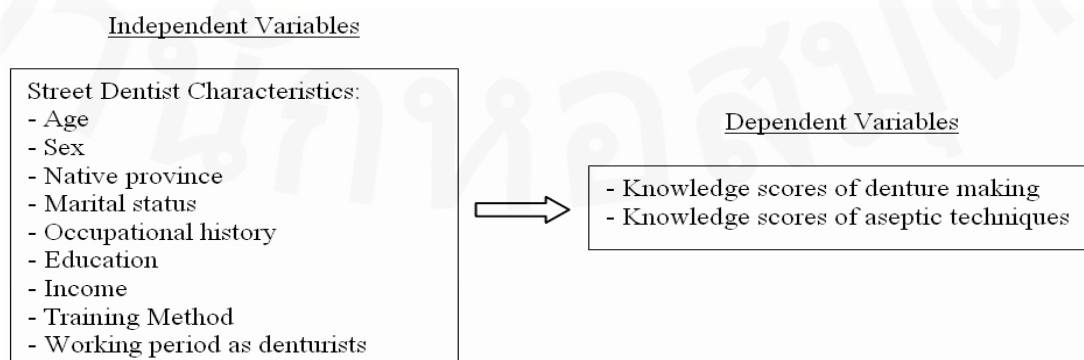
Table 1. (Continued)

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

**Table 2. Framework of Factors Affecting the Level of Dentistry Knowledge of Bangkok Street Dentists**

### **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.

## CHAPTER TWO

### REVIEW OF LITERATURE

This chapter reviews the literature in seven main areas along with a summary:

- (1) The Framework of Existence of Thai Street Dentists
- (2) The Roles of Denturists in Some Countries
- (3) The Concept of the Origins and Resolution of Interoccupational Conflict
- (4) The Concept of Health Belief Model
- (5) The Consumer Behavior and the Consumer Buying Decision Process
- (6) The Science-based Knowledge Required by Legal Denturists
- (7) The Perspectives of Senior Dentists to the Outlaw Dentists

#### 2.1 THE FRAMEWORK OF EXISTENCE OF THAI STREET DENTISTS

To understand the story of Thai outlaw dentists, the researcher reviewed the M.A. thesis by dentist Suphaluk Lertmanorut (2005).

##### *Table 3. The Study's Procedures*

Table from the thesis, "Street Denturists", by dentist Suphaluk Lertmanorut (2005)

Research questions	Research methodology	Informants/data sources
1. How did street denturists originate and develop?	-Documentary history research -Oral history	-Historical documents and text books -A senior Chinese denturist
2. Street denturists' roles -What were their social meaning -What were their socio – economic dimation of health role in the point of view of clients and denturists?	-Participatory observation -Informal interview -In-depth interview	-Denturists -Denturists' assistants -Apprentices -Involved people -Clients -Other social networks
3. What were factors supporting the origin and existence of street denturists?	-Analyzing and combination data got from the methodology above	

The thesis's topic was *Street Denturists: The State, The Dental Profession and Illegalization, Case Study of a Group of Street Denturists in Bangkok*. She studied about street denturists in terms of origin and development, existence, roles, illegalization, and righteousness to be optional denture makers. The research was a qualitative research using participatory observation including in-depth interview data approach. Sampling used is purposive with snowball sampling technique. Her research's reliability was enhanced by using triangular technique, a research technique using three or more research techniques for one research question by comparing all results of the different research techniques to confirm conclusions (Triangular research design, 2008). Dentist Suphaluk Lertmanorut experienced some distrustfulness from street dentists and some part of straddle both researcher and dentist status.

Dentist Suphaluk Lertmanorut portrayed the screen of ordinary lifestyle of street dentists in Thaprachan community including environment, their narrow working space and tainted instruments, and the procedures before customers making decision until wearing dentures. Also, she testified the stories of them as a poor supporter on various kinds of media. In addition, she mentioned other countries such as China, Tibet, Philippines, Morocco, India, and Cambodia where dental quacks had been available (Flicker, 2006). However, there was some dissimilarity that street dentists in some countries played roles like "charlatans" because their services include extracting teeth and some exclusive dentists' treatments, but Thai denturists did not perform those remedial treatments (DamnCoolPics, 2008).

In the past, many other treatments to cure dental problems were performed by monks, folks, or persons using pain-killing drugs and salt solution. Naturally, some people preferred quacks. Consequently, though attempting to develop education, ethical standard, and law to gain people's trust, the state could not force people to choose only dental professionals (ทันตแพทยสภา, 2538). As a result, many groups besides dental professionals shared roles to carry off dental problems.

Her findings explained the framework of existence of European street dentists, how in the past the power to explain and treat sickness was in the hand of priests. And then, the power was shared to barbers and other non-sacred persons. The barbers' work included tooth removal, so they claimed superiority in developing

science-based knowledge despite not being a monopoly or professional before barbers-surgeons became professionals. Afterward, dentists claimed to control the quality of public health by the state's standard of registrations and licenses.

In 1699, France declared the Dental Act. That was the origin of discrimination between legal dentists and illegal non-dentists to gain people's trust on state health care while it caused monopoly, autonomy, and profitability for the systemic knowledge-based group. However, a lot of evidence showed that some people still chose non-dentists.

From the website of the American Dental Association (1840), Horace Hayden and Chapin Harris established the world's first dental school, the Baltimore College of Dental Surgery, and originate the Doctor of Dental Surgery (DDS) degree. The association was founded in 1859. Then, in the early 1900s, the licensure, the state or condition of having a license granted by official or legal authority to perform medical acts and procedures not permitted by persons without such a license licensure, was achieved by the state to protect the public from those practitioners without adequate education (Licensure, n.d.). The strategy that a state passed the law forcing personnel to be registered and licensed was a tactic of authority which led to an end of free dental market for charlatans, quacks, magicians, folk healers, and so on. In brief, state eradicated and punished non-dentists, but supported and controlled dentists for its stability.

From dentist Suphaluk Lertmanorut's thesis, classical Thai dental treatments which targeted symptom alleviation related to ancient medicine and superstition such as rituals, black magicians, herbalists, and fumigators. Thais had many social values such as black tooth-staining ritual, incisal edge grinding belief, intentional extraction of lateral incisors, filing teeth when growing to puberty. In the reign of King Chulalongkorn, modern dentistry changed many Thai beliefs. For example, white teeth enhanced better look, stable teeth could be removed, tooth decay could be treated by filling, aging did not cause tooth loss, and missing teeth could be replaced by artificial teeth. This resulted in dental demand increasing and development of dental materials and techniques, but not in comfortably movable instruments like today micromotors. Before any regulation was announced, Thai dental market was shared by various types of dental personnel including Chinese

denturists, American missionaries, monks, and folk healers. In 1988 the first medical school Siriraj Hospital was founded in the reign of King Chulalongkorn (Mahidol University, Faculty of Medicine Siriraj Hospital, 2008). Since then western medicine was the exclusive group supported by state. Once the Medical act of 1923 was proclaimed, dentists were discriminated into legal dentists, first-class and second-class, and illegal dental personnel (คลังปัญญาไทย, 2550). State declared the standard of registrations and licenses to the qualified persons and to eradicate all non-dentists for people's safety and state's stability. Dentists' roles were dominated by professionals to standardize the quality of public dental health care. However, there was no definition of the qualification to be healers, so everyone could still take part in being healers or dental craftsmen, not dental therapists, but if they were harmful to people, the healers would be punished.

Only dentists from medical university were guaranteed being the first-class dentists (Suphaluk Lertmanorut, 2005, pp. 78-81). In 1938, the Dental Association of Thailand was founded (ทันตแพทยสมาคมแห่งประเทศไทย, 2543). Later, in 1940 the first Faculty of Dentistry, Chulalongkorn University was founded (จุฬาลงกรณ์มหาวิทยาลัย, คณะทันตแพทยศาสตร์, 2550). Then, in 1949, allowing self-trained practitioners to get a tooth-arrangement-test in model for the second-class licenses in dentist-shortage period came to an end. In 1994, the Dental Council was set up and the Dental act was proclaimed to control dental professions and support their monopoly and autonomy (ทันตแพทยสภา, 2541). The Act did not allow any traditional type registration (คลังเอกสารสาธารณะ, 2551). This meant state granted only modern dentistry and prohibited all others. Moreover, dental professionals defined dental work including dental craft work as a part of rehabilitation sector to monopolize completely all sectors of dental work because past dental craft work was done by anyone skillful. Dentists stimulated people by their higher qualification and performance to avoid the outlaws.

State and professionals strived to control dental health service and suppress street dentists by the Act. Consequently, many were arrested and charge with being quacks, being malpractice dentists, allowing non-dentists to work like dentists. However, Chinese customers were not concerned with their legal status but trusted in illegal dentists' ability. Additionally, the outlaw established a social network to signal

quacks' arrest. They made an effort to negotiate for licenses, but failed. Meanwhile, the outcome of authorities' control was ineffective because the outlaw still existed. Indeed, they survived and gained high income with only basic skills and easily accessible dental materials. The dental health care system was not manipulated fully and exclusively by dentists. People are active and rational for their rights to make their own choices. Her study recommended dentists to understand their existence for the sake of social and economic roles of the street denturists and client's in Thai cultural way.

She asserted that the state's point of view was concerned about denturists' problems and to clean up illegal practitioners. Moreover, she noted that some people became victims of boastful quacks because people lacked knowledge and good attitude in dental health. Besides, dentists' health care was inaccessible due to limitation of personnel, tools, and financial resource. She argued the opinion that if the legal part increased resources, the illegal would not survive. That was true for western culture which science-based system was suitable. For Thai media's aspect, they publicized the stories positively, no negative attitude, and ignore illegalization. In addition, media advertised their services as a poor supporter, folk wisdom, and cheap, speedy services. And some implied it was interesting work that everyone could be trained for. Therefore, this social and cultural health phenomenon contributed to this affordable alternative's survival despite breaking the law. The thesis stressed that Thai street denturists only make dentures, while others in some countries did more quackery.

She described the anthropologist's perspective that they viewed this origin and existence as the pluralistic nature of health culture. Since the Medical act of 1923 was announced, almost all of the illicit dentists were trained from the second-class dentists. Although some people know that they are not qualified on science-based knowledge but are trained within a shorter time than the graduated, they still prefer to get involved in the unlawful business to earn a large amount of money. Their strategies of the old-fashioned working style win clients' hearts.

Her study reported that service purchasers knew the denturists are unqualified, but the services were cheap, quick, negotiable, friendly, and functional. Clients were unhappy with the dentists because dentists fixed prices, times and



treatments, and consider them as patients, while street dentists pampered them with bargaining power. Naturally, people preferred having alternatives, so street dentists were supported by particular customers, social networks, word-of-mouth recommendations, and some media.

Clearly, Thai street dentists' existence among illegalization has been supported further by Thai cultural complexity.

## **2.2 THE ROLES OF DENTURISTS IN SOME COUNTRIES**

In early 1980s, licensed denturism was allowed in some countries, where competent care failed because of the costly training programs' tuition and limited demand for denturists' services (Stevenson, 2003, pp. 34-37). However, now in some countries such as South Africa, denturists are successfully regulated professionals (The Society for Clinical Dental Technology, 2007).

There are many articles involving various roles of street dentists in other countries.

One article is about roadside dentists and infections. Almost all Thai street dentists do not perform dental treatments dealing with blood; they only make dentures. On the contrary, PlusNews reported on September 18, 2007 that in Lahore, capital of Pakistan's eastern Punjab Province, the roadside dentist Siraj Saeed removed teeth without anesthetic and with only primitive, contaminated tools. The quacks could pass on hepatitis and AIDS rapidly by using the same instruments on one patient after another. They only dipped their equipment in a bucket of water and washed them with soap after finishing their daily work. Dentist Anwar stated that lots of these practices were enhanced by an acute shortage of qualified dentists. In 2006, Pakistan's government showed the ratio one dentist for 23,000 people. Quacks also stemmed from costly dental treatments in the private sector. Though free, the government's services are unfavorable. In fact, people had known from media that they could be infected from contaminated instruments, but they had little awareness of hygiene and could not afford other better kinds. The Pakistan Medical Association confirmed the increasing prevalence of hepatitis rating over 11 percent. Moreover, the World Health Organization (WHO) ranks Pakistan in the "concentrated epidemic" stage of HIV/AIDS positive with over 85,000 persons infected. Plus, experts of Pakistan's

National AIDS Control Programme (NACP) admitted that the number of HIV/AIDS sufferers could be higher due to quacks in Lahore and other major cities in Pakistan continuing their unsafe practices despite campaigns to tackle the apparent risks.

In sum, roadside dentists were closely related to infectious transmission.

Another article the San Francisco Chronicle confirmed the quacks' malpractice and lack of qualification in Lahore. David Rohde reported on August 20, 2002, that Mohammad Aslam used pliers, wire cutters and a metal file on the mouths of customers. Muhammed Jameel was trained on the street in Karachi from a Chinese guy when he was 10 years old. In Pakistan, every year hundreds of thousands of patients' vital teeth were cut up and metal wire was inserted, and filed false teeth were put into patients' mouths while they were distracted by tricky talking. The large amount of street dentists evidently displayed extreme pain thresholds and meagerness. Approximately, 50 million Pakistanis' earned incomes below the international poverty line or less than \$37 a month. They could not afford a \$40 false tooth from a licensed dentist. Pakistan street dentists and customers had conducted their rough quack treatments on roadside areas prone to all infection without any concern for healthy but only satisfaction. Quacks wore no gloves, barely cleaned tools. Many authorities of Pakistani health officials were unable to eliminate them due to immense demands of poor people. Some believed that using fingers and herbal medicine was better than harmful brushing that could impair gums. Khan, a ninth-grade educated dental quack and tattoo artist, was proud of his secret method of removing brown stains from teeth that a western medical education could not match. However, he and some other street dentists had never removed even a tooth. They claimed they bought the same tools, teeth and glue as legal dentists. Aslam, a street dentist in the park, honored himself as a poor supporter. And this was approved by the appreciation of Anjum, the regulatory official, though he wanted them to be eradicated.

For all that, readers could see that street dentists in Lahore practiced their work in very horrible primitive ways.

In a third article from the Ludhina Tribune in India on February 19, 2001, dentists opened advanced clinics in cities for rich people, while a roadside dentist was a reasonable and affordable choice for common people although he was obviously uneducated (Roadside 'dental clinics', 2001). He was a skillful quack who had

worked with a famous dentist. His tools and price list were displayed. Treatments at customers' home and tooth removal on sidewalk were available. He decided to make and repair dentures for his own patients after making them for dentists with high earnings. Medical officials were not concerned with tooth extractions, but had to the infection of easily deceived people by quacks.

Remarkably, the roadside dentist misled people that his work was right and affordable by referring to his work experience for a dentist though he himself actually yearned for high income.

A fourth article, in July 2003 the Asiatic Society of Bangladesh reported that more than 80 percent of Bangladeshi people in India had at least one or more oral and dental diseases (Banglapedia, n.d.). There was no regular dental treatment in villages, except voluntary temporary dental camps at some places for minor extractions, scaling and temporary restoration. So, they lacked qualified dental services and mostly lived without dentures. Quack dental practice increased in the country despite insufficiency of education, skill, and dental knowledge. When the Medical and Dental Act was proclaimed in 1980, folk intellect practice of medicine or dentistry became illegal. Exceptionally, the Act granted registration for those nonqualified dental practitioners practicing dentistry since more than five years before 1980. The ratio of dentists to the population in Bangladesh was one for every 0.2 million people, and there was one dental hospital providing all sorts of free dental treatment to patients. However, private dental clinics were accessible. The large organizations had their own dentists. This was the reason for quacks' existence. In addition, dental problems increased due to early tooth loss caused by betel leaf chewing and wrong belief of worm growth in the decayed teeth.

In short, this mentioned the increasing dental problems which stemmed from wrong beliefs and insufficiency of qualified dentists while illegal roadside quacks were available despite the Dental Act.

Next, in the New York Times of June 7, 2005, Stacey Stowe reported about a decreasing of street dentists. Normally, street services were found in Jaipur city and villages just as roadside bike-repairers, barbers, cooks. But, Dr. Ajay Kakar, a dental specialist stated that street dentists decreased and remained fewer than 100 while the number of dentists was 80,000. The first class of the nation's first dental

institution graduated in 1958. In this city, Mr. Mahender Singh, an experienced street dentist, sold false teeth and performed dental services near a sidewalk in busy area near the 'old city'. He was proud to be poor supporter. Trained by his father, Mr. Singh passed on the learning to his son. His cousins and uncles dealt with dental work as well. His tools were neatly aligned on a cloth on concrete block. He boiled extra dental tools in a tin box of water over a copper stove. He applied a low concentrated purple liquid on his hands between customers as asepsis, but if rushed, contamination was transferred from Mr. Singh, flies, instruments, and patients. He gave an anesthetic injection into the gums. Zaman Ali, an aide at a government hospital, who liked to socialize with quacks more than dentists, came for a cheaper dental bridge adjustment. When testifying to his talent, Mr. Singh displayed his acknowledgments by showing a thank you letter from a dentist in Florida who had stopped on a tour of the city and a framed article about him from a Hindi newspaper.

Amazingly, this in Jaipur city, India was different from the previous reports in articles about the decreasing number of street dentists, the dental-tool boiling, and an anesthetic injection.

Lastly, Cai Wenjun from ShanghaiDaily.com on June 20, 2008 reported about first-time severe punishment on fourteen illegal underground dentists. They were fined 10,000 Yuan due to illegal practices and cut-price service. Zhong Yue, a Huangpu health supervision agency official stated that outlaw dentists were the most common form of underground medical practitioners in Huangpu's downtown, and most were migrant people.

This showed more serious punishment than before in China, where street dentists were not normally arrested.

### **2.3 THE CONCEPT OF THE ORIGINS AND RESOLUTION OF INTEROCCUPATIONAL CONFLICT**

In the abstract of the significant theory by James W. Begun and Ronald C. Lippincott in 1987, they explained the reason conflict between occupations occurs as

Conflict over work boundaries between occupations occurs when one occupation encroaches on the work functions of another

occupation (the "dominating occupation"). Encroachment efforts originate from the strategic responses of occupations to environmental changes. The dominating occupation (or internal segments of it) opposes encroachment efforts to the extent that economic survival of the dominating occupation is threatened. Encroachment efforts heighten in intensity as the number of members of the encroaching occupation who receive education in the dominating occupation's knowledge base grows. In the case of state-regulated occupations, the political system plays a major role in the resolution of the disputes, and the political outcomes of the interoccupational conflicts depend upon both the interest group resources of the competing occupations and legislators' judgments about the competence of the encroaching occupation to perform the disputed task. This framework is illustrated using the case of optometry's attempt to expand its work boundaries to include the application of drugs to the eye (p. 368).

In short, the conflict between occupations occurs when one occupation invades another occupation. Consequently, the economic survival of the skill-based occupation is threatened, while the science-based one grows. Moreover, the political system plays a major role in the resolution of outcomes of the interoccupational conflicts. One end of the similar work is depressed by the political mechanism, and no loophole allows them to get even a bit of legalization unless they graduate from a formal institution.

#### **2.4 THE CONCEPT OF THE HEALTH BELIEF MODEL (HBM)**

About what affects people's decision to engage with street dentists' services, the researcher refers to the Health Belief Model (HBM) from Wikipedia. The information shown in the Encyclopedia of Public Health was that the HBM was first developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels working in the U.S. Public Health Services. Since then, the HBM has been adapted to explore a variety of health behaviors. Next, the Health Belief Model by

Rosenstock and Becker is based upon the idea that an individual must have the willingness to participate in health interventions and believe that being healthy is a highly valued outcome; that is, a person will take a health-related action if that person feels that a negative health condition can be avoided, and a positive expectation can be accomplished by taking a recommended health action. Significantly, the most influential factor within Becker's model that might prevent an individual from engaging in healthy behaviors was the perceived barriers. Therefore, it was possible to predict if an individual would engage in positive health behaviors by determining the individuals' perception of the disease or illness, identification of modifying factors, and the likelihood that the individual will take some action. In other words, the HBM allows us to consider the probable psychological factors: *perceived susceptibility*, *perceived severity*, *perceived benefits*, and *perceived barriers*. These four factors influence a patient's decision to engage with health services. An added concept, *cues to action*, would activate readiness to perform. A recent addition to the HBM is the concept of *self-efficacy*, or one's confidence in the ability to successfully carry out an action. These latter two factors were added by Rosenstock and others in 1988 to help the HBM better fit the challenges of changing habitual unhealthy behaviors such as condom using (Rosenstock, Strecher, & Becker, 1988, pp. 175-83).

**Table 4. The Conceptual Framework and Terms of the Health Belief Model**

Table from "Theory at a Glance: A Guide for Health Promotion Practice" (1997). (University of Twente, 2004).

Concept	Definition	Application
<b>Perceived Susceptibility</b>	One's opinion of chances of getting a condition	Define population(s) at risk, risk levels; personalize risk based on a person's features or behavior; heighten perceived susceptibility if too low.
<b>Perceived Severity</b>	One's opinion of how serious a condition and its consequences are	Specify consequences of the risk and the condition.
<b>Perceived Benefits</b>	One's belief in the efficacy of the advised action to reduce risk or seriousness of impact	Define action to take; how, where, when; clarify the positive effects to be expected.

*Table 4. (Continued)*

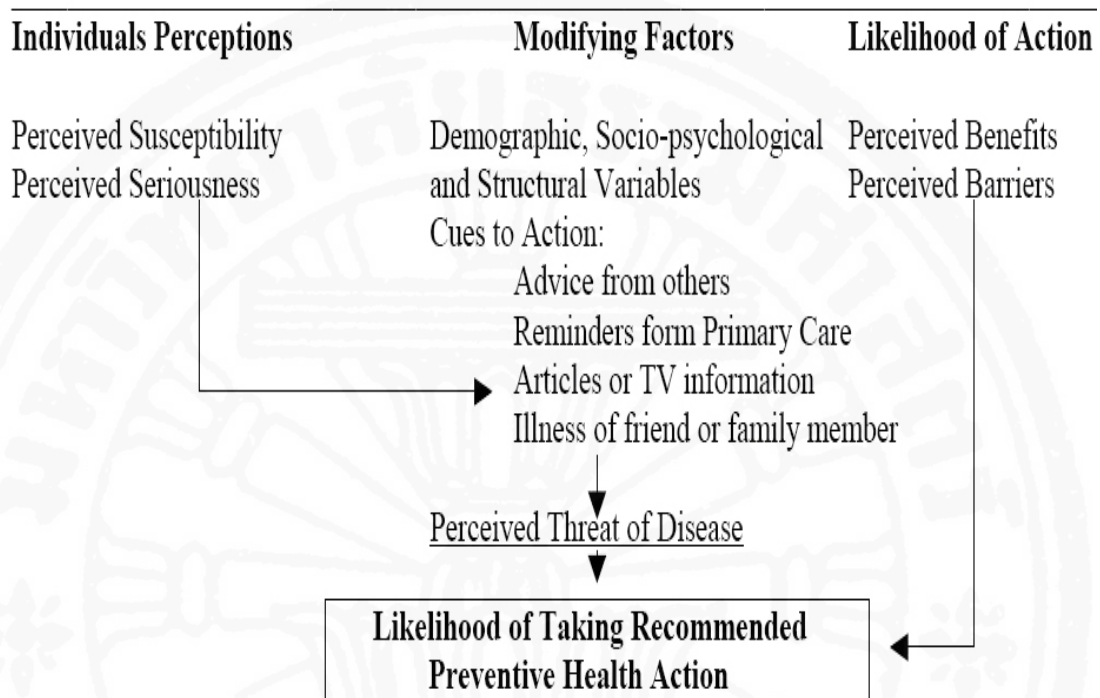
<b>Concept</b>	<b>Definition</b>	<b>Application</b>
<b>Perceived Barriers</b>	One's opinion of the tangible and psychological costs of the advised action	Identify and reduce barriers through reassurance, incentives, assistance.
<b>Cues to Action</b>	Strategies to activate readiness"	Provide how-to information, promote awareness, reminders.
<b>Self-Efficacy</b>	Confidence in one's ability to take action	Provide training, guidance in performing action.

*Table 5. The Operational Framework of HBM for Engaging the Street Dentists' Services*

<b>Concept</b>	<b>Definition</b>	<b>Application</b>
<b>Perceived Susceptibility</b>	One's opinion of chances of getting an unfavorable condition	People with missing teeth have to realize about defective appearance, poor pronunciation, and mastication problem.
<b>Perceived Severity</b>	One's opinion of how serious a condition and its consequences are significant enough to try to avoid	If the problems continue, speech error, bad personality, imperfect social function, and nutritional problems lead to mental and physical sicknesses.
<b>Perceived Benefits</b>	One's belief in the efficacy of the recommended action to reduce risk or seriousness of impact and protect them from getting worse	They define how, where, when to take the treatments from one who makes them satisfied either dentists or street dentists.
<b>Perceived Barriers</b>	One's opinion of the tangible and psychological barriers of the advised action and ways to eliminate or reduce these barriers	Identify and reduce barriers such as high cost, long time, upset, infection, and nonprofessionals through reassurance, incentives, and assistance.
<b>Cues to Action</b>	One's receipt of reminder cues to activate 'readiness'	Commercial information supporting their reputation directly and indirectly through media approaches the approval of clients.
<b>Self-Efficacy</b>	One's confidence to take the action	People feel confident that they can get suitable dentures from street dentists.

In brief, the table of the HBM is illustrated by the diagram below.

**Table 6. Becker's model diagram.** (Jo Ann K. Mackey, 2002)



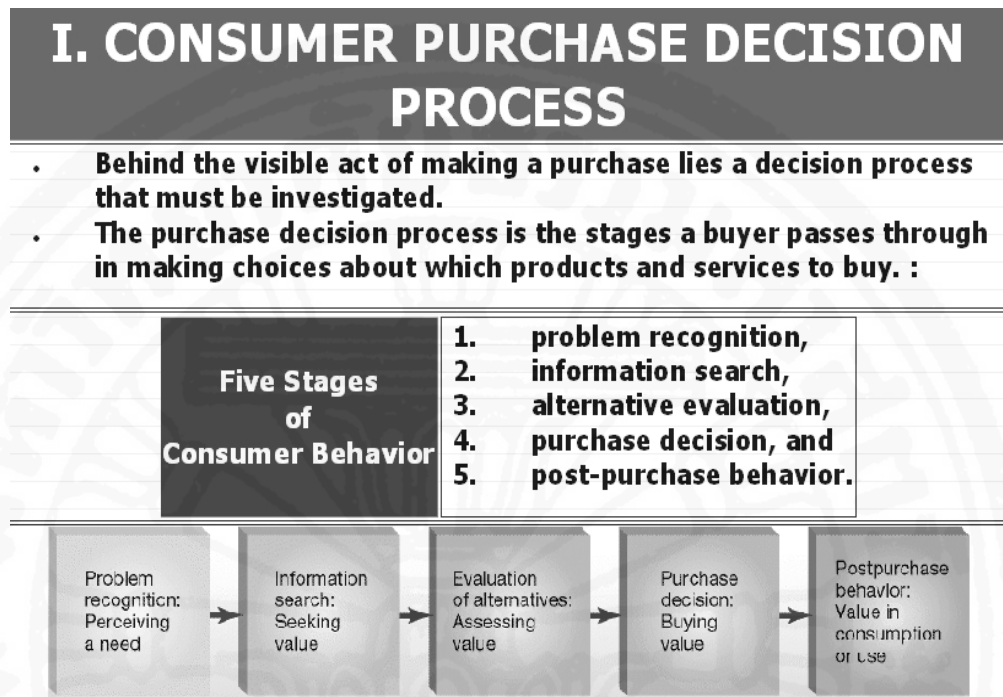
## 2.5 THE CONSUMER BEHAVIOR AND THE CONSUMER BUYING DECISION PROCESS

According to the relation of denture wearers and denture makers in this research, the researcher considered this as a commercial relationship (Overview to consumer behavior, 2008). Street dentists and their customers, not dentists and patients, connect with each other to serve their own demand. While the customers are contented with needed dentures, the denturists achieve their satisfying income. The concept to explain this phenomenon is '*Consumer behavior and Consumer Buying Process*' by Philip Kotler (2003, pp. 213-223).

Before developing marketing strategies, street dentists have to understand what factors influence a buyer's behavior and how they make purchase decisions. There are five stages through which the consumers consider before deciding to accept the services. These steps are *problem or need recognition, information search, alternative evaluation, purchase* and *post-purchase evaluation*.



**Table 7. Five-Stage Decision-Making Process** (Richard J. English, 2008).



In general, buyer behavior is influenced by family, friends, reference groups, and society, so they are divided into three major factors: *social factors*, *psychological factors*, and *personal factors* (Kundi, J. J., Khan, F., & Mahir, M., 2008).

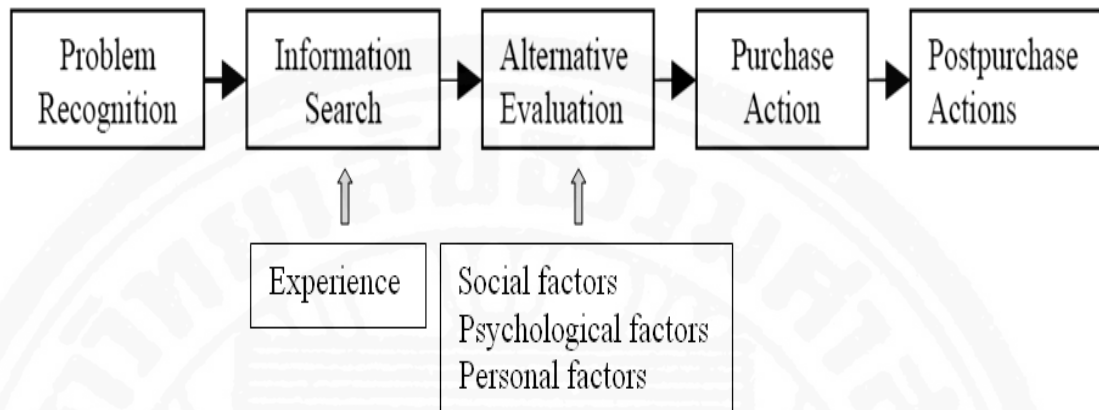
First, social factors including culture, family, social class and reference groups influence on social acceptance of the value of buying behavior. Therefore, people will join the services which most group members prefer, but avoid the services negative to their social images.

Second, psychological factors including motives, perception, learning, and personality affect a buyer's attitude. For example, some consumers love to buy only Nokia mobile phones though Samsung phones at the same qualification are cheaper.

Third, personal factors including demographic factors, lifestyle, and situational factors are unique to a person. For example, a woman buys a comfortable sedan car while a man buys a four-wheel-drive truck.

Besides the consumer behavior, the consumer buying decision process is a potential procedure which generally involves five stages as in the diagram below.

**Table 8. Five-Stage Decision-Making Process** modified from Philip Kotler (2003, p.204).



The model of buyer behavior-decision making process states that anyone making a decision has to consider the whole process rather than just the purchase decision. It indicates that customers pass over all stages in every purchase both of things and services. However, in many routine purchases, customers often overlook or step back some of the stages.

First, problem recognition is a crucial stage of problem awareness to seek products or services. Without recognizing the needs or wants, persons would not seek to buy goods or service.

Second, information search to find ways or alternatives able to solve the problem depends on buyers' experiences. The buyers with some experiences will recall information from memory for their choices, while the customers with no prior experience will search for the needed information from other sources such as personal sources, commercial sources, and public sources.

Third, alternative-evaluation plan to make their selection happens after finding out the information. While planning their selection, consumers focus on product or service features, benefits, and their own preferences to solve the certain problems; social factors, psychological factors, and personal factors influence buyer's behavior, play a significant role on his/her evaluation

Next, purchase action is a step after consumers have listed the compared products or services. They make selection of which and where to get ones, and take action of buying.

Finally, post-purchase actions affect the future purchases. If this buying meets customers' expectations, they will be satisfied and will repeat the purchases. In other words, when the buying fails to meet their expectations, it will cause dissatisfaction and no future purchase. Therefore, next transactions inevitably depend on consumers' expectation and satisfaction's experiences

By comparison, the Consumer Buying Decision Process is similar to the Health Belief Model as the followings.

- **Problem Recognition**

This is equivalent to *Perceived Susceptibility*; that is, people with missing teeth need dental help; for example, they need dentures to correct the flawed appearance and to solve their mastication problem.

- **Information Search and Evaluation of Alternatives**

This is similar to *Perceived Severity*, *Perceived Benefits*, and *Perceived Barriers*. In simpler terms, once people become aware of worse situations, they seek information for comparing the advantages and disadvantages of the treatments they are going to take.

- **Purchase**

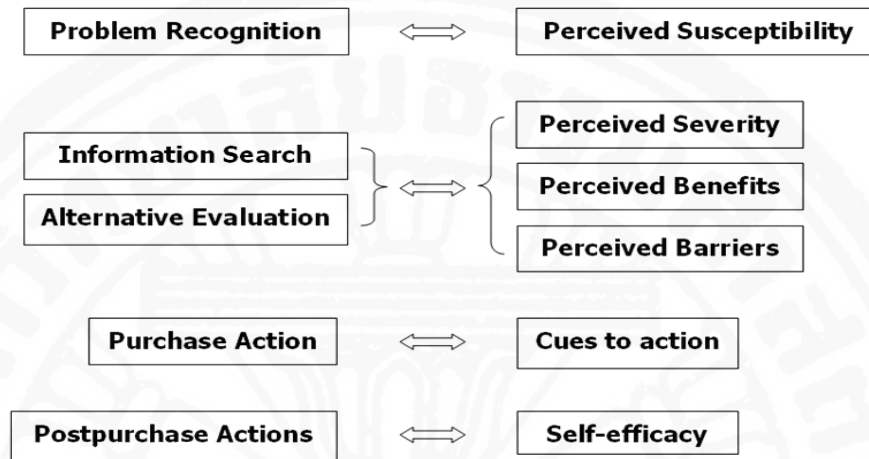
This occurs simultaneously with *Cues to Action*. People are ready to select dental services from street dentists if they feel sure of indecisive factors such as cost, time, and quality. Otherwise, people may change their mind to choose dentists to be sure of qualified and healthy services despite high cost. They select and get services done.

- **Post-Purchase Evaluation**

Also, *Self-efficacy* means expectation fulfillment and satisfaction of services or goods.

The two theories is compared by the researcher's diagram following.

**Table 9. Comparison the Health Belief Model and the Decision-Making Process**



## 2.6 THE SCIENCE-BASED KNOWLEDGE REQUIRED BY LEGAL DENTURISTS

As mentioned earlier, denturists in some countries are legal. Their qualification has to meet the requirements of skills and knowledge by studying and being trained in registered colleges. The science-based standard knowledge is demanded. As an example, George Yonge College of Applied Science and Technology (1996) in Canada has an educational program as the following:

**Table 10. Program Outline for Legal Denturism of George Yonge College**

Modules	Course Code
<b>SEMESTER I</b>	
General anatomy and physiology	<u>DENT7801</u>
Dental & Orofacial Anatomy & Histology	<u>DENT7802</u>
Microbiology & Infection Control	<u>DENT7803</u>
Periodontology	<u>DENT7804</u>
Oral Pathology	<u>DENT7805</u>
Pharmacology	<u>DENT7806</u>
Radiology	<u>DENT7807</u>
Pre-Clinical Prosthetics	<u>PRAC178</u>

*Table 10. (Continued)*

<b>SEMESTER II</b>	
Dental Psychology	<u>DENT7808</u>
Dental Materials	<u>DENT7809</u>
Nutrition	<u>DENT7810</u>
Ethics & Professional Relations	<u>DENT7811</u>
Community & Public Health Denturism	<u>DENT7812</u>
Dental Biomechanics	<u>DENT7813</u>
Pre-Clinical Prosthetics II	<u>PRACT278</u>
Clinical Prosthodontics, Theory & Application	<u>PRACT378</u>
<b>SEMESTER III</b>	
Removable Partial Denture	<u>DENT7814</u>
Complete, Over & Immediate Dentures	<u>DENT7815</u>
Small Business, Marketing and Practice Management	<u>DENT7816</u>
Medical Emergencies in Denture Practice	<u>DENT7817</u>
Clinical Prosthodontics, Theory & Application	<u>PRACT478</u>
<b>TOTAL HRS.</b>	<b>2286</b>

The legal denturists have strived for their knowledge before getting a decent status at least for 2,286 hours. And, their denturism is under Denturism Act, 1991 (The College of Denturists of Ontario, 2007). On the contrary, Thai street denturists have no standard criteria to certify their abilities deserving to get a license.

The information from the US DENTURIST.com showed that denturism is currently practiced in over twenty countries throughout the world including Australia, Canada, Netherlands, Denmark, Sweden, New Finland, the United Kingdom, and six states in the USA (Denture wearers cry out, who will hear them?, 2000).

This is why the researcher desires to take advantage of doing this research to assess street dentists' knowledge about dentistry and to be the first step for other persons associated in this field to improve some condition for our social benefits.

## 2.7 THE PERSPECTIVES OF THE SENIOR DENTISTS TO THE OUTLAW DENTISTS

In the first article, people had always been warned about the harm from street dentists' dentures. Dentist Nipatsorn Ladawan (นิพัทธ์สร อดาว์ลัย, 2505, น. 196-198) explained clearly how the good dentures were constructed by dental professions. It was not so easy, quick, and cheap work as done by illegal denturists. To establish good dentures took so much time for maximum quality and safety that dentists had to spend at least six years to learn two-year preclinic and four-year in-clinic dental course for all necessary scientific knowledge such as Anatomy, Physiology, and Prosthodontics.

Once dentists began to make dentures, it did not include only making pieces of dentures, but it meant to improve facial appearance, speaking, and mastication. Therefore, diagnosis by naked eyes might not be sufficient; sometimes x-ray jaws and joints for better denture design was required. Tooth-model articulation was performed to simulate the accurate jaw relation. Besides, artificial-tooth characteristics were determined carefully for proper shape, color, and so on. Before finishing denture craftworks, dentists had to do trial dentures for the last adjustment of profile, pronunciation, and dimensions until they achieved the greatest practical quality.

However, after being transformed to solid dentures, they were not left out of dentists' responsibility. Rechecking and correcting by dental professions for patients' health and safety still had to be continued because of laws of nature, things never stay the same.

Unlike non-dentists who always induce clients with commercial images of easy, quick, and cheap dentures, dentists were attentive to all necessary procedures and knowledge which non-dentists carelessly skipped and took advantages for all their claims.

In the second article written by dentist Chaleamsak Rojanapradit (เฉลิมศักดิ์ วิจารณ์ประดิษฐ์, 2504, น.107-114) about illegal dentists in Thailand since 1927, he stressed that the extension period of legal registration by two-year education or by passing a certain exam until 1949 was long enough. Yet, after that the outlaw still cried out for

licensure that authorities could not allow because professionals had to study hard in dental institutes. Amateurs or nonprofessionals do not deserve grants.

He classified Thai illegal dentists into 4 groups: denturists who did not care for registration, assistants or employees of legal dentists, other craftspersons craving for more income, and educated foreigners who failed the exam for Thai dental licenses. The first group no longer exists but the others caused problems. Additional factors which enhanced their number were officers' insufficiency, frivolity, incoordination, low scale punishment, and people's immunity from harm from malpractices.

Dentist Chaleamsak Rojanapradit suggested the solutions: increasing authorities, taking more serious arrest, educating administrators and the police more on risk which people might get, more severe punishment and loopholes correction, and informing people of malpractice.

He identified many perils from those quacks without scientific-based knowledge and referred to serious policy to clear up the outlaws by exiling the foreign unlicensed dentists.

His noteworthy question to ask for cooperation was whether it was time to get rid of all illegal dentists from our beloved Thailand for people's welfare.

In sum, the two articles showed negative attitudes toward the illegal dentists and did not suggest how to seek benefit from their experience or skills for millions of Thai edentulous people who could not access decent dentures.

## CHAPTER THREE

### METHODOLOGY

This research was conducted step-by-step guided by the book “Research Methodology” by Kumar (1999).

This chapter describes (1) the subjects, (2) the instrumentation, (3) the procedures used in the collection and analysis of the data, and (4) the data analysis

#### **Duration of the Study**

The period of this study began in November 2008 and lasted until the end of February 2009

*Table 11. Study Work Schedule*

Month	November				December				January				February			
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>ACTIVITIES</b>																
<b>A. Planning phase</b>																
- Detemine sample																
- Design questions																
- Pre-test questions																
- Revising questions																
- Post-test questions																
<b>B. Implementation phase</b>																
- Conduct survey																
- Data collection																
<b>C. Analysis phase</b>																
- Data verification																
- Data processing & Analysis																
<b>D. Reporting phase</b>																
- Reporting writing																
- Reporting printing																
- Reporting dissemination																



### 3.1 SUBJECTS

The population of this survey is the denturists who work on the side walk of streets around Bangkok Metropolitan area. The samples were selected based on specific characteristics of street dentists only, so purposive sample technique was determined. They perform an outlaw job and naturally do not participate with any strangers, except clients and familiar persons. In addition, the samples were reluctant, concealed, and scattered over wide areas in Bangkok and the nearby towns. Therefore, the snowball or chain sample technique was added to identify next informants by the previous ones. In other words, other members of their group, next participants, were determined by the informant who had finished answering the questionnaire. Collecting data started from Thaprachan, an area most crowded with street dentists. This continued until the data collection accomplished the target number.

The sample size was expected to be 100 street dentists in Bangkok. Most of them had worked in the areas of Thaprachan, Bangkhae, Siriraj hospital and nearby, Wongweinyai, Chareonkrung, etc. Every participant was a street dentist who was willing to take part in this research for benefits of our society.

### 3.2 MATERIALS

This study used Thai-version, self-administered questionnaires to approach the samples' primary data at the site they worked. The questionnaire consisted of 30 questions divided into five parts. The first part asked about personal information such as age, sex, income, education, and occupational history. The second part was knowledge of street dentists about how to make decent dentures. The third part related to knowledge about hygienic working. The next part involved their work problems. Then, the last part was the help needed from the associated authorities.

The questionnaire was composed of closed-ended and open-ended questions. The closed-ended questions were answered by choosing correct answers or writing some of their own answers. The open-ended questions were used to give them freedom to express factual information and what they needed to improve their work. The questions designed were correct at relevance, wording, order, and related to the variables defined. Besides, their tone did not make informants feel humiliated about the level of their knowledge. In addition, the researcher set a benchmark of the

acceptable level of knowledge of both denture making and hygienic technique at 80% of all knowledge questions; the passed street dentists had to get 12-15 points.

The questionnaire for distribution was pre-tested by a few non-sample street dentists to evaluate its effectiveness. Then a modification was performed according to their feedback about the questionnaire. Every question was extremely important and pertinent to this research's target. The questionnaires assured respondents of anonymity and confidentiality and that their information was used only to achieve the objectives of this research.

### **3.3 PROCEDURES**

#### **3.3.1 Research Design**

This research study was a survey study or cross-sectional design conducted single shot to investigate the level of knowledge about dentistry of street dentists in Bangkok.

#### **3.3.2 Data Collection**

Since this data collection was framed by limited time and scattered samples, this stage was operated by a few collectors. Consequently, the researcher planned to train potential assistants about how to derive effective data. Separately answering in 15 minutes, each informant returned the completed questionnaire to the waiting data collector. This was designed to get individual information and to avoid findings' errors from informants' discussion. Both the researcher and the assistants performed this data collection on behalf of students of Thammasat University, a neutral organization. Collecting the data began and ended in December 2008.

### **3.4 DATA ANALYSIS**

The researcher used the Statistic Package for Social Sciences (SPSS) program, version 14.0 for the analysis of the data to answer the research questions. For open-ended questions, the researcher gathered all answers, quantified them and use descriptive statistics such as frequency, percentage, mean, and median to analyze the data.

## CHAPTER FOUR

### RESULTS

The previous chapter explained the subject, materials, and necessary procedures used in data collection and data analyzing. This chapter reports the results obtained from 23 street dentists in Bangkok and vicinity. The data was analyzed by using SPSS version 14.0 and divided into 5 parts based on the objectives of the study. Therefore, the results were shown as follows:

- 4.1 The respondent's general characteristics and the scope of their work
- 4.2 The respondents' sources of knowledge
- 4.3 The respondents' knowledge level of making dentures and disinfection techniques
- 4.4 The respondents' working problems
- 4.5 The help the respondents wanted from the associated authorities.

#### 4.1 RESPONDENTS' DEMOGRAPHIC CHARACTERISTICS AND SCOPE OF WORK

*Table 12. Gender of Respondents*

Gender	Frequency	Percent
Male	19	82.6
Female	4	17.4
Total	23	100.0

From total 23 respondents, it was found that most of them (82.6%) are male, Table 12.

*Table 13. Age of Respondents*

Age(years)	Frequency	Percent
≤ 40	6	26.1
41-50	9	39.1
≥51	8	34.8
Total	23	100.0

The respondents' ages were divided into 3 groups: 26.1% were under 40 years, 39.1% were between 41-50 years, and 34.7% were over 51 years, Table 13.

**Table 14. Place of Birth of Respondents**

<b>Place of birth</b>	<b>Frequency</b>	<b>Percent</b>
Bangkok & Vicinity	10	43.5
Up-country	13	56.5
Total	23	100.0

Table 14 shows the respondents' place of birth. 56.5% of 23 respondents came from up-country such as Chiangmai, Phetchaboon, Nakornphranom, Khonkaen, Phetburi, Nakhonsawan, and Phichit, and the rest came from Bangkok and vicinity such as Nonthaburi, Samutphrakarn, and Samutsakorn.

**Table 15. Education of Respondents**

<b>Education</b>	<b>Frequency</b>	<b>Percent</b>
Primary school	9	39.1
Junior high school	7	30.4
Senior high school	3	13.0
> Senior high school	4	17.4
Total	23	100.0

Table 15 shows the education of respondents that about two-thirds of respondents had primary to junior high school education, whereas 30.4% of them had senior high school to bachelor degree education.

Concerning their marital status, all of the respondents were married and were living with their spouses (table not shown).

**Table 16. Previous Occupation**

<b>Previous Occupation</b>	<b>Frequency</b>	<b>Percent</b>
Health involved	6	26.1
Others	17	73.9
Total	23	100.0

Asking about previous occupation of the respondents, those who said that they worked in health related work such as a dental assistant, medical assistant, and X-ray technician accounted for 26.1% and those who did not have such experiences accounted for 73.9%, Table 16.

**Table 17. Duration of Working as Street Dentists**

<b>Experience(years)</b>	<b>Frequency</b>	<b>Percent</b>
<10	9	39.1
10-20	11	47.8
>20	3	13.0
Total	23	100.0

Almost a half of 23 respondents had worked as street dentists for 10-20 years. The others, 39.1%, had worked for less than 10 years and those who worked for 20 years or more accounted for 13.0%, Table 17.

**Table 18. Respondents' Monthly Income**

<b>Monthly income(Baht)</b>	<b>Frequency</b>	<b>Percent</b>
16,000-40,000	7	30.4
40,001- 80,000	10	43.5
80,001-160,000	6	26.1
Total	23	100.0

The respondents' monthly income was derived from 2 sets of data, client number/day and the number of false teeth per client. The researcher calculated their monthly income on the basis that respondents got 200 baht per tooth and worked 20 days per month. The 23 respondents' monthly income ranged from 16,000 to 160,000 baht that 30.4% of respondents earned 16,000-40,000 baht per month, 43.5% of respondents earned 40,001- 80,000 baht, and 26.1% earned 80,001-160,000 baht per month, Table 18.

Additional information is about the scope of street dentists' work, the conditions that the respondents worked for and the conditions that they did not. These situations are displayed as follows:

**Table 19. Scope of Respondents' Work**

<b>Scope of respondents' work</b>	<b>Frequency</b>	<b>Percent</b>
Removable plastic-based dentures	23	46.0
Removable metal-based dentures	17	34.0
Fixed bridge false-teeth	2	4.0
Denture repair	6	12.0
Diamond embedding, fake orthodontics	2	4.0
Total	50	100.0

The scope of respondents' work was that 46% of their answers were removable plastic-based dentures, and 34% of their answers were removable metal-based dentures. The rest was fixed bridge false-teeth, denture repair, and trendy natural tooth-decoration. This also exhibits that all respondents made removable plastic-based dentures, Table 19.

**Table 20. Exception for Denture Making**

<b>Exception for denture making</b>	<b>Frequency</b>	<b>Percent</b>
Severe decayed teeth	12	32.4
Severe inclined teeth	5	13.5
No natural tooth	5	13.5
Gum inflammation	11	29.7
Heavy dental stone or tooth mobility	4	10.8
Total	37	99.9

Table 20 shows that one-third of the reasons the respondents refused to make dentures was severely decayed teeth. Next, 29.7% of the reasons not to make dentures were gum inflammation. Third, 27% of the reasons were severe tooth inclination and all teeth missing. The last condition was heavy dental stone or tooth mobility, 10.8%.

#### **4.2 THE SOURCES OF RESPONDENTS' KNOWLEDGE**

**Table 21. Training Sources of Respondents**

<b>Training source</b>	<b>Frequency</b>	<b>Percent</b>
Being assistant to dentists	2	8.7
Being trained in family	5	21.7
Being trained from relatives	11	47.8
Being trained from hired denturists	5	21.7
Total	23	100.0

The majority of respondents (69.5%) were trained by their families and relatives. Besides, 21.7% of them were trained by hired street dentists. For the least amount, 8.70% of them were trained from dental clinics, Table 21.

### 4.3 THE RESPONDENTS' KNOWLEDGE LEVEL OF MAKING DENTURES AND DISINFECTION TECHNIQUE.

This part was about how respondents practiced their work. They were informed that they could answer more than one choice. This part consisted of 15 questions. When a question was correctly answered, one mark was recorded. On the other hand, when a question was wrongly answered, zero mark was recorded. This scoring reflected the level of knowledge about dentistry. Therefore, the full score of knowledge was 15 marks. Also, the researcher evaluated the correctness of the answer according to possibility of practical procedures.

**Table 22. What to do before starting denture making**

What to do before starting denture making	Frequency	Percent
1. Check the intraoral condition	19	54.3
2. Ask about customers' medical history	3	8.6
3. If seeing abnormal tissue, you will refuse to make denture	2	5.7
4. Only ask customers about dentures they want, and take imprint	9	25.7
5. Ask customers whether they have ever worn dentures or not	2	5.7
Total	35	100.0

**Table 23. Correct and Wrong Responses from the Street Denturists**

What to do before starting denture making	Frequency	Percent
Incorrect	4	17.4
Correct	19	82.6
Total	23	100.0

About a half of all answers of what to do before starting denture making was checking the intraoral condition, Table 22, and every answer was correct except choosing only the 4<sup>th</sup> answer. Consequently, all respondents who did not answer only the 4<sup>th</sup> answer got one mark. The result shows 82.6% of respondents answered correctly, Table 23.

**Table 24. What to do when customers have many severely decayed teeth**

What to do when customers have many severely decayed teeth	Frequency	Percent
1. Ignore the condition and start making dentures	2	8.0
2. Suggest that they see dentists before making dentures	20	80.0
3. Let customers decide whether to do dentures or not	3	12.0
Total	25	100.0

**Table 25. Correct and Wrong Responses from the Street Denturists**

<b>What to do when customers have many severely decayed teeth</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	3	13.0
Correct	20	87.0
Total	23	100.0

Table 24 shows that almost all of the answers of what to do when customers had many severely decayed teeth were suggesting to them to see dentists before making dentures. The respondents who answered only this choice got one mark. On the other hand, respondents who answered other choices or this choice with others got no mark. The result shows 87% of respondents answered correctly, Table 25.

**Table 26. Effect of saliva on dentures' retention**

<b>Effect of saliva on dentures' retention</b>	<b>Frequency</b>	<b>Percent</b>
1. The less saliva, the more dentures' retention	1	4.3
2. The more saliva, the more dentures' retention	4	17.4
3. Saliva has no effect on dentures' retention	18	78.3
Total	23	100.0

**Table 27. Correct and Wrong Responses from the Street Denturists**

<b>Effect of saliva on dentures' retention</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	19	82.6
Correct	4	17.4
Total	23	100.0

Table 26 presents the effect of saliva on dentures' retention, 78.3% of all answers were that saliva had no effect on dentures' retention. However, the correct answer was the only one choice that the more saliva, the more dentures' retention. The respondents who answered others or the 2<sup>nd</sup> choice combined with others got no mark. The result shows that only 17.4% of respondents answered correctly, Table 27.

**Table 28. Wearing gloves or not**

<b>Wearing gloves or not</b>	<b>Frequency</b>	<b>Percent</b>
1. Wash hands	15	53.6
2. Wear gloves	10	35.7
3. None of the above	3	10.7
Total	28	100.0



**Table 29. Correct and Wrong Responses from the Street Denturists**

<b>Wearing gloves or not</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	13	56.5
Correct	10	43.5
Total	23	100.0

Table 28 indicates that about a half of the answers were that respondents washed hands, but did not wear gloves. On the other hand, one-third of the answers were wearing gloves which were correct whether they washed their hands or not. The result was that only 43.5% of respondents answered correctly, Table 29.

**Table 30. What to do after taking the imprint out of customer's mouth**

<b>What to do after taking the imprint out of customer's mouth</b>	<b>Frequency</b>	<b>Percent</b>
1. Wash the imprint with tap water	10	41.7
2. Wash the imprint with antiseptic solution	11	45.8
3. Pour dental stone immediately	3	12.5
Total	24	100.0

**Table 31. Correct and Wrong Responses from the Street Denturists**

<b>What to do after taking the imprint out of customer's mouth</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	2	8.7
Correct	21	91.3
Total	23	100.0

The majority of answers (87.5%) were washing the imprint after being taken out of customers' mouth; whether they washed it by tap water or antiseptic solution was correct. On the contrary, only 12.5% of the answers were pouring dental stone immediately which was incorrect, Table 30. The result is that 91.3% of respondents answered correctly, Table 31.

**Table 32. What to do after removing tooth models from impression trays**

<b>What to do after removing tooth models from impression trays</b>	<b>Frequency</b>	<b>Percent</b>
1. Just remove the impression and then take the next one	1	4.2
2. Clean and wash the tray with tap water	3	12.5
3. Clean and wash the tray with antiseptic solution	12	50.0
4. Clean and boil the tray in hot water	8	33.3
Total	24	100.0

**Table 33. Correct and Wrong Responses from the Street Denturists**

What to do after removing tooth models from impression trays	Frequency	Percent
Incorrect	3	13.0
Correct	20	87.0
Total	23	100.0

Table 32 shows that 50.0% and 33.3% of answers were disinfecting the impression trays after being used by antiseptic solution and boiling water respectively. The two answers were correct. On the contrary, 16.75% of all answers that were either just removing the impression or washing with tap water were incorrect. The result is that 87.0% of respondents answered correctly, Table 33.

**Table 34. Tooth arrangement**

Tooth arrangement	Frequency	Percent
1. Arrange without articulation	1	4.2
2. Mount the models on articulators	23	95.8
Total	24	100.0

**Table 35. Correct and Wrong Responses from the Street Denturists**

Tooth arrangement	Frequency	Percent
Incorrect	0	0.0
Correct	23	100.0
Total	23	100.0

Table 34 shows about tooth arrangement. Almost all of the answers were mounting the models on artificial jaws before tooth arranging which was correct, while just 4.2% of all answers were incorrect. The result shows that all respondents used articulators, and one respondent used both ways; that was, at least the 2<sup>nd</sup> choice had to be chosen to be correct. As a result, all respondents answered correctly, Table 35.

**Table 36. Tooth selection**

Tooth selection	Frequency	Percent
1. Whitish shade is more favorable for wearers	0	0.0
2. Harmonized with the remaining teeth	18	50.0
3. Harmonized with size and shape of the remaining teeth	5	13.9
4. In case of full dentures, select whatever satisfies wearers	13	36.1
Total	36	100.0

**Table 37. Correct and Wrong Responses from the Street Denturists**

<b>Tooth selection</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	0	0.0
Correct	23	100.0
Total	23	100.0

Table 36 shows that none of the answers was selecting the whitish shade to satisfy wearers. That means all answers are correct whether respondents chose either the 2<sup>nd</sup> or the 3<sup>rd</sup> or the 4<sup>th</sup> or any combination except the 1<sup>st</sup> choice. The result shows that all respondents answered correctly, Table 37.

**Table 38. Tooth alignment**

<b>Tooth alignment</b>	<b>Frequency</b>	<b>Percent</b>
1. Whatever satisfies customers	5	16.1
2. Align on bone ridge	1	3.2
3. Conform to the adjacent and opposite teeth	21	67.7
4. Try-in the arranged in customers' mouth	4	12.9
Total	36	100.0

**Table 39. Correct and Wrong Responses from the Street Denturists**

<b>Tooth alignment</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	1	4.3
Correct	22	95.7
Total	23	100.0

Table 38 presents that only 16.1% of answers of the criteria to arrange false teeth on models were whatever satisfied customers. That answer was incorrect, while the respondents' other answers were correct either the 2<sup>nd</sup> or the 3<sup>rd</sup> or the 4<sup>th</sup> or any combination except the 1<sup>st</sup> choice. The result is that 95.7% of respondents answered correctly, Table 39.

**Table 40. Plastic- based denture making**

<b>Plastic- based denture making</b>	<b>Frequency</b>	<b>Percent</b>
1. Sprinkle the solution over the resin powder on tooth model	2	8.0
2. Mix resin powder and solution, and then spread on the model	4	16.0
3. Mix resin and solution, and press on the model when it is dough	19	76.0
Total	25	100.0

**Table 41. Correct and Wrong Responses from the Street Denturists**

<b>Plastic- based denture making</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	4	17.4
Correct	19	82.6
Total	23	100.0

Table 40 asks about plastic-based denture making, the majority of the answers (76.0%) were pressing the mixture of resin and solution on the model when it was dough; that was correct. In contrast, 24% of all answers were not waiting till the mixture became dough. The result shows that 82.6% of respondents answered correctly, Table 41.

**Table 42. How to correct customers' pain from denture wearing**

<b>How to correct customers' pain from denture wearing</b>	<b>Frequency</b>	<b>Percent</b>
1. Tell them to take time for getting familiar with wearing dentures	3	12.0
2. Grind the dentures until wearers get well	22	88.0
3. Grind the natural teeth until wearers get well	0	0.0
Total	25	100.0

**Table 43. Correct and Wrong Responses from the Street Denturists**

<b>How to correct customers' pain from denture wearing</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	0	0.0
Correct	23	100.0
Total	23	100.0

Table 42 shows no respondent chose grinding the natural teeth that was the only incorrect answer, while other answers were all correct. The result demonstrates that all respondents answered correctly, Table 43.

**Table 44. Suggestions for denture cleaning**

<b>Suggestions for denture cleaning</b>	<b>Frequency</b>	<b>Percent</b>
1. Remove and brush dentures softly with toothpaste	19	73.1
2. Only wash dentures with tap water	5	19.2
3. Immerse dentures in mouthwash	2	7.7
Total	26	100.0

**Table 45 Correct and Wrong Responses from the Street Denturists**

<b>Suggestions for denture cleaning</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	6	26.1
Correct	17	73.9
Total	23	100.0

Majority of the answers (73.1%) about denture cleaning were removing and brushing dentures softly with toothpaste that was the only correct answer; other answers were incorrect, Table 44. The result shows that approximately three quarters of respondents answered this procedure correctly, Table 45.

**Table 46. What to do while sleeping**

<b>What to do while sleeping</b>	<b>Frequency</b>	<b>Percent</b>
1. Should not wear denture during sleep	21	91.3
2. Wearing denture during sleep maintains retention stabilization	0	0.0
3. Up to wearer, use cream for night wear	2	8.7
Total	23	100.0

**Table 47. Correct and Wrong Responses from the Street Denturists**

<b>What to do while sleeping</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	2	8.7
Correct	21	91.3
Total	23	100.0

Almost all of respondents suggested that denture wearers not wear dentures during sleeping, Table 46. That was the only one correct, whereas others were incorrect. The result shows that 91.3% of respondents answered correctly, Table 47.

**Table 48. Suggestion for dentures after removal**

<b>Suggestion for dentures after removal</b>	<b>Frequency</b>	<b>Percent</b>
2. Immerse in salty water	1	3.4
3. Immerse in mouthwash solution	6	20.7
4. Immerse in plain water	22	75.9
Total	29	100.0

**Table 49. Correct and Wrong Responses from the Street Denturists**

<b>Suggestion for dentures after removal</b>	<b>Frequency</b>	<b>Percent</b>
Incorrect	6	26.1
Correct	17	73.9
Total	23	100.0

Three quarters of respondents' answers were the only one correct answer that denture wearers should immerse dentures in plain water after removal.

Conversely, the other answers were incorrect, Table 48. The result shows that around three quarters of respondents answered correctly, Table 49.

**Table 50. What to do if false teeth or denture cracked or fractured**

What to do if false teeth or denture cracked or fractured	Frequency	Percent
1. Glue it	1	3.3
2. Repair with dental material	22	73.4
3. Make new ones	7	23.3
Total	30	100.0

**Table 51 Correct and Wrong Responses from the Street Denturists**

What to do if false teeth or denture cracked or fractured	Frequency	Percent
Incorrect	1	4.3
Correct	22	95.7
Total	23	100.0

Almost all respondents answered the right answers that when dentures cracked, Table 50, they repaired or made new ones. On the contrary, only 3.3% of the answers were gluing the cracked dentures that is incorrect. The result shows that 95.7% of respondents answered correctly, Table 51.

Figure 1. The Number of Respondents Who Answer Correctly on Each Knowledge Question.

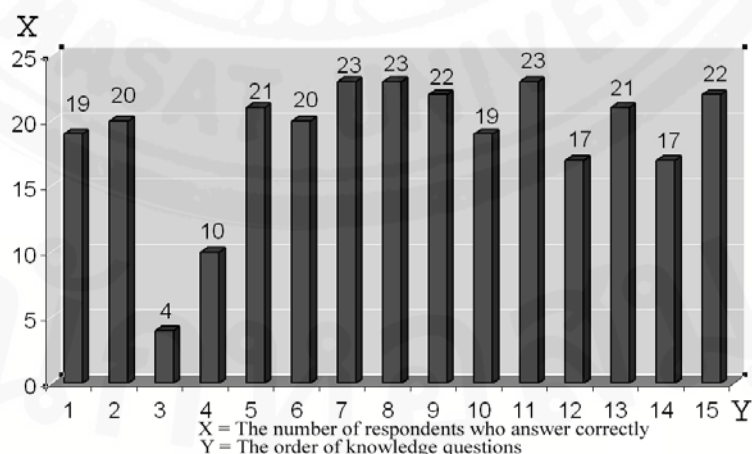


Figure 1 shows that the first minimum number of respondents who answer the knowledge question correctly is 4 persons; the second minimum number is 10

persons, while the majority number is between 17-23 persons. The question that 4 respondents got correct is about the effect of saliva on dentures' retention, and that 10 respondents got correct is about wearing gloves while working.

After calculating the scores that each respondent got from answering correctly, the researcher set up the criteria of passing at 80% of all questions about knowledge of dentistry. The total was 15 marks, so passing criteria was 12 marks. The result of knowledge scores was shown as the following.

**Table 52. Knowledge Score**

Score(marks)	Frequency	Percent
9	1	4.3
10	2	8.7
11	2	8.7
12	8	34.8
13	6	26.1
14	4	17.4
Total	23	100.0

Table 52 shows that respondents' knowledge score ranged from 9 marks to 14 marks. First, 34.8% of respondents got 12 marks. Next, 26.1% of respondents got 13 marks. Lastly, 17.4% got 14 marks.

**Table 53. Passing Respondents**

Pass	Frequency	Percent
No	5	21.7
Yes	18	78.3
Total	23	100.0

Table 53 shows that 78.3% of 23 respondents passed the acceptable knowledge level.

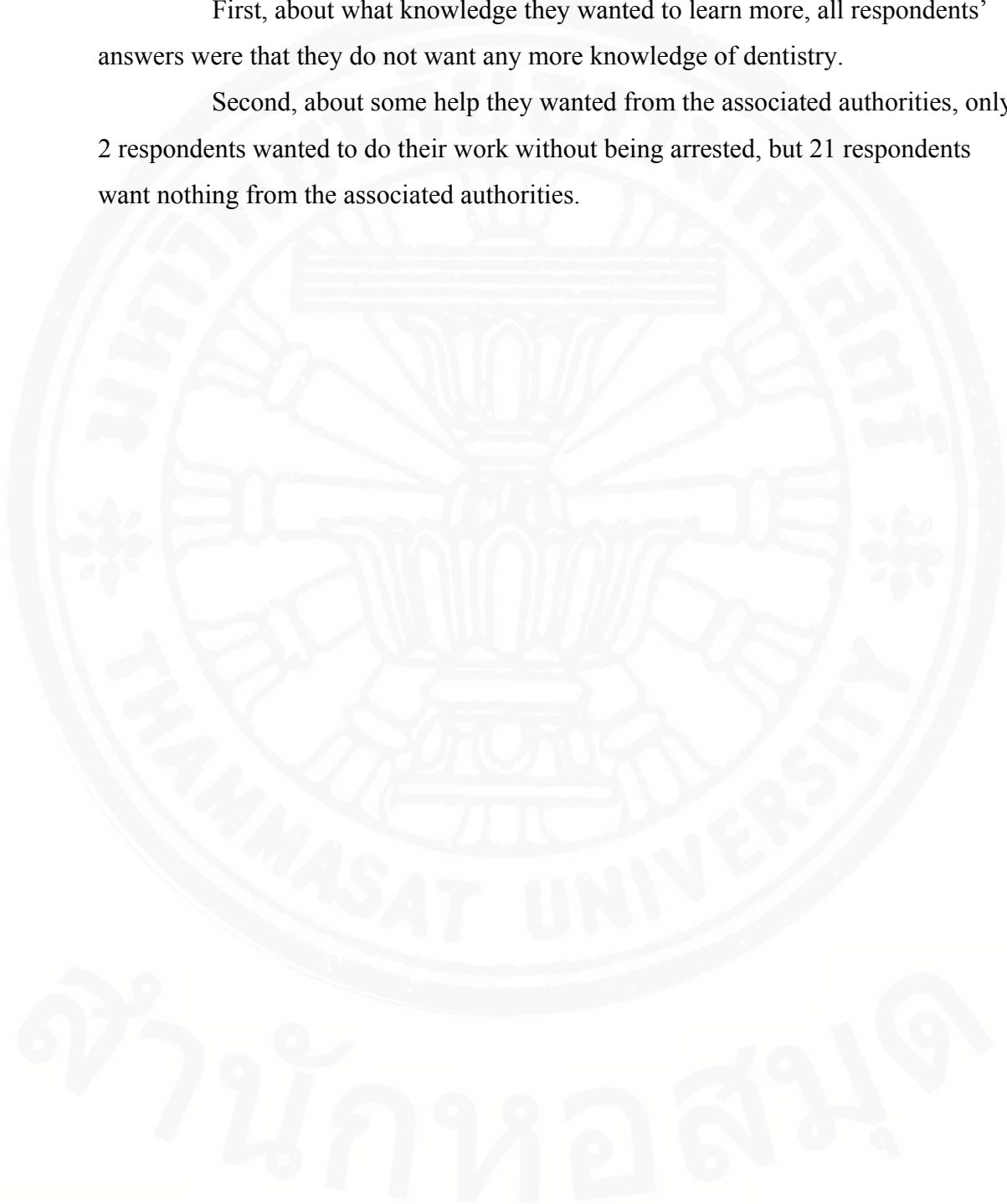
#### **4.4 THE RESPONDENTS' WORKING PROBLEMS**

About the problems usually happening in their working, respondents' answers were all similar that the problems were pain, unfamiliarity with new dentures, and incorrectness of using.

#### **4.5 THE HELP RESPONDENTS WANTED FROM THE ASSOCIATED AUTHORITIES**

First, about what knowledge they wanted to learn more, all respondents' answers were that they do not want any more knowledge of dentistry.

Second, about some help they wanted from the associated authorities, only 2 respondents wanted to do their work without being arrested, but 21 respondents want nothing from the associated authorities.





## **CHAPTER FIVE**

### **CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS**

This chapter presents (1) a summary of the study, (2) a summary of the findings, (3) discussion of the knowledge about dentistry of street dentists in Bangkok and unexpected happenings, (4) conclusions, and (5) recommendations for further research.

#### **5.1 SUMMARY OF THE STUDY**

This section summarizes the investigation of the knowledge about dentistry of “Street Dentists” in Bangkok. The motivation to study their knowledge was that this denture making alternative had many disadvantages known to the public, but they still existed despite illegalization. The motivation to study their knowledge was that it was known to the public in general that these denturists’ work was inferior and to learn whether or not they possess some ‘good’ denture practice and knowledge to be less harmful to population who make use of their work.

##### **5.1.1 Objective of the Study**

The principle of this study was to discover the level and the sources of knowledge of street dentists about making proper dentures and disinfection techniques. Moreover, this research explored their working problems and help they needed from the associated authorities.

##### **5.1.2 Subjects, Materials, and Procedures**

To reach the goal, the subjects were selected by using purposive sample technique plus snowball technique. After the Thai-translated questionnaire of thirty questions had been finished and tested, the survey started from Thaprachan on November 29, 2008 and then expanded to other areas. Data was recorded for one sample at a time of fifteen minutes. On January 14, 2009 this survey stopped as scheduled; 23 questionnaires were collected. Then, the researcher analyzed the data by using SPSS version 14.0 for descriptive statistics such as frequency distribution and percentage.

## 5.2 SUMMARY OF THE FINDINGS

The results of the study can be summarized as follows:

### 5.2.1 The respondent's general characteristics and the scope of their work

Regarding the general characteristics of the 23 street dentists questioned in Bangkok, they were mainly male and were largely over 40 years old; they were born equally in Bangkok plus suburbs and in up-country. In addition, they all had spouses. Besides, they mostly graduated not above senior high school. Moreover, the greater part of them had never worked related to health-care services, but then almost a half of respondents had worked as street dentists for 10-20 years. Additionally, most of them earned more than 40,000 baht per month of which the maximum were 160,000 baht per month.

Concerning the respondents' scope of their work, all of them made removable plastic-based dentures, and one-third also made removable metal-based dentures. In addition, a minority repaired dentures and a few did non-denture work. On the other hand, the majority of them did not make dentures in case of severe, terrible tooth decay or gum swelling.

### 5.2.2 The respondents' sources of knowledge

The researcher found that the most common source of respondents' knowledge was their families and relatives, and the second source was hired street dentists.

### 5.2.3 The respondents' knowledge level of making dentures and disinfection techniques

5.2.3.1 The findings about the knowledge of making dentures of these street dentists are as follows:

1. Most of them did not ask customers only about the spec of wanted dentures before taking imprints, but they also paid attention to intraoral condition, medical history, abnormal tissue, and denture wearing experience as well.
2. When customers had many severely decayed teeth, the majority of respondents suggested to them to see dentists before making dentures.

3. More than three-fourths misunderstood that saliva had no effect on dentures, while less than one-fourth perceived that the more saliva, the more dentures' retention.

4. All respondents mounted the tooth models on articulators, while one respondent added the option of not doing so.

5. All respondents correctly arranged artificial teeth in conformity with the color, size, or shape of the remaining teeth. However, their tooth selection depended on wearers' satisfaction when no tooth was available. In other words, none of them was confused that whitish shade was more favorable for wearers.

6. Almost all of the respondents adjusted false-teeth alignment according to bone ridge, adjacent and opposite teeth, trying-in, and clients' satisfaction. There was only one person who did this wrongly by choosing merely to please clients.

7. Most of the respondents made the base of removable plastic dentures correctly by choosing only waiting until the mixture of resin and solution became dough before adapting it on a model, not combining with others ways.

8. When customers got pain from dentures, all respondents ground the dentures until wearers got well and some added that it took time for getting familiar with new dentures. No respondent wrongly corrected the pain by grinding the natural teeth.

9. If false teeth or dentures cracked or fractured, almost all of the respondents repaired or make new ones without gluing them. Only one respondent did malpractice repairing by using glue.

5.2.3.2 The findings about the knowledge of disinfection techniques of these street dentists are as follows:

1. Less than half of the respondents wore gloves while working with clients.

2. After taking the imprint out of customer's mouth, nearly all of the respondents washed the imprint either by tap water or antiseptic solution before pouring dental stone. Less than 10% of the respondents skipped this hygienic step.

3. After removing tooth models from impression trays, the majority of the respondents cleaned and washed the trays with tap water or boiled

them in hot water. A minority of the respondents wrongly did this step by removing the impression without cleaning or washing with tap water.

4. For denture-cleaning suggestions, nearly three-fourths correctly suggested to denture wearers that dentures should be removed and brushed softly with toothpaste without immersing dentures in mouthwash.

5. Nearly all of the respondents correctly suggested that denture wearers not wear dentures during sleep.

6. Nearly three-fourths of the respondents properly suggested to clients to immerse the removed dentures in plain water, not in other solutions.

The respondents' knowledge score analyzed ranged from 9 marks to 14 marks of the full score of 15 marks. Therefore, the majority of the respondents passed this knowledge benchmark of 12 marks, but none got full score.

#### 5.2.4 The respondents' working problems

All of the respondents faced generally similar problems: pain, unfamiliarity with new dentures, and wrong denture use.

#### 5.2.5 The help the respondents wanted from the associated authorities.

No respondents wanted more knowledge of dentistry or help from the associated authorities.

### 5.3 DISCUSSION

This section discusses the findings found from this data and the unexpected findings found while doing research.

5.3.1 About the general characteristics of the street dentists in Bangkok, they were mostly male. This might be related to the natural attributes of denture-making dealing with craftsmanship such as working with plaster or cement, drilling machines, and volatile mixture. As seen in masonry work, men were adaptable to work with cement, drilling, and painting more than women. Moreover, Thai women in the past were seriously raised up within the fine framework of social norm or they were to stay away from an indecent image, so this illegal work was mainly dominated by men. Next, the finding that the street dentists were all married conformed to other findings that they basically were above 40 years old and they had done many other

jobs before being street dentists. Then, considering their high monthly income, the researcher perceived the reason why they became illegal denturists. The earnings attracted anyone whose background normally suited low income. In addition, because of the belief that denture making was easy, required short-time training and no high profile background persons without health-caring experience from any province and any educational profile possibly thought that they were suited to be street dentists. Therefore, after having experienced low invested work but high income returns, about a half of respondents continued being street dentists for 10-20 years.

5.3.2 Due to the selling points of their advertising that their services were cheap and quick, all of the street dentists made dentures with fast-setting materials. In other words, they made low-quality removable plastic-based dentures. Additionally, some of the street dentists expanded their work scope to making removable metal-based dentures to serve higher quality demand and their own higher income, but longer waiting-time. Moreover, a few street dentists did non-denture work such as diamond embedding in canine teeth and fake orthodontics because they were greedy though they knew that the work caused harm to clients. On the contrary, they mostly refused to make dentures in case of severe tooth decay or gum swelling. This may be because if not, they knew they would certainly fail. Thus, they suggested that clients see dentists before coming back to them. It was a self-prevention from losing faith in their ability.

5.3.3 After obtaining the information of level of knowledge of making denture, the researcher found that only a few of the street dentists knew the effect of saliva on dentures' retention. This wrong understanding led them to get problems in case of no natural tooth left over. Furthermore, they did not prevent contamination between themselves and clients by wearing gloves. That is, they performed careless disinfection techniques.

In this research, the pass criteria of knowledge score was 12-15 marks because the researcher thought that health concern was not to be compromised to low score. Hence, the set point was 80% of the full score. Although the researcher really wanted to probe the knowledge scientifically, all knowledge questions were designed according to the real practice at their working sites, not real dentists' practice standard. The framework of the question-design was determined by observation including in-

depth interview data of the background of street dentists described in dentist Suphaluk Lertmanorut's thesis. For example, when the researcher designed a question about false-tooth alignment by the street dentists, it was only whether they used articulator to mount the tooth models or not. On the other hand, the artificial tooth alignment by dentists was so complicated that dentists had to record the relation of jaws, patients' facial profile, the bone under dentures, and so on to achieve the right tooth alignment. Moreover, aseptic techniques executed by dentists were more rigorous than only cleaning with tap water, antiseptic solution, and boiling water; they were strictly performed following the rules established by the dental association such as using autoclave machines and many other complex techniques.

Although the practical correct answers were offered for selection, none of the street dentists got the full score of 15 marks. Considering the significant amount who failed that was more than 20% of all respondents and the results that those who passed could not get full score on the extremely adjusted questions, the researcher thought that it reflected an inadequate knowledge of the street dentists. Moreover, unexpectedly and unbelievably, the investigator (the data collector) noticed that some answers chosen were not the way they act. For example, some answered that they waited until the mixture of resin and solution became dough, but actually the data collectors observed that they mixed and spread the mixture on the model without waiting. In addition, some claimed that they wore gloves, but the data collectors never saw that any of the respondents did so. Moreover, some answered they cleaned and washed the contaminated appliances with antiseptic or boiling water, but, in reality, they only soaked them in buckets of tainted water. Their answers were different from what had actually happened, and this was in agreement with the descriptive information in dentist Suphaluk Lertmanorut's thesis. In the researcher's opinion, they may select the good-looking answers to show that they were knowledgeable. Otherwise, they may know the right answers but intend to do their job in negligent ways for earning a high profit and spending less time on the work. The unexpected findings clearly supported dentist Nipatsorn Ladawan's assertion, "The good dentures were constructed by dental professionals. It was not as easy, quick, and cheap as done by illegal denturists. To establish good dentures it took so much time for maximum

quality and safety that dentists had to spend at least six years to learn”(นิภัตสร ลดาวัลย์, 2505, น.196-198).

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, and presumably clients had accepted the street dentists' working. However, the researcher could not disregard the information of this improper working, and recognized that it was a duty to share the fact and to alert the society of harm from indecent denture making because the Consumer protection Act of 1979, section 4(3) stated that citizens had the right to expect safety in the use of goods or services. Therefore, innocent people should be protected at least by the findings of the alternative in the step of perceiving benefits in the Health Belief Model. Consequently, they should consider whether the cues to action from commercial advertisement were credible and reasonable or not. People should be able to access information before making decision between dentists and street dentists according to “Consumer behavior and Consumer Buying Process” by Philip Kotler (2003): problem or need recognition, information search, alternative evaluation, purchase and post-purchase evaluation. In sum, the findings of knowledge about denture making and disinfection techniques both from collected data and from this experience should be made known to public awareness before people make their decision in choosing health care. Besides, Thailand has never had a study course for legal denturism like George Yonge College of Applied Science and Technology in Canada, and others in over twenty countries such as Australia, Canada, and the United Kingdom. As mentioned earlier, the researcher desired to find out street dentists' knowledge about dentistry for some possible social benefits, but all respondents' working problems were very trivial problems. In other words, they did not realize any problems dealing with inadequate knowledge about dentistry, and amazingly, they clearly refused any knowledge if offered. Therefore, their attitude unavoidably reminded the researcher of dentist Chaleamsak Rojanapradit's question whether it was time to get rid of all illegal dentists from our beloved Thailand for people's welfare. In the researcher's opinion, their willingness to ignore additional dental knowledge conveyed the message that they had no concern about social health care, but focused only on money. In addition, they did not mention problems caused by illegalization

though they were depressed by political mechanism, according to “The Concept of the Origins and Resolution of Interoccupational Conflict” by James W. Begun and Ronald C. Lippincott in 1987. This agreed with the information in dentist Suphaluk Lertmanorut’s thesis that they were protected by their own street-dentist network and polices. Moreover, when arrested, they were not guilty if it was not proved that they were inserting materials into customers’ mouths according to the Dental Council president Pisal Thepsitta’s statement in the press release organized by the Dental Council on May 12, 2008.

This research partially met the goal of the study because of various limitations. An important problem was the unknown number and locations of street dentists in Bangkok because no formal record was made. Hence, the number was assigned groundlessly, but the researcher was hopeful that the more respondents, the more validity of the findings. Accordingly, the expected number was set at 100 respondents, but the real total number collected was 23 respondents. This sample size problem derived from overestimation, scattered locations, non-cooperation of respondents, and limited time. First, according to a senior respondent who had worked for more than 20 years, the number of actual Bangkok’s street dentists was around 30 persons, so the researcher may have exaggerated the sample size. Second, data collection started from Thaphrachan area as planned until unable to do further research there. Then, moving to other areas as informed in dentist Suphaluk Lertmanorut’s thesis and others areas someone suggested such as Daokanong, Phrapradaeng, nearby Siriraj Hospital, Nonthaburi river's harbour, Wongweinyai, Charoenkrung, and so on, the data collectors were employed a very long time to reach the scattered sites. Moreover, the data collectors did not meet any respondents at the sites mentioned because street dentists were absent, and some would present themselves only when clients really intended to make dentures. That was, their brokers signaled them. As a result, although data collectors worked hard, time passed without advancement. Third, non-cooperation of respondents was a significant obstacle because some respondents refused to answer any question and some made phone calls to block other street dentists from answering these survey questions. This phenomenon reflected that “street dentists” was still a sensitive issue in our society. They were afraid that strangers may trouble them because their work was illegal.



Moreover, according to dentist Suphaluk Lertmanorut, they were afraid that the data collectors might be the authorities from the Revenue Department. However, not all street dentists refused to give information to the data collectors, but they would answer if there was no questionnaire. So, the answers were collected by talking and when finished all questions in mind, the data collectors had to record the data in a real questionnaire immediately. Additionally, some street dentists were kind enough to appoint the data collectors to come back later when they were less busy with denture making. The data collectors had to adjust the data collection depending on the condition enhancing willingness of the respondents. For example, when the researcher asked some street dentists to help fulfill this research, they declined to do so. Amazingly, the researcher sent a trained assistant to get the answers from the previous street dentists, and she succeeded because they communicated in North-eastern dialect. Then, 23 questionnaires were collected; the time was up as scheduled. Therefore, the field work ended, and then data analysis began. Although this survey reported not much quantitative data, it may be a pilot study for other researchers to investigate more on this particular group. In the researcher's opinion, this study may be done better by observation and in-depth interview, not by questionnaires. However, for this very short time, the researcher thought that this research achieved the objectives in the aspects of assessment of knowledge of denture making and disinfection techniques of the street dentists in Bangkok, working problems, and help needed by using questionnaires and on-site observation. Additionally, this survey unveiled a lot of extra information opposite to the researcher's expectation especially their attitude, the refusal of more knowledge that may raise their status above illegal street dentists. Moreover, after the findings were interpreted, the researcher felt that it was worthy to deal with this challenging sensitive issue that affected the social health condition.

#### **5.4 CONCLUSIONS**

Although this research has been done in a very short time as scheduled, the researcher gets the answers for all the questions: where street dentists obtained knowledge of denture making from, the level of knowledge about dentistry they possess, their working problems, and the help they need. In other words, its findings fulfill the objectives by showing that the first source of knowledge of the 23 street

dentists in Bangkok was their family and relatives, and the second source was hired street dentists. Subsequently, most of them passed the criterion, 80% of 15 simple knowledge questions, of the passing level of knowledge about denture making and hygienic techniques, but none of them got full score. Next, their working problems were generally about pain, unfamiliarity, and wrongly use of dentures. Finally, no one wanted more knowledge of dentistry and help from the associated authorities. Moreover, while doing the field work or collecting data, the data collectors experienced much more resistance than cooperation though approaching with proper adaptation, honesty, and neutrality. In addition, some of their real practice was not the same as they answered.

## **5.5 RECOMMENDATIONS FOR FURTHER RESEARCH**

Based on the findings and conclusions of this study, the following recommendations are made for future research.

5.5.1 In relation to the complication of Thai cultural society, other researchers who may want to deal with this topic “Street Dentists” should be confident and be determined and very patient because it is not easy to approach the samples in the ordinary way. They always distrust strangers.

5.5.2 Up to now, the researcher still has doubt about the exact number of the street dentists in Bangkok and vicinity, so the sample size should be specially considered.

5.5.3 In the researcher’s view, this research should be better done by qualitative and not quantitative approach. Therefore, future researchers should be aware of the most suitable research design.

5.5.4 When dealing with this topic, researchers have to be mindful of the language and font style used. It should be polite, simple, and readable.

5.5.5 The researchers dealing with this topic have to pay very much attention to neutrality, not judge but report and explain only the findings.

5.5.6 This research background reported that many Thai people were waiting for dentures, so future research may find out the solutions to help them by way of the qualified denturists.

5.5.7 Instead of focusing on street dentists, future research may focus on street dentists' clients, or public opinion about this matter.

5.5.8 Future research may be done in other areas of Thailand where people have got troubles from illegal denturists as always shown in news.



สำนักหอสมุด

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สำนักหอสมุด

**APPENDIX A**  
**QUESTIONNAIRE**

**STREET DENTISTS: KNOWLEDGE ABOUT DENTISTRY**  
**OF STREET DENTISTS IN BANGKOK**

**Statement of Confidentiality**

This questionnaire is a part of research methodology course of Master of Arts in English for Careers, Language Institute, Thammasat. The objectives of the study are to identify the sources of knowledge, to explore knowledge about making proper dentures, to discover knowledge about disinfection techniques, to know about work problems, and to acknowledge the help needed from the associated authorities. All of your information will be treated confidentially and will be used for the research purpose only. Your cooperation is highly appreciated for improving our society and your own work.

For more information, please kindly contact the researcher, Ms.Napit Wattanathaworn, at telephone number 081-560-6354 or by e-mail, [napitwat@hotmail.com](mailto:napitwat@hotmail.com)

Ms.Napit Wattanathaworn  
Language Institute, Thammasat University

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This questionnaire is divided into 5 sections as the following

1. General information
2. Knowledge of denture making
3. Knowledge of infection reduction
4. Work problems
5. Help needed from the associated authorities

**QUESTIONNAIRE**  
**STREET DENTISTS: KNOWLEDGE ABOUT DENTISTRY**  
**OF STREET DENTISTS IN BANGKOK**

**Instruction: Please mark the choices as many as you think they are correct, and fill in the blank as you like.**

1. Sex  male  female
2. Age .....Years
3. Native province .....
4. Highest education .....
5. Marital status
  - Single  Married
  - Divorced  Widow/ Widower
  - Others.....
6. Previous Occupation before being a denturist .....
7. How did you get the skill of denture making? .....
  - Being dentist's assistant before  Being trained from own family
  - Being trained from relatives  Hiring a denturist to train
  - Others.....
8. How many years have you worked as a denturist? ..... Years
9. How many customers do you have on average per day? .....Persons
10. How many artificial teeth does each customer want? .....Teeth
11. What are the reasons you don't make dentures for the customers?  
 .....  
 .....  
 .....

12. What will you do before starting denture making?

- Check the intraoral condition
- Ask about customers' medical history
- If seeing some tissue maybe abnormal, you will refuse to make denture
- Ask customers about the dentures they want, and take oral impression
- Others.....

13. What kind of work you do deal with?

- Removable plastic-based dentures
- Removable metal-based dentures
- Fixed bridge false-teeth
- Others (such as denture repairing).....

14. When customers have many severely decayed teeth, what will you do?

- Ignore the condition due to no relation, start making dentures
- Suggest that they see dentists before making dentures
- Let customers decide whether to do dentures or not
- Others.....

15. Do you think salivary flow affects dentures' retention?

- The less saliva, the more dentures' retention
- The more saliva, the more dentures' retention
- Saliva has no effect on dentures' retention
- Others.....

16. First step of denture making, what do you do?

- Wash hands
- Wear gloves
- None of the above
- Others.....

17. After you have taken the imprint out of your customer's mouth,

- Wash the imprint with tap water
- Wash the imprint with antiseptic solution
- Pour dental stone immediately
- Others.....

18. After you remove the tooth models from impression trays, what will you do next?

- Just remove the impression and then take the next one
- Clean and wash the tray with tap water
- Clean and wash the tray with antiseptic solution
- Clean and boil the tray in hot water
- Others.....

19. About tooth arrangement

- arrange without articulation
- Mount the models on articulators
- Others.....

20. About false teeth selecting

- Whitish shade is more favorable for wearers
- Harmonized with the color of the remaining teeth
- Harmonized with size and shape of the remaining teeth
- In case of full dentures, select whatever satisfies wearers
- Others.....

21. Teeth arrangement

- Whatever satisfies customers
- Align on bone ridge
- Conform to the adjacent and opposite teeth
- Try-in the arranged in customers' mouth
- Others.....

## 22. About denture base making

- Sprinkle the solution over the resin powder on tooth model
- Mix the resin powder and solution, and then spread on the model
- Mix the resin and solution, and press on the model when it becomes dough
- Others.....

## 23. If customers suffer pain from wearing denture

- Tell them to take time for getting familiar with wearing dentures
- Grind the dentures until wearers get well
- Grind the natural teeth until wearers get well
- Others.....

## 24. Suggestions for denture cleaning

- Remove and brush dentures softly with toothpaste
- Only wash dentures with tap water
- Immerse dentures in mouthwash
- Others.....

## 25. What are your suggestions?

- Should not wear denture during sleep
- Wearing denture during sleep maintains retention stabilization
- Others.....

## 26. Suggestion for dentures after removal

- Place in dry place
- Immerse in salty water
- Immerse in mouthwash solution
- Immerse in plain water
- Others.....

27. If false teeth or dentures are cracked or fractured

- ( ) Glue them
- ( ) Repair with dental material
- ( ) Make new ones
- ( ) Others.....

28. What problems usually happen in your working?

.....

.....

.....

29. What more knowledge do you want?

.....

.....

.....

30. What help you want from the associated authorities?

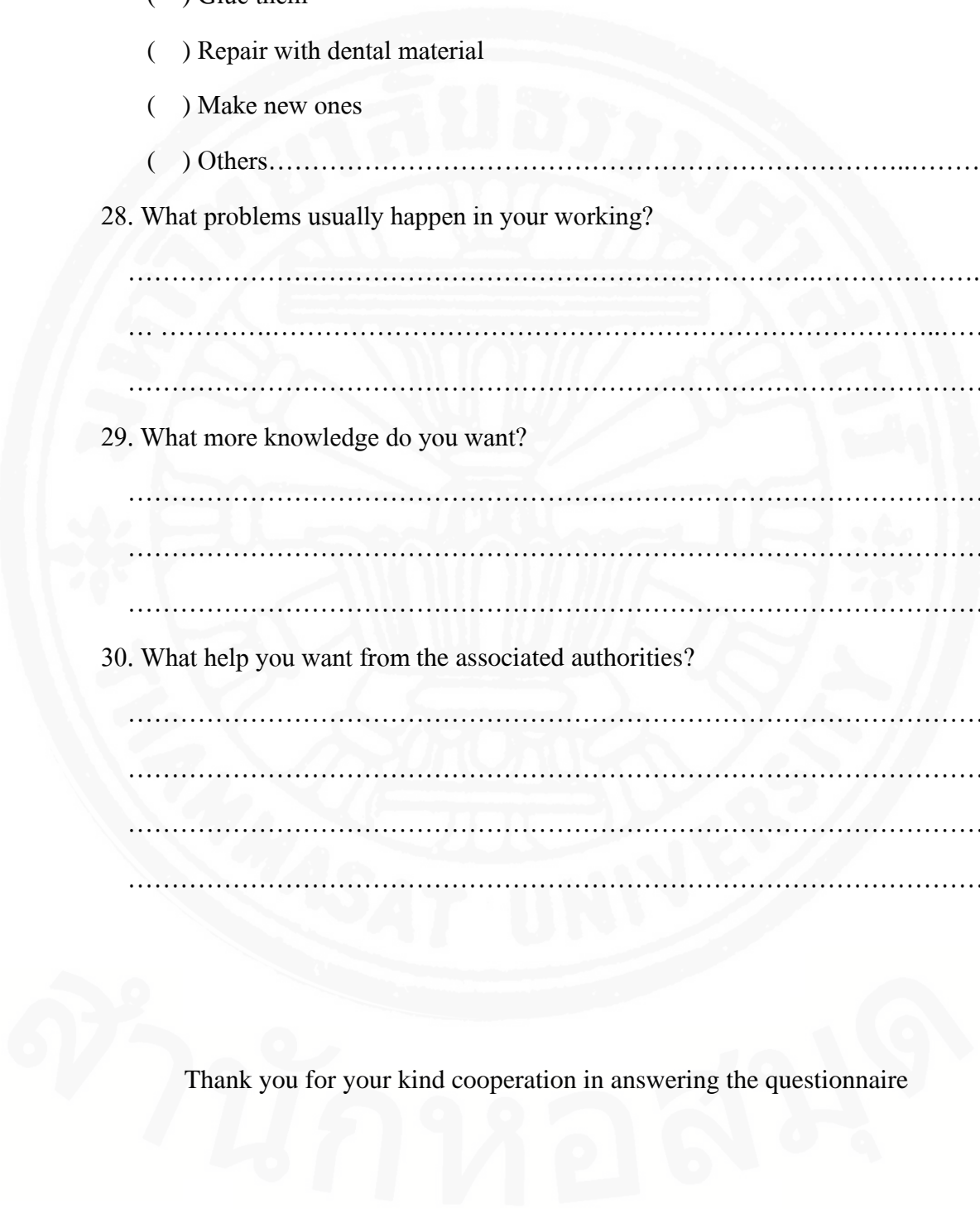
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Thank you for your kind cooperation in answering the questionnaire



## APPENDIX B

### แบบสอบถาม

#### ความรู้ทางทันตกรรมของช่างทำฟันปลอมในกรุงเทพมหานคร

#### คำยืนยันการไม่เปิดเผยความลับของผู้ตอบแบบสอบถาม

แบบสอบถามนี้เป็นส่วนหนึ่งของวิชาระเบียบวิธีวิจัยของนักศึกษาระดับปริญญาโท สาขาภาษาอังกฤษเพื่ออาชีพ สถาบันภาษามหาวิทยาลัยธรรมศาสตร์ แบบสอบถามนี้มีวัตถุประสงค์เพื่อศึกษาความรู้ของช่างทำฟันปลอมในกรุงเทพมหานคร ในด้านที่มาจากความรู้ในการทำฟันปลอม ความรู้ในการทำฟันปลอมที่ดี ความรู้ต่อการทำงานลดการติดเชื้อ ปัญหาที่พบบ่อย ความคิดเห็นต่อหน่วยงานที่เกี่ยวข้อง ทั้งหมดนี้จะนำไปสู่ประโยชน์โดยรวมต่อสังคมทุกฝ่าย ทั้งช่างทำฟันปลอมและผู้รับบริการ ข้อมูลที่ท่านตอบในแบบสอบถามนี้ จะถือเป็นความลับและจะนำไปใช้ประโยชน์ทางการศึกษาเท่านั้น

ในโอกาสนี้ผู้วิจัยขอขอบคุณในความร่วมมือของท่านเป็นอย่างสูง

หากท่านมีความประสงค์ในการติดต่อผู้ทำวิจัย ท่านสามารถติดต่อคุณณภิส วัฒนถาวร

หมายเลขโทรศัพท์ 081-560-6354 หรือ โดยทาง [napitwat@hotmail.com](mailto:napitwat@hotmail.com)

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แบบสอบถามนี้แบ่งเป็น 5 ส่วนดังต่อไปนี้

1. ข้อมูลทั่วไป
2. ข้อมูลการทำฟันปลอม
3. ข้อมูลการลดการติดเชื้อ
4. ข้อมูลปัญหาการทำงาน
5. ความต้องการต่อหน่วยงานที่เกี่ยวข้อง





## 12. ก่อนทำฟืนปลอมควร

- ( ) ตรวจสอบคุณภาพฟืนและเหมืองกว่าทำฟืนปลอมได้หรือไม่
- ( ) ถามลูกค้าเกี่ยวกับโรคประจำตัว
- ( ) ถ้าคิดว่ามีเนื้อเชื้อแปลกๆ จะไม่ทำฟืนปลอมให้
- ( ) ถามความต้องการลูกค้าเกี่ยวกับฟืนปลอมแล้วพิมพ์ปากเลย
- ( ) อื่น ๆ.....

## 13. ท่านรับงานเกี่ยวกับทำฟืนปลอมอะไรบ้าง

- ( ) ฟืนปลอมถอดได้ฐานพลาสติก
- ( ) ฟืนปลอมถอดได้ฐานโลหะ
- ( ) สะพานฟืนติดแน่น
- ( ) อื่น ๆ (เช่น ซ่อมฟืนปลอม) .....

## 14. ลูกค้ามีฟืนสุรณแรงหลายซี่ท่านทำอย่างไร

- ( ) ทำฟืนปลอมเลยเพราะไม่เกี่ยวข้องกัน
- ( ) ใ้ไปรักษาก่อน
- ( ) ใ้ลูกค้าตัดสินใจเองว่าจะทำฟืนปลอมเลยหรือไม่
- ( ) อื่น ๆ.....

## 15. ท่านคิดว่าสภาพน้ำลายมีผลต่อการใส่ฟืนปลอมหรือไม่

- ( ) น้ำลายน้อยๆใส่ฟืนปลอมได้ดี
- ( ) น้ำลายมากใส่ฟืนปลอมได้ดี
- ( ) ปริมาณน้ำลายไม่มีผลต่อการใส่ฟืนปลอม
- ( ) อื่น ๆ.....

## 16. ก่อนทำฟืนปลอมท่าน

- ( ) ล้างมือ
- ( ) ใส่ถุงมือ
- ( ) ทำเลย
- ( ) อื่น ๆ.....

## 17. หลังพิมพ์ปากแล้ว

- ( ) ล้างแบบพิมพ์ด้วยน้ำเปล่า
- ( ) ล้างแบบพิมพ์ด้วยน้ำยาฆ่าเชื้อ
- ( ) เทแบบปูนได้เลย
- ( ) อื่น ๆ.....

## 18. เมื่อแกะแบบพิมพ์และวัสดุพิมพ์ทิ้งแล้ว

- ( ) พิมพ์ปากถูกกำจัดไปได้เลย
- ( ) ล้างถาดพิมพ์ปากด้วยน้ำเปล่า
- ( ) ล้างถาดพิมพ์ปากและแช่น้ำยาฆ่าเชื้อ
- ( ) ล้างถาดพิมพ์ปากและต้มในน้ำร้อน
- ( ) อื่น ๆ.....

## 19. ก่อนเรียงฟัน

- ( ) เรียงได้เลยแล้วรอแต่ในปากเมื่อใส่แล้ว
- ( ) ยึดแบบฟันในเครื่องจำลองการสบฟัน
- ( ) อื่น ๆ.....

## 20. การเลือกฟัน

- ( ) ฟันสีขาวๆถูกคำชอบเสมอ
- ( ) ต้องเทียบสีจากฟันในช่องปาก
- ( ) ต้องดูขนาดและรูปร่างฟันที่เหลือ
- ( ) ถ้าไม่มีฟันแท้เหลือก็เลือกตามใจลูกค้าได้
- ( ) อื่น ๆ.....

## 21. วิธีการเรียงฟัน

- ( ) เรียงยังไงก็ได้ให้ลูกค้าพอใจ
- ( ) เรียงบนแนวสันเหงือก
- ( ) ดูความสัมพันธ์ฟันข้างเคียงและฟันคู่สบ
- ( ) เรียงแล้วลองในปากก่อนยึดจริง
- ( ) อื่น ๆ.....

## 22. การทำฐานพื้นปloomพลาสติก

- ( ) โรยผงแล้วพรมน้ำยาบนแบบปูนเลย
- ( ) ผสมผงกับน้ำยาแล้วตักโรยบนแบบปูนทันทีเลย
- ( ) รอให้เป็นก้อนเหนียวนึ่ม จึงกดบนแบบปูนเลย
- ( ) อื่น ๆ.....

## 23. ลูกค้าใส่แล้วเจ็บ ท่านจะทำอย่างไร

- ( ) บอกลูกค้าว่าคุ้นเคยแล้วจะไม่เจ็บ
- ( ) กรอแต่งพื้นปloomจนกว่าจะหายเจ็บ
- ( ) กรอแต่งพื้นเท้าจนกว่าจะหายเจ็บ
- ( ) อื่น ๆ.....

## 24. แนะนำคนใช้ทำความสะอาดพื้นปloom

- ( ) ถอดออกมาแปรงเบาๆด้วยแปรงกับยาสีฟัน
- ( ) ล้างน้ำเปล่าก็พอ
- ( ) ให้แช่น้ำยาบ้วนปาก
- ( ) อื่น ๆ.....

## 25. ข้อควรแนะนำลูกค้าใส่พื้นปloom

- ( ) ควรถอดพื้นปloomตอนนอน
- ( ) นอนใส่พื้นปloomนอนจะได้แน่นๆและพื้นไม่ลึ้ม
- ( ) อื่น ๆ.....

## 26. หากถอดพื้นปloomพักควรทำข้อใด

- ( ) วางไว้ให้แห้งๆ
- ( ) แช่น้ำเกลือที่เค็มนิดหน่อย
- ( ) แช่น้ำยาบ้วนปาก
- ( ) แช่น้ำเปล่า
- ( ) อื่น ๆ.....

27. ถ้าซีฟีนปลอมหรือฐานฟีนปลอมร้ายหรือหัก

( ) เอกาววิทยาศาสตร์ทำให้ติดกัน

( ) ซ่อมด้วยวัสดุทำฟีนปลอม

( ) ควรทำใหม่อย่างเดียว

( ) อื่น ๆ.....

28. ปัญหาที่ท่านพบบ่อยจากงานทำฟีนปลอม

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29. ท่านคิดว่าท่านต้องการความรู้เรื่องใดเพิ่มขึ้น

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30. ท่านต้องการความช่วยเหลืออะไรบ้างจากหน่วยงานที่เกี่ยวข้อง

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ขอขอบคุณทุกท่านที่สละเวลาตอบแบบสอบถามในครั้งนี้

ชำนาญกหาอสมุด









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