MEDICAL TECHNOLOGY AND ILLNESS EXPERIENCE OF PATIENTS UNDERGOING CORONARY ARTERY BYPASS GRAFTING SURGERY IN CONTEMPORARY THAI SOCIETY

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MEDICAL TECHNOLOGY AND ILLNESS EXPERIENCE OF PATIENTS UNDERGOING CORONARY ARTERY BYPASS GRAFTING SURGERY IN THAI CONTEMPORARY

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ABSTRACT

The objective of this study was to study the subjective illness of patients who had undergone coronary artery bypass grafting surgery, in a social, economic and cultural context characterized by inequalities in the physician-patient relationship, medical service provision and health policy. Qualitative methodology was utilized. The data were collected at a central hospital in Eastern Thailand through narrative interviews with 7 participants. All were receiving medication to control cardiovascular disease and received a coronary artery bypass grafting surgery at the studied hospital or elsewhere, 6 months to 10 years ago. Cyborg Anthropology and Critical Medical Anthropology Perspectives were used to analyze medical technology on 4 levels: the individual, the relationship between the patient and medical personnel, the medical institution and national health policy. The 7 participants were socio-culturally diverse.

Heart surgery patients are affected by the social structure, especially the state policies of public health insurance in an era of globalization and democratization by developing country to imitate west. While such policies attempt to cover all Thai citizens at considerable expense, improvements are still needed in terms of quality, the medical service provision, which focuses on the use of advance medical technology and currently operates on capitalist principles, and in the patient-physician relationships, in which physicians currently play the role of peddlers of medical technology to patients. The individual heart surgery experiences with medical technology saves lives on one hand, but ends them or causes disability on the other. Patients awaiting heart surgery are in a vulnerable position, fending off death, and facing great uncertainty about their future. Patients gave their cultural and religious perspective amulets. Medical technology was seen as mysterious and beyond questioning about its effectiveness in curing illness. Medical technologies operate within transnational capitalism and thus provide one-sided information about the technology saves human lives. The participants who had undergone the heart surgery could be divided into 3 categories: who negotiate their situation of lives intertwined with medical technology, who were submissive toward the technology, and who opposed it. When medical technology became a part of human body, it reduced that person’s humanity by causing endless dependence on itself. The use of medical technology for saving human lives should take cultural relativism perspective of holistic life with science and culture.

KEY WORDS: MEDICAL TECHNOLOGY / ILLNESS EXPERIENCE / HEART SURGERY / SUBJECTIVITY / CULTURE

195 pages

เทคโนโลยีทางการแพทย์และประสบการณ์ความเจ็บป่วยของผู้ป่วยที่ผ่าตัดทำทางเบี่ยงหลอดเลือดหัวใจในบริบทสังคมไทยปัจจุบัน

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บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อศึกษาประสบการณ์ความเจ็บป่วยของผู้ป่วยต่อเทคโนโลยีทางการแพทย์ในการผ่าตัดทำทางเบี่ยงหลอดเลือดหัวใจในมิติของภาวะอัตวิสัยและตัวตน ภายใต้ความสัมพันธ์ที่ไม่เท่าเทียมระหว่างแพทย์กับผู้ป่วย ระบบบริการทางการแพทย์ นโยบายสุขภาพ ท่ามกลางบริบททางเศรษฐกิจ การเมือง สังคมและวัฒนธรรมในปัจจุบัน ระเบียบวิธีวิจัยเป็นการวิจัยเชิงคุณภาพ เก็บรวบรวมข้อมูลจากโรงพยาบาลศูนย์แห่งหนึ่งในภาคตะวันออกของประเทศไทย ใช้วิธีเก็บข้อมูลด้วยการสัมภาษณ์แบบเล่าเรื่อง และคัดเลือกผู้ร่วมวิจัยแบบเฉพาะเจาะจงจำนวน 7 ราย จากผู้ป่วยที่มารับยาควบคุมอาการของโรคหลอดเลือดหัวใจที่โรงพยาบาลที่ศึกษา ซึ่งได้รับการผ่าตัดที่โรงพยาบาลศึกษาหรือสถานพยาบาลอื่น ผ่านการผ่าตัดในระยะเวลาตั้งแต่ 6 เดือนขึ้นไปและไม่เกิน 10 ปี การศึกษานี้ใช้แนวคิดมานุษยวิทยาไซบอร์กและมานุษยวิทยาการแพทย์เชิงวิพากษ์ในการวิเคราะห์เทคโนโลยีทางการแพทย์ใน 4 ระดับได้แก่ ระดับปัจเจก ระดับความสัมพันธ์กับบุคลากรทางการแพทย์ ระดับสถาบันทางการแพทย์ และระดับนโยบายของประเทศ ผู้เข้าร่วมวิจัยทั้ง 7 รายมีพื้นฐานทางสังคมและวัฒนธรรมที่แตกต่างกัน

ผู้ป่วยที่ผ่าตัดหัวใจอยู่ภายใต้โครงสร้างสังคม ซึ่งรัฐจัดนโยบายสุขภาพแบบโลกาภิวัตน์ยุคประชาธิปไตยเน้นการพัฒนาประเทศตามอย่างชาติตะวันตก โดยใช้งบประมาณจำนวนมากจัดบริการให้ครอบคลุมประชากรของประเทศแต่ยังต้องพัฒนาคุณภาพของบริการ ระบบบริการทางการแพทย์มุ่งเน้นการใช้เทคโนโลยีทางการแพทย์ขั้นสูงและหมุนด้วยทุนนิยม รวมทั้งความสัมพันธ์ระหว่างแพทย์และผู้ป่วยซึ่งแพทย์เป็นพ่อค้าคนกลางในการนำเทคโนโลยีทางการแพทย์มาสู่ร่างกายมนุษย์ ประสบการณ์ของผู้ป่วยที่มีต่อเทคโนโลยีทางการแพทย์ในการผ่าตัดหัวใจ โดยผู้ป่วยมองเทคโนโลยีทั้งช่วยชีวิตและอาจทำให้ตายหรือพิการได้ ผู้ป่วยที่ต้องผ่าตัดหัวใจอยู่ในภาวะเปราะบาง ต่อสู้กับความตาย และอนาคตที่ไม่แน่นอน ผู้ป่วยแสดงความไม่มั่นใจต่อการใช้เทคโนโลยีทางการแพทย์ในการผ่าตัดหัวใจ โดยอธิบายผ่านตรรกะทางศาสนาที่เกี่ยวข้องกับวัฒนธรรม ได้แก่ เคราะห์ บุญ กรรม โชค ดวง และพระคุ้มครอง เทคโนโลยีทางการแพทย์เป็นสิ่งลึกลับที่มนุษย์ไม่ตั้งคำถามกับประสิทธิภาพในการแก้ปัญหาโรค เพราะเทคโนโลยีทางการแพทย์ผูกโยงกับระบบทุนนิยมข้ามชาติ ข้อมูลที่เผยแพร่แต่ด้านดีของเทคโนโลยีที่ช่วยชีวิตมนุษย์ ตัวตนของผู้ป่วยที่ผ่านการผ่าตัดทำทางเบี่ยงหลอดเลือดหัวใจ ประกอบด้วย ผู้ที่ต่อรองในการมีชีวิตอยู่ร่วมกับเทคโนโลยีทางการแพทย์ ผู้ที่ยอมจำนนต่อเทคโนโลยีทางการแพทย์ และผู้ที่ต่อต้านเทคโนโลยีทางการแพทย์ วิธีการจัดการกับความเจ็บป่วยโดยผู้ป่วยมีชีวิตอยู่ร่วมกับเทคโนโลยีทางการแพทย์และพึ่งพาเทคโนโลยีทางการแพทย์ ซึ่งเทคโนโลยีทางการแพทย์กลายเป็นส่วนหนึ่งของร่างกายมนุษย์ เป็นความสัมพันธ์ระหว่างมนุษย์กับเครื่องจักรที่ลดทอนความเป็นมนุษย์ การใช้เทคโนโลยีทางการแพทย์ในการช่วยชีวิตมนุษย์ควรใช้วัฒนธรรมสัมพัทธ์ที่คำนึงถึงชีวิตแบบองค์รวมทั้งด้านวิทยาศาสตร์และวัฒนธรรม

195 หน้า

CONTENTS

CONTENTS (cont.)

CONTENTS (cont.)

LIST OF FIGURES

CHAPTER I
INTRODUCTION

1.1 Significance of the Problem

Victor E. Frankl states, "We might not be the questioner to seek the meaning of life but the respondent to the life which questions us." (Milton cited in Kruawan Thiangdham, 2001). The venerable abbot, my father who has entered monkhood at the age of 63 and found that he has been suffering a cardiovascular disease and decided to have CABG surgery at the age of 65. Amidst the hope of our family members, the decision to undergo technological heart operation would make the symptom better. However, the medical technology brings unexpected things and his passed away after the operation for just 10 hours. The narration of his venerable has personally recorded and the unexpected technological mishaps attract me to study them. His venerable records are:

"***None, in this world, is perfect***– *basically; I am quite a serious person like a perfectionist. It analogically presses myself. Whence, we understand and accept that none is perfect in this world; we will not feel weighty, not tiresome, not suffering and not stressful…*

Turning Point of the life *– it happened when I was 63. My only son died in a car accident. My wife could not accept the real life and left me to spend her last life abroad. Happiness at the end of life ever expected failed. I was deep in melancholy with heavy drinks and only to stop was by desperately drunken and heavy vomited. Once, dinks made me so humiliated me to face anyone. I was on that day so drunken and helpless and friends had to help me walk. All eyesight stared at me with disgusts with a drunkard like me. Not only so disgraced but also dying because I felt a sudden Heberden's asthma, difficult to breath and attempted the breath choke. Finally, I found that Dharma opened our eyes to world truth rather than make-ups. Since then, whisky was forever unnecessary to me because I understood that the life necessity is consciousness. If consciousness exists, fear not to any immeasurable problems.……*

Air mass without spiritual supports *– a thing most needed by a human is acceptance and attention and just at least two listeners are enough. To speak alone without listeners is feeling like a lunatic, an air mass, bodiless, burnt-out, and no will power to do anything. Today, I visit a doctor for a coronary angiogram at my groin. The physician informs me that I cannot undertake PTCA since my five coronary arteries are too small and too contracted. PTCA is sheer risky. The physician chides me I should have PTCA long time ago. My previous physician has recorded that I declined to undergo PTCA. The best solution now is the artery bypass surgery. I have told him that I did not want to since I was worrying about my children and fearing that after surgery I would not recover and cannot witness their success. Neverthess, the physician responds that if Your Venerable declines; Your Venerable will not see them again……"*

This narrative is abstract and reflects the human spiritual dimension, idealism, and interrelation between humans and their surroundings (Naphaporn Hawanont, 2011). The narrative discloses an illness full of complex feeling beginning from chest pain linking to the world of pains (Good, Brodwin, Good & Kleinman, 1992). Illness links with life events accumulated since the past until the present. It brings stress and pressure, which harm the physical and mental health: the death of the beloved who passed away before the viable time.

Besides the narrative, illness reflects thought, emotion or feeling and action to heart surgery by medical technology. It is an operation under the anesthetization. It is similar to standing between the life border and death (Lock, 2000). The patient cannot step across the border and never recover; if it is astrologically explained under the belief of Thai societies related to surgery – a doom day (Sayavej Devabhummi, 2003). Lay perspective about heart surgery is similar to slaughtering in animal slaughtered pedestal (Porter, 2006). With such belief, it drives patients to absolutely avoid surgery.

Under the biomedical knowledge, the cardiovascular disease is caused by the sclerosis of the coronary arteries and reduces blood to the heart and brings myocardial infarction (Aphichart Sukhonthasap, 2000) with the symptom of angina pectoris having chest pain and inter-symptoms such as sharp pain in the heart as if being pressed and difficult to breath or colic. Besides heart pain, there are feeling of

soared throat, pains at shoulders, arms, back, and jaws. Chest pain may shatters left arms and its armpit.

Such symptoms suffer the patient but the medical experts recommend that heart surgery by medical technology is the only way to save the patient for that suffering. Here, the patient has to select life and death with the same possible opportunity. Only the physician can save the patient's life from the surgery situation. The patient's life is then in the hands of the doctors. Doctors are godlike who dominate the life of the patient under a heart surgery. Illness experience toward the medical technology in the heart surgery is attractive to be investigated since the patients overlook the deadly risk of a heart surgery.

Treatments by the medical technology bring more pains and if failed they bring chronic pains (Stanworth, 1987). The cardiac catheterization is to diagnose the sclerosis of coronary artery through the computer screen. If there is just little sclerosis, the patient could under take medication. If there are more than two scleroses of coronary arteries, the patient needs CABG surgery. In both cases, the doctor will take out the cardiac catheterization after diagnoses. If the patient has less than two scleroses of coronary arteries, the treatment will be by revascularization or stent by immediately enlarging the coronary arteries (Nopparat Thanachaikhant, 2000).

Steps of cardiac catheterization are under the anesthetization but the patient is conscious all the time. Before catheterizing at the wrist or the groin until the other end reaches the coronary artery, then the angiogram is injected with x-ray and computerized records in each artery. Volume of x-rays absorbed might endanger the patient. The heavy substance injected is composed with iodine. Therefore, if the patient is affected with marine allergy should be also affected, especially with the patient of kidney dysfunction. It needs to be cautious on the radiation affecting the kidney. The patient will be at sharp heat or cardiac arrhythmia during the angiogram. The angiogram may lead to acute myocardial infraction and needs heart emergency surgery (Nopparat Thanachaikhant, 2000).

CABG surgery under anesthetization, the uses of sophisticated medical technology, stopping the cardiac cycle and retuning to normalcy affect the patient's memory in long-term (Nopparat Thanachaikhant, 2000).Before using cardiopulmonary bypass machine (CPB) for hemostasis replacing the human heart needs to stop cardiac

cycle. The patient's life connects with the medical technology, which is unnatural. Inserting artifact into the human body emerges amid the medical interventions within the medical hospital at the tertiary care, which prolong death and emergency treatment (Krakauer, 2007).

The pathological diagnosis has been enlivened during the dark side of the modern age viewing health threat as materialism (Brown, 2011, p.134) based on scientific concepts and rationalization and safety-check for the patient by the medical technology such as by x-ray, ultrasound and so on (Fisher & Mohanen, 2011). It is the isolation from the real world. Why is disease taken as a problem and treated by the medical technology? Is it not easier to view diseases as common things (Brown 2011, p.325). Human illness is mostly self-healed or with common treatment (Phra Vichit Dhammajoti, 2011).

Self-care during human infirmity is the competing goods to the treatment of medical technology the capitalist product. Self-care is unpurchasable values and the fair shared-values for every human in societies (Loustaunau & Sobo, 1997). It is the permanent solution to the mainstream medical services discriminating the rich and the poor because the medical service system is focusing on the rich, the leader level, and the high society people, which concentrate to treat the diseases of rich people such as cardiovascular disease rather than diseases for malnutrition (Starfield, 1998).

Neglecting disease and taking interest in health and human suffering is to disclose the idealism of capitalism behind applying the medical technology for medication (Brown, 2011). It is the political and economic hope through the government policy or regulation to the medical institutions and the medical personnel who invite patients to enter the world of medication where the medical technology is under suspicions (Good, 2007). Applying the critical approach of the medical anthropological concept to analyze the patient's experience of the medical technology for open-heart surgery is subjectivity. It affects the thought, feeling, practice, self and identity based on reasons of each patient amid the changes of social, economic, political and cultural structures nowaday and in the local level and the national level.

Applying the critical approach to analyze the medical technology under the medicalization backs the gains of the medical capitalism and the medical industrial complex expanding its jurisdiction, authority and practice through a greater space in

the daily life of the human beings (Clarke, Shim, Mamo, Fosket & Fishman, 2003). It turns the oddities of the medical technology into the ordinary and creates the medical technological discourse in our daily life (Good, 2007).

Illness experience is created by the institutional power and the social structure (Lapum, Angus, Peter & Watt-Watson, 2010). This includes the medical technology imposed on individuals (Biehl, Goods and Kleinman, 2010). Though there are many studies on the open-heart surgery surveying the outcomes, i.e. mortality, morbidity and economic cost-effectiveness but the patient's experiences with the medical technology of the open-heart surgery are neglected (Rujirawat, Ratttanachotphanit, Samkeaw, Cheawchanwattana, Johns Pratheepawanit, Limwattananon & Sakolchai, 2008).

Allowing patient to narrate by the narrative therapy in view of each individual being their own life expert, potential to reduce influences of their own problems is proactive to problems and attempting to deal their problems by themselves. It encourages, enlivens the power and respects the narrator. It is a return of oneself from being discriminated. Accessing the life experiences of the patient through narrative methodology is to open the space of knowledge from the subjected silent person (Naphaporn Hawanont, 2011). It shows being the lord of knowledge and power, which is not the monetary and influential power but power of idealism and imagination (Biehl, Good & Kleinman, 2007).

The critical medical anthropology perspective explains the inequality of the coverage resource distributions at the national and international levels. It discloses the political, economic, social and cultural structures and the medical institutions, which respond to the medical industrial system and the worldly capitalist idealism (Bear, Singer & Susser, 1997). The medical suppliers of the medical technology create doctor-friendliness, which the medical profession dominates most the medical institutions which formulate language to transfer concepts and call the medical technology rather than medical equipment which exists and prioritize the medical profession to order and to use it more than other groups of profession.

Moreover, the transnational corporations supplying the medical technology supply its data all the time through medical researches, which might be just their propagandas by hiring researchers to find just its positive sides. Doctors are

overloaded and might not have time to check whether it is deadly or not. In addition, doctors have no time to search its new well-rounded data; they then find opportunity to increase their knowledge though the data of the suppliers (Clarke, Shim, Mamo, Fosket & Fishman, 2003).

The critical medical anthropology perspective classifies the analysis in to four levels. They are (1) the individual level examines the illness experiences or the suffering experience toward the medical technology. (2) The micro-social level analyzes the relationship between the medical personnel and the patient in using the medical technology for the open-heart surgery. (3) The intermediate social level analyzes social institutions, i.e. hospitals which using the medical technology. (4) The macro-social level analyzes health in terms of the worldly capitalist system, which emphasizes technological development and sophisticated treatment (Bear, Singer & Susser, 1997).

The individual level – the open-heart surgery applying the medical technology is in the life dilemma to be chopped around the chest (Portor, 2006) where the heart exists and it is the most important organ of the body. It means death is visiting the suffering (Johnson, 1991). Worries of further caring children and the experience of coronary artery bypass grafting (CABG) surgery connect to repetitive productions. The idealism to use medical technology for treatment from the national leaders through the health policy to the patients, fetishism, and reification is the process of the abstract idea shaped by human beings materialized into domination over human beings (Suphang Jantawanich, 2008). Human beings seductively adore manmade medical technology and adhere to its importance.

Heart surgery patients under the medical technology links to artifact such as stent, tube, respiratory-aid equipment, and cardiopulmonary machine are differed to each patient including the inersubjectivity, which is the practice, bargaining or resistance to the medical technology, and the medical personnel related to patients, which connected to be the subjects over the patients.

The patient's experience on CABG surgery is the medical imaginary with queries on the medical technology on its physical jeopardization, its bizarre, its uncertainty of success, and ambiguity of the future events to be met such as death,

disability and disfiguration (Good, 2007). In addition, the individual experiences also reflect dynamism of the political and economic structure and the medical institution. It exposes that human beings give values to life and are aware of self-values relating to all things and express what they think. It is the look on the body filled with thoughts, emotion, and feelings based on subjective reality (Biehl, Good & Kleinman, 2007).

Patients using medical technology are full of thinking about the loss of flesh and blood, death and sorrow leading to imagining about the morgue or disfigured human beings mechanized by cyborg (Good, 2007). It reflects both the negativity and the bizarre of using the medical technology. It reveals the patient's identity with enthusiasm to use it. There will be disappointment and refusal if its uses fail (Good, 2007).

Heart surgery patients amidst the medical technology are under struggles of the biosecuritization discourse (Fisher & Monahan, 2011). The physical threats of using medical technology are seen with both uncertainties of the outcomes from treatments and unsafe (Krakauer, 2007). Amid the political, economic and cultural hope on medical technology created by the idealism of the worldly capitalist system, the medical technology isolates patients from public and embrace patients for treatment (Good, 2007).

The micro-social level – reflecting the interrelation among the medical personnel and the patients leads to heart surgery. The medical technology is no free from the self of scientists, the medical personnel and victims of technology (Lock, Young & Cambrosio, 2000). The technophoric view directs decision of treatment though the medical technology is bizarre. However, the questions are raised about the ethics of medicine, politics, and medical epistemology whether the medical technology is used for the benefit for the patients or to respond to the needs of experts (Gabe, Kelleher & Williams, 1994).

Steps of CABG surgery are complex. It both stops and recovers the cardiac cycle. Surgical method is decided by the surgery team and the medical practice support the subordination of the patients in societies. The medical personnel dominate and frame the new way of living for the patients with more medicalization (Doyal, 1994).

Surgery harms the religious zeal, morality, and physical health including reduces human values to a group of a lifeless but mechanized cells (Elston, 1994). Steps of open-heart surgery need potassium injection to cardiac arrest to ease operation and stimulate the heart beating after surgery. Such techniques certainly ease the surgeons to operate but critically unnatural and use more blood, easily gets complications if the cardiac cycle is not revived (Nopparat Thanachaikhant, 2000). It is difficult to guess the outcomes of the medical technology treating the patients.

In the technophoric view between the medical personnel and patients, using technology display unequal power between the doctors and the patients. Technology is used to transfer ideas and belief of the users to the victims. When the medical personnel claim their expertise in using technology, it displays their medicalization (Weiss & Lonnquist, 2006).

The worldview arisen with people in medical clinic engulfed by the medical technology connecting with treatment and sciences spread around the clinicians. Amid the cultural context of using the medical technology, the clinicians invite patients into the world of medication and inscribe the soma medical experience, and psyche of the patients under various narrations (Good, 2007).

The intermediate social level – examining technology and the medical service system, the latter adopt the former for uses. The medical technology becomes the medical equipment, which the hospital executives have to use them as routine practice. Patients are treated with medical technology controlled by the computer database and least touch patients while accelerating patients to enter steps of treatment without delay. It is to upgrade the medical treatments in the hospital, which is the important mission in developing the hospital quality (Fisher & Monahan, 2011) and the medical service system steps across the threshold to the medico-industrial complex (Clarke, Shim, Mamo, Fosket & Fishman, 2003).

Some technologies are little useful to the patient’s health but they are still used in the clinics because of their diagnosis speed such as the cardiac center using ultrasound though less accuracy (Daly, Guillemin & Hill, 200) . Targets of the hospital and the healthcare unit emphasize securitization for the patients through medical technology. It creases the new responsibility to the medical personnel. Applying it

raises more budgets from the state in training and their personnel team (Fisher & Monahan, 2011).

The policy practices on developing the hospital quality is to provide new public management but requires informed consent. It provides less option of treatments for patients. Many of them are not offered genuine alternative treatments and feel coerced to take treatment. This includes heart surgery patients with medical technology, where their operational index or uses of medical technology are unclear and they have less opportunity to decide or to express their own determination (Doyal, 1994).

The macro-social level – examining the medical technology and the capitalist system; the medical technology is not alone but under the cultural, social, economic and political frameworks at the national and international levels (Lowy, 2001). Concepts to lower health threats of patients through medical technology is the global health discourse made for the economic gains which worry people and make them need to use medical technology (Brown, 2011).

Cooperation of the medical technology suppliers and the global capitalist media (Fisher & Monahen, 2011) and the exaggerations of the medical technology make the government and the hospitals feel the necessity to use it in action (Good, 2007). The state enacts the technological imperatives to suspend death and to prolong the life from the incurable chronic diseases (Fisher & Monahen, 2011). This is to express the state well wishes on health security (Brown, 2011) Therefore, use or not using the medical technology, such as stop pulmonary respirator, must follow legal rationalization (Fisher & Monahen, 2011).

The medical technology is produced by the industrial system. The suppliers are making market gains in its trading (Clarke, Shim, Mamo, Fosket & Fishman, 2003). Companies supplying medical technology build concepts of treatment through medical technology and cover its failures (Good, 12007). Some technologies err in result report and its unaccountability still exists (Fisher & Monahen, 2011).

This research applies the concept of Cyborg Anthropology explaining the relationship between machine or artifact and human beings under the cultural context. The open-heart surgery using multi-medical technology leads the patient's life to connect with the medical technology and not the previous human life any longer.

Adopting artifact into one body emerges amid the medical practice intervention in the tertiary care prolonging death and emergency treatment (Krakauer, 2007) among the cultural context of the medical sciences where finance is deeply woven (Good, 2007).

Referring truth of using medical technology for the patient through biostatistics with legitimating (Clarke, Shim, Mamo, Fosket & Fishman, 2003) is to treat patients with modern medical technologies but still full of suspicions. Some of them are still under the clinical trials) and after applying it, patients are still not healthy (Good, 2007). CABG surgery should study human history and real human diseases through observing human beings in the real situation rather than from biostatistics.

Investigating patients' experiences toward medical technology in CABG surgery is to free human being from social dominance and health service system. It leads to changing from the traditional health service system, which is related to power between providers and recipients to the modern health service system, which protects recipients and opens a platform for the protection of the medical technology consumers. This is to introduce the new health service system useful to all in the social groups.

The significance of the problem; the critical medical anthropology perspective and the concept of Cyborg Anthropology amidst complexes of economic, political, social and cultural structure and the medicalization demand people to solve their problems through examining that there are diseases and the medical technology is the only treatment. Critical questioning on medical technology might lead to applying it with patients where it brings happiness physically and mentally.

1.2 Research Questions

1. How does the health policy prioritize medical technology in treatment, affect the mainstream of the medical service system, relate unequal power relationship between the medical personnel and patients and their illness experience toward CABG surgery?

2. How does the mainstream of the medical service system following the health policy prioritizing the application of medical technology legitimize the medical personnel in CABG surgery with the medical technology?

3. How is the relationship between the medical personnel and the patient under the inequality of power to decide treatment with discursive proactive of CABG surgery applying the medical technology?

4. How is the illness experience of the patients to the CABG surgery having both resistance and negotiation, which are subjectivity and affecting thought, emotion, practice and self?

1.3 Research Objectives

1.3.1 General objectives

This is to study the illness experience of patients towards the medical technology in CABG surgery, which are the subjectivity leading to differently creating self and treating illness in each patient; their experience of patients existed under relationship between the medical personnel, health service system and the health policy amid the economic, political, social and cultural structures at the local and the national levels.

1.3.2 Specific Objectives

1. To analyze illness experience of patients towards the medical technology in CABG surgery which existed under power relation between patient and medical personnel, especially political-economic factors, cultural factor, national health policy and medical service system with capitalistic ideology

2. To study illness experience of patients towards the medical technology in CABG surgery which is subjectivity having resistance and negotiation and affects thought, emotion and practice leading to different self creation and illness treatment in each patient.

1.4 Scope of this Study

This is a qualitative research applying narrative interview, documentary review and in-depth interview.

Part 1: It is an investigation of the illness experiences among patients towards medical technology in CABG surgery applying narrative interview and participant observation. The interview questions are in the Appendix. The research participates in deep listening with filed notes and information collected is intersubjective with the narrators. This creates prudence and reflexivity, which are the important variables in checking data, ways of thinking, analysis, and the creation of good relationship between the researcher and the participants. Purposive sampling is in line with the critical approach. Participants have been sampled from CABG patients from other hospitals and the hospital site through their fetching medicine to control symptoms in the hospital site, which is the Eastern Hospital Center of Thailand.

Part 2: Reviewing of documents related to developing hospitals for cardiac center have been explored on budget, workforce, action plans and priority of the policy in developing the cardiac center of the hospitals.

Part 3: In-depth interviews and participant observation have been taken with experts applying policy, regulation and practices of the medical technology with CABG surgery in the hospitals with the interview guideline in the Appendix.

The research was conducted during December 2011 – March 2012.

1.5 Contribution from this Study

1. The knowledge of the anthropological theories on medical technology, which is part of the human body and leads to its implementation, is for the human wellbeing physically, mentally, and spiritually under the current Thai social context.

2. Knowing the thought, emotion or feeling and practices of the patients toward medical technology in CABG surgery; and it displays the pros and cons of applying medical technology in CABG surgery.

3. It reveals the spread of medical technology in CABG surgery related on capitalism, health policy and prioritization of the national hospitals.

4. It is to be the guides for further researches on medical technology with CABG surgery in relation to the health promotion of the patients after CABG surgery.

1.6 Operational Definitions

Patient undergoing CABG (coronary artery bypass grafting) surgery are patients having open-heart surgery under anesthetization to treat the contraction of the coronary left main arteries or acute contraction of three coronary arteries which might slow the function of the left lower side of the heart including having acute irregularity of the mitral or aortic valves.

Illness Experience of patients in CABG surgery are the perception of their subconsciousness toward medical technology in CABG surgery having both resistance and negotiation affecting thought, emotion and practice leading to different self creation and illness treatment in each patient. It helps define all living and non-living things around them amid the cultural context which reflects the social relationship and the social institution pressing their lives and bringing them torture.

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CHAPTER II
THEORETICAL CONCEPT

This chapter is contributed to concepts and related theories of medical technology and the critical approach of the medical anthropology to properly conceptualizing the framework for the investigation. This is to study the illness experience of patients towards the medical technology in CABG through illness narrative and through related documents of developing the Cardiac Center regarding budgets, personnel, job plans, priority of developing the cardiac center policies and in-depth interviews with experts.

The critical approach of the medical anthropology is used in analyzing problems in this study. It relates at the level of individual being mal practice of medical ethics (Vithoon Ung-prahan, 1995), implementing expensive medical technology with few recipients, which might lead to problems of socially unfair allocating resources by using the limited resource to serve just few people rather than fairly use them with people at large (Vithoon Ung-prahan, 1995). It needs to consider illness experience, which is a holistic study of life as being an individual, a social member, a part the nature (Mukda Suksamarn, 1995; Phra Whichit Dhammajito, 2011), and level of society problematic to the cardiac health service system regarding growing expenses, unfair treatment and the service inaccessibility (Rujirawat, Rattanachotpanit, Samkeaw, Cheawchanwattana, Johns Pratheepawanit, Limwattananon & Sakolchai, 2008). It cannot be denied that major causes of these dilemmas coming from perspectives of seeing diseases and patients in the medical biologic lenses in association with global development and social development stressing capitalism and consumerism (Phra Whichit Dhammajito, 2011). Contents are as below.

2.1 Development of the Medical Technology Concepts

2.1.1 Concept of Technological-determinist View

It is to understand technology as a technological application and technology is the determinist to change society (Daly, Guillemin & Hill, 2001): an explanation of the medical technology through structural –functionalism. It contends that the medical technology is a tool or a device to prolong human life, which leads to its more complexity. This included screening technology, and the uses of high-tech medical technology as the miracle cure (Stanworth, 1987).

The structural-functionalism contents that using the medical technology is the consensus legitimized by society, a social order to heal public ill health to return to normal roles and duties (Lupton, 2004). The concept of technological-determinist view explains the medical technology with objectivity and with impartiality but not questioning benefits of the patient, the medical doctors and the capitalism, which overshadows the uses of medical technology (Lupton, 2004). Handling health and society by sciences and technology emphasizing hospitalization is the burden to the social expenses, state budgets and individual budgets (Stanworth, 1987). It is also inefficient to address chronic diseases especially cardiovascular disease.

The concept of technological-determinist view finds only the positive view of the medical technology without considering its negative sides that damage health. It also helps justify medical personnel who use it. It is naïve realism, which the patient can optimize to reject or choose or to be submissive top the uses of medical

te4achnology (Stanworth, 1987). In light of the structural-functionalism, the concept of technological-determinist view recognizes the spread of the medical technology into various regions of the country without considering it as health resources in general within both the public sectors and the private sectors. This includes expenses to maintain technology or the maintenance personnel or custodians. The concept ignores social context, politics and technological economy where technology is not just the visualized and touchable machine but also being aware of the context which technology is developed, improved and implemented (Daly, Guillemin & Hill, 2001).

2.1.2. Concept of Cyborg Anthropology

Based on the technological-determinist view, it defines technology as an application of the scientific knowledge to achieve targets in developing industries and commerce. However, anthropologically, it means a knowledge system, tools and variety of skills use in crating precuts for human societies and economy. (Daly, Guillemin & Hill, 2001). Technology is an appeal if worth to human needs (Daly, Guillemin & Hill, 2001).

Haraway (1991) a cyber feminist analyses and conditions the advancement of sciences and technology in the lifestyle of postmodernism of the west. She integrates methods of feminism, psychoanalyses and Marxism in order to analyze the discourses of race, gender, and classes transformed by the technological development through studying the neo-human age who are both human and cyborg manifesto. It is the relationship between the technological machine and human under the cultural context. Human image is moved from the cyborg image of human self and machine. (Daly, 2011)

The concept of cyborg anthropology analyzes knowledge, tools to access knowledge and opportunity to access knowledge of sciences and arts (Daly, 2001) amid the global culture connected with the international market power (Clarke, Shim, Mamo, Fosket & Fishman, 2003) . The medical technology trading is the typical commodities, which are changed to be the tangible public goods (Miller, Sanders & Lehoux, 2009). It affects the social classes of the first tertiary until the third tertiary (Clarke, Shim, Mamo, Fosket & Fishman, 2003). It creates advantages taking between

the state, discriminating ethnicity, classes and advantage taking among genders (Miller, Sanders & Lehoux, 2009).

Emerging the big science projects and technophilia creates biomedicalization by analog and digitalization (Clarke, Shim, Mamo, Fosket & Fishman, 2003), amid the circulation of data context and diversification of TV, radio, newspapers, journals, and magazines (Loustaunau & Sobo, 1997) cyberspace(Good, 2007), medical texts, novels, medical guides. They are found in newspapers and journals, hygiene leaflet, individual experiences, and other experiences on symptoms similar to oneself and medical consultation (Loustaunau & Sobo, 1997), which are related to time, space and values of the created human beings.

The concept of cyborg anthropology comes from the movement to enter the post structuralism. The humanist movements focusing on human-centered, lead to post-humanist and question about the autonomy of an individual. Individuals can maintain their autonomy to a certain extent and be flexible for adaptability (Daly, 2001). Self-determinism can help adapt to survive from the situation using medical technology, which is complex and unpredicted consequences (Stanworth, 1987).

In addition, the Cyborg Anthropology optimizes to respond the human being the subject and being the subjectivity connected to mechanism (Good 2007) amid the cultural context stressing on digital capitalism where the distributors of world technology and experts are manufacturers and disseminate data (Clarke, Shim, Mamo, Fosket & Fishman, 2003). They allow humans to recognize technological data and diversely creating themselves.

Humans develop technology for their life sustaining and make societal advancement. Their existence can transform under the controls of cyborg. In the case of dialysis with the patient of renal failure, it can prolong their life for 20 years. However, technology has restriction to co-exist with human being. The critical approach on technological practices and its appropriateness where technology is everywhere penetrative in every corner of the societal lifestyles (Daly, 2001) helps to decide whether to use the medical technology or not.

2.2. The Critical Medical Anthropology (CMA) Perspective

2.2.1. The Essence of CMA Perspective

Its critical background is the global capitalism, which brings social inequalities and powers, and they become the elements to determine health condition and healthcare system (Bear, Singer & Susser, 1997). They analyze accessibility and the uses of the same technology among scientists, clinicians and the local people (Lock, Young & Cambrosio, 2000). They point out the pros and cons of technology against health. This is a collection of the post-modernism, the critical theory, sciences, technology and health (Lupton, 2004). It is a multiple interpretation of the medical technology characterized in the interdisciplinary by questioning the impartiality of using technology, which resist sciences (Krakauer, 2007) and analyze the social process and politics related to the uses of technology (Lock, Young & Cambrosio, 2000).

Criticizing technology by classifying advantages and disadvantages whether it brings advantages where a society has proved does it not really endanger human beings. At the same time, it proposes guides to apply technology with the changed social contexts (Daly, Guillemin & Hill, 2001). Criticizing the structures at the level of individual and unto the social level least endangers human beings in using the medical technology but optimizes the medical technology. It reveals whether to accept or to resist technology (Lock, Young & Cambrosio, 2000).

The CMA connects phenomenon at the individual levels to the macro context (Bear, Singer & Susser, 1997). Solving individual problems needs to be aware of the social structure and it relationship which determine troubles (Suphang Janthawanich, 2008) because social institutions also control or oppress human lives (Naphaporn Hawanont, 2011).

The rest half of the 20th Century, there was a shift from medicalization to biomedicalization. It doubled dominion through variety of the processes with the jurisdiction of medicine. It brings medical problems. Biomedicalization changes both human and non-human under the advancement of sciences and technology, which are molecular biology, biotechnology, genomization, organ transplants and advance medical technology (Clarke, Shim, Mamo, Fosket & Fishman, 2003).

The medical biotechnology applies the theory of disease susceptibility based on capitalism, which seeks profits from the patient and creates the capitalist health inequality and it is driven from the levels of institutions, nations and the globe. It includes unequal power between the medical doctors and the patient, which leads people to strive and affect social behavior and their social experience (Lock & Scherper-Huges, 1990).Capitalism and industrialism damage public health started on ecology with lesser ozone and creates global warming, wastes from factories, climate pollution, disaster and accidents from machine uses (Williams & Popay, 1994).

Applying the theory of disease susceptibility based on capitalism, leads to technological invention to treat those who have purchasing power for medicine such as cardiovascular disease. Ignoring disease from hunger of the poor enlarges a social gap between the rich and the poor (Starfield, 1989). It is the failure in solving the social grand narrative of the modern era, which the scientific thoughts are justified for solving social problems for quite long time. However, it cannot be denied that scientific can split itself from political power. The illness experience from the local people is critically characterized the spread of dispute and scientific knowledge in the post-modern era (Williams & Popay, 1994).

2.2.2 Narrative as Methodology

The concept of symbolic interactionism prioritizes human experiences. It mentions about interpersonal actions with the surrounding world with the resistance and negotiation process (Morse & Johnson, 1991). It uses illness experience to connect body and mind under the social and cultural context, which involves variety of life components rather than physiopathology (Good, 1994).

Illness experience is developed from an inductive approach and its grounded theory used in the qualitative approach is a form of better explanation for the complicated illness experience through interview, participatory observation and other sources of data used such as from the medical chart record. It is a drive for researches arisen from the gap of the local knowledge (Morse & Johnson, 1991). The theory of illness is likely developed from the illness perspective rather than from the medical personnel, the social workers, or other important persons in society (Richter, 2008).

Illness experience is the affect found in daily life. Its subjectivity is to consider life world in the form of material rather than the non-material. It is to observe the body with sheer spirit and ideology (Biehl, Good & Kleinman, 2007) through perception (Nichter, 2008) or through consciousness, which is the pivot of self-generation and self-perpetuation (Kleinman, 1988; Good, Brodwin, Good & Kleinman, 1992; Biehl, Good & Kleinman, 2007).

Perception arises before the chemical process with complicated networks, which will later turn to be the cells. The theory of rationalism adhering to the material truth cannot explain it. Therefore, the perception is the begin of life (Capra cited in Wisit-Nattharos Wangwinyoo and Sawing Pongsiriphat, 2005). It needs to consider the spirit as perception (Nichter, 2008) or gives the meaning (Kleinman, 1988) or cognition (Biehl, Good & Kleinman, 2007) which differ from scientific thoughts. It is an in-depth intuition. Spirit, which is the human reason, is a part of the human soul and it is not separated to be material or mind only (Phra Phaisarn Wisalo, 2004; Pra Wichit Dhammajito, 2011).

Perception is transformed into the sense without being framed is not only extrovert perceived with the sensory but also, the introvert senses, which perceives emotion or spirit together. It is sensitive and complicated connected with human behavior even to social surrounding (Biehl, Good & Kleinman, 2007). Surroundings or the living habits influence genes in the reproductive genes of each living body (Mukda Suksamarn, 1995).

Once human perceives his self, his deep play will drive him to raise a question about life or to find answers to the life problem knotted to oneself (Biehl, Good & Kleinman, 2007) through imagination or narration (Kleinman, 1988). Imaginations are narrated thorough fables, myth, literatures, traditions, and religion, where humans have deep connection with the universe, skies, stars, lands, rivers and other holies (Good, Brodwin, Good & Kleinman, 1992).

Imagination is the foundation of ethic and moral existing amid humanity (Biehl, Good & Kleinman, 2007).Problems of emotion and senses allow humans know that they are not alienated from any of their surroundings naturally, materially and environmentally counted from the levels of societies to their families and unto themselves (Mukda Suksamarn, 1995). It is necessary to respond to the question of

what are the body and the life. Why is one sent into this world without intention and sent out without intention? (Kleinman, 1988; Phra Phaisarn Wisalo, 2004).

The complicated emotions and senses within integrity of each one are different in each other. Emotion with compliance with others, with environments and needs the senses to stabilize one's existence in this world requires freedom from being caged in this world (Biehl, Good & Kleinman, 2007).

Though imagination or narration is seen as non-sense (Lock, Young & Cambrosio, 2000), irrational (William & Popay, 1994) but all these narrations are net within the courses of politics, economics, and social values. It is a human perspective to the universes, to the world, and to other things including human artifacts such as technology and the human-self (Biehl, Good & Kleinman, 2007). All these narrations enable each ethnic group, each tribe and each hemisphere to exist themselves and with compliance with others and environments in each age and in each era. They always pair with sciences without conflict, break or elimination from each other. On the contrary, they are developed in pair ever since (Paul Feyerabend (1978) cited in Wira Somboon, 1998, 2006).

The highlight of the postmodernism is the collapse of the Meta Narrative – the modern scientific discourse tempting humans to believe in the advancement and liberation, which is losing ground of its accountability derived from technology and its digital impacts based on prediction. Diverse discourses and Mini Narrative appears and cannot be subject to a universal Meta Narrative. It rises countless specific complicated narrative (Haraway, 2008).

The perspective of health and illness with monitoring and surveillance body under the double discourse is first, about the risk, expense control, duration of survival, scientific rationalization (Kaufert, 2000) and expertise (Naphaporn Hawanont, 2011). Second, is the rational-based knowledge to understand the human body of oneself (Good, Brodwin, Good & Kleinman, 1992), which connects to emotion, belief, moral, fear and death (Kaufet, 2000). They are in the form of illness narrative (Kleinman, 1988). It is the lay knowledge (Naphaporn Hawanont, 2011). They will be changed by social context when illness and the clinical practices happen(Good, Brodwin, Good & Kleinman, 1992). Both kinds of knowledge are irreplaceable to each other (Kaufet, 2000)

2.2.3. Four Levels of Analysis with CMA Perspective

2.2.3.1. The macro-social level

Its hypothesis at this level is technology is not just what one see and medium only (Daly Guillemin & Hill, 2007) but the medical technology connects to the international business under the global capitalism - medical technology trading, drug industry and health policy (Fischer & Monahan, 2011). The promotion of biomedicalization dominion in the health service system, the class reproduction, and the profit-making orientation are the critical causes for the biomedicine to emphasize technology, medication, and complicated treatment. Such practices are legalized, trained in the medical school, and supported in biomedical researches (Bear, Singer & Susser, 1997).

Relationship between the global capitalism and the state

World capitalism backing profit from production and applying medical technology to help people creates philanthropy in medicating diseases and turns medical technology into the social goods (Good, 2007). Information circulated in societies make profits for the distributors to the medical technology and another way to monitor people (Clarke, Shim, Mamo, Fosket & Fishman, 2003). They increase the health expenses of the state in using medical technology to save the life of people.

The randomized clinical trial of the medical technology or drugs by the transnational companies uses the evidence - based data and statistics (Clarke, Shim, Mamo, Fosket & Fishman, 2003) from the state agencies, who collect some types of demographic data in using medical technology or drugs, such as blood, stool, cheek tissues, gene check, epidemic data sample of pathology, and medical records (Loustaunau & Sobo, 1997). People never have been requested for permission or compensations from these transnational companies, which use their bio-data. It is the interference of their privacy and decreases their power of ownership in their won demographic data (Krakauer, 2007).

The medical technology distributors will coordinate their befits with the political powerhouse and the medical association (Clarke, Shim, Mamo, Fosket & Fishman, 2003). There are researches of the medical technology to defeat illness as key in medication and overlooking the overuses of technology in diagnosis

or treatment. They look at the break-even rather than seriously helping the poor and those inaccessible to the health service (Kaufman, Mueller, Ottenberg & Koenig, 2011). There are insufficient government researches to identify the extent that the new medical technology in the markets worth the health system in each country (Miller, Sanders & Lehoux, 2009).

Cost is used in considering the medical technology rather than its efficiency (Miller, Sanders & Lehoux, 2009) such as the economic break-even in the health cost, the incremental cost-effectiveness ration (ICER) of health service and per capita (Rujirawat, Rattanachotphanit, Samkeaw, Cheawchanwattana, Johns Pratheeppawanit, Limwattananon & Sakolchai, 2008). Using the medical technology such as CT scan (Computed Tomography Scan) and MRI (Magnetic Resonance Imaging) which are not only expensive (Hill, 2001) but also training for technical control must be organized with maintenance cost. Now, no fund has been provided to keep personnel for its repair people (Last, 1987).

The state is aware of the importance in using technology to sustain people (Kaufman, Mueller, Ottenberg & Koenig, 2011); it regulates policy, laws and makes decision difficult not to use technology and if not using technology, must have clear indication including licenses must be requested (Krakauer, 2007). Unnecessary treatments using technology are surplus in the hospital and paid by the state (Kaufman, Mueller, Ottenberg & Koenig, 2011). This is to use the medical technology to diagnose illness and medication. In addition, it is to classify people by categories and kinds to meet the needs of the state medication (Fisher & Monahan, 2011).

Problems of drawing scientific and technological policies prioritize practices of scientists and medical doctors who are the expert groups by lacking to consider the cultural, social, economic and political contexts (Lowry, 2001). Analyzing technology at the social level must be systematic on the objective of implementing technology, and importantly, what do society and humans receive from technology (good, 2007). Technology will be developed and implemented in specific situation of society and politics and sometimes, its consequences cannot be predicted (Daly, Guillemin & Hill, 2001). By reason, technology is not just a machine with objectivity only (Krakauer, 2007).

2.2.3.2. The intermediate social level

This level emphasizes social institutions, i.e. hospital (Bear, Singer & Susser, 1997) which analyzes the health service system using medical technology for the recipients' better health. If analyzing another side of the hospital, it is a social institution using medical technology to cage the poor patients affected by illness (Daly, Guillemin & Hill, 2001).

The policy of developing the Cardiac Excellence Center

The state is interested in medical technology considering from the public accessibility of medical technology (Good, 2007) and its availability around the country (Jackson, 2001). The policy is drawn to establish more cardiac excellence centers in the provinces. This is to reduce transport expenses for treatment in the central area, to save the life of the emergency care for the myocardial infraction patients, and to develop the center's capacity to achieve the level of international cardiac excellence center (Office of Policy and Strategy: Ministry of Public Health, 2008).

Organizing the social order in the medical institution with the treating the bureaucracy for the common practices by not adhering to personal feeling but emphasizing efficiency, rationality and code of conduct allows the medical personnel detach human sensitivity (Hunter, 1994). At present, the hospital image, operation and medical technology walk together. Without hospital, there will be no advancement in technology and operation. Then human life will be without treatment to thing invasive to human body. Hospitals are used for the physicians' meeting to decide surgery and emergency cares. Appraising each hospital is using number of beds in each hospital (Portor, 2006).

The specialist hospitals are more likely medicalized than general hospitals. The public hospitals had goal to help the poor. In fact, the hospitals control number of the patient through admission, appointment and regulations (Friedson, 1970). Significantly, the hospital pioneers new technology which the new operation used with patients are suspicious whether new technologies can respond to the suspicion of the medical experts and for operation practices or for the real benefits of the patient (Portor, 2006).

The 20th century hospitals have changed from the previous centuries as if the care homes for the poor to become the center of the modern medical centers. However, hospitals in this century are watched by societies because more surgeries increase the hospital's expenses especially with the modern technologies which are used in diagnosing diseases starting from X-ray to CT scan (Computerized Tomography) (Weiss & Lonnquist, 2006).

The emerge of hygiene in the 19th century (Elston, 1994) turns the hospitals to change from their determination to treat the poor like repairing machines into the medical institution to repair or to change machine. The human organs of all classes affect the medical costs more during the 20th century. Rationally, operations are more intricate, counted from the laboratory tests and more technology for diagnosis. The medical technology is more significant with more expenses (Portor, 2006).

Societies begin to question medical technology and hospitals, which cannot solve the entire illness (Saks, 1994). It is predicted that hospitals cannot still respond tit he the needs of the patient in terms of life. Current hospitals might meet their end like the primitive life such as the dinosaurs, which could not adapt themselves to the changing age. Other institutions, which are simple and accessible to every corner of life, would replace the hospitals (Portor, 2006).

During the decades of 1990, there were paradigm shifts of repair to creating health, and illness plans shifted to chronic diseases, the awareness of the negative problems and dehumanization caused by medical technology, availability of lay knowledge, needs of involvement in handling life and public health as the consumers and needs of controlling expense crisis for better health (William & Popay, 1994).

The new social movements (Elston, 1994) emerged in the past two decades (Loustaunau & Sobo, 1997), were the assembly of individuals to demand the change of values and lifestyle (Elston, 1994). It was the resisting trends against rationalization rather than emotion and feeling (Saks, 1994). This was the spark leading to changing the reductionistic public health paradigms to the holistic view (Loustaunau & Sobo, 1997).

Suspicions over the justified knowledge, expertise, power and roles of experts, problems of social and health handling by sciences and experts such as failures in addressing chronic diseases are coming from restraints of conceptualization in separating body from the mind. Emotional dimension, feeling, and holistic view have been overlooked. This includes the emerge of new political culture which emphasizes public self-determinism which turns relationship between the medical service providers and the recipients involve in deciding their health rather than waiting for order and compliance to the experts (Saks, 1994).

The public health in the 19th century emphasized public participation allowing them to look after themselves and applied the lay knowledge. It showed the public participation (Williams & Popay, 1994). The lay knowledge was logical and rational in itself. It emphasized coexistence with equilibrium between human beings and nature. It was also the fight-back movement of civil politics to open the social space and to claim legality to determine their own fate. It was also claiming their power to determine the principles of the national resource uses (Last, 1987).

Following the policy of developing the hospitals is to integrate the illness experience as a part in the treatment, their empowerment and their competence. It helps enhance the illness because power involved closely to the level of control and life determination which individual perceives. Powerlessness is the risk factor of disease susceptibility (Starfield, 1998). Knowledge of biomedicine includes the meaning of society and the patient point of view (Loustaunau & Sobo, 1997). Problems to be solved are malpractice, disrespectful to the patient's idea, degrading the patient's values, and ignoring to the patient's question (Hunter, 1994). It needs to treat them holistically on their bodies, their mind, their emotion, their spirit and their societies (Loustaunau & Sobo, 1997).

2.2.3.3 The micro-social level

This level emphasizes relationship between the medical doctors with the patients and medicalization at the level of interaction. The medical doctors demand treatment and medicalizing distress. The patient has to admit according to the doctor's demand since doctors has expertise-based (Bear, Singer & Susser, 1997). It affects patient who turn to a lifeless material (Williams & Popay, 1994).

Surgeons save the life of patients by expertise knowledge

The expertise knowledge legitimizes in defining disease, medication and decision in monopolizing medical technology for treatment. Using medical technology under the expert's experience saves and prolongs the life of the patients (Krakauer, 2007), then it reproduces an ideal of medical technology of the experts through dominating and constraining patients when the physicians interfere them with medical technology used in the health service system under the uncertainty of their medication and medical dependency (Loustaunau & Sobo, 1997).

The expertise knowledge explaining the physiological conditions which raise the pathology of the patients is the language which patients cannot access the biomedical knowledge. The explanation of the medical sciences relating to disease susceptibility in the patients' cell levels and the side effects of the medical technology in medication cannot give credible responses to the meaning of an individual life. However, patients and their relatives have to understand the dilemma. The social scientists and anthropologists have developed concepts based on individual attitudes changeable by historical contexts through narrative model from the self-life experiences interfered by medication and unable to solve health problems, which patients are encountering. This is the failure in using medical technology (Williams & Popay, 1994).

The clinical decision from the influence of the physicians' thinking affects the findings of cardiovascular disease in women at lower rate than fact (Doyal, 1994). Inclusion of using age data, it turns the symptoms of the cardiovascular disease more acute with greater fatality rate (Loustaunau & Sobo, 1997).

Physicians likely do some medication rather than none even though uncertain and little certain. However, they want to see the success of their treatment. When patients meet them, any medication is taken rather than consultation. Upon informing diagnosis, physicians will announce any susceptible disease. Such idea indicates their decision rather than rationalization or scientific principle (Friedson, 1970).

Idea emphasizing the medical action is to build faith in themselves. However, physician likely excuse that it is to respond to the needs of the patients. It then raises partial relationship of power in decision-making of treatment

between the physicians and the patients. Physicians are happy with the entreaty of patients in prioritizing them (Hunter, 1994). It is observed that either the public hospital or the private hospitals with different medical practices being differently oppressed by patients; physicians still provide similar medical practices. Emphasis of medical practices rise along with the physicians' confidence of prescribing that there will certainly be good outcome. They also confidently act in their medical practices though physicians and the patients are not realizing and misled on recovery that it is the consequences of their medical practices (Friedson, 1970).

Ideas emphasizing medical practices have been ingrained since studying in the school of medicine (Loustaunau & Sobo, 1997). In addition, biomedicine still has invasive solution, which transforms physicians to be the interventionists to the human body most (Krakauer, 2007). Theoretically, physician is a profession relying on sophisticatedly scientific knowledge and it is the main reason supporting the monopolistic power of the profession (Friedson, 1970). However, in practices, it is found that there are so drastic different among the physician groups on diagnoses and medications of the same disease, either operation or prescriptions or using anesthesia and so on. Such differences come from constraint of the medical sciences knowledge applied in the medical practices and each medical experience (Loustaunau & Sobo, 1997).

Upon coma, the patient is used as the battlefield among physicians and death, which they endeavor to defeat at all cost by ignoring effects on the patient. If they can eliminate or delay death, they win. However, if death is winning, they will withdraw themselves from the battlefield. Social scientists conclude that though death is the first enemy the physician must overcome but they fear death and scare to admit patients with least survival and disregard the near-death patients (Loustaunau & Sobo, 1997). It makes them think that patient dying on surgery bed is serious but in the recovery, room is common (Friedson, 1970).

Technology and human are parts of the intertwined relationship network. The purpose of applying technology is partially specifying technology (good 2007). Either using or not using the medical technology requires considering the social and economic structure in association with idea and mood of the medical doctor and the patient (Krakauer, 2007). The medical practices involve mainly

with clinical experiences, which is the genuine and unique treatment and handling disease. It makes the medical practices become subjectivity emphasizing personhood (Friedson, 1970).

The root of biomedical knowledge considering pathology of sick organs overlooks feeling and data of the patient. Applying the medical technology for diagnosis and treatment empowers the physician to definitely dominate the patient more. The advanced medical technology used in the hospitals raises competence to fight death better, which challenges physicians (Krakauer, 2007). The medical personnel are legitimized to use the medical technology for the open-heart surgery, which in turn make the patient discards being the agency. In addition, applying technology in surgery suffers the patient affecting the patient's characteristic (Lapum, Angus, Peter & Watt-Watson, 2010).

Raising questions of using medical technology both techniques, method, and impartiality that who does technology serve? Who control technology? The impartiality of technology comes from the economic and political motivation, which is behind it (Kaufman, Mueller, Ottenberg & Koenig, 2011). The transnational distributors of the medical technology encourage the medical personnel through discount in ordering the medical technology, hosting banquette, premium, and excursion abroad to motivate physicians to persuade patients to use the corporate medical technology. Trading-led profession of the medical personnel critically affects profits for the transnational corporations distributing the medical technology.

Development of surgical knowledge

With the Hippocratic Oath recalling the archeology of surgery, physicians began to practice it with the poor patient until arriving at the proper one. Surgery was then applied to successfully solve the problem of the historical dignitaries such as King Louis XIV. The poor patients were the contributors of the surgery and raised it to the higher honor (Weiss & Lonnquist, 2006). Surgery was so developed during the Enlightenment Age and based on empiricism. It emphasized practices rather than intellectual, which could be could be called that surgery is skills rather than intellectual (Portor, 2006).

The studies of surgery founded on the postmortem surgery leads to constraint on anatomy and physiology of the living person where there is blood circulation. In addition, there is differentiation and normal variation of organs of each patient, which cannot take truth-claim of analogy (Portor, 2006). Many patients in the hospitals are classified by similar diseases rather than by case. The medical knowledge likely explains the representative disease with statistics, which medication is not based on what the symptoms told by the patient but lesion. It is viewed by objectivity rather than subjectivity (Kleiman, 1988).

Efficiency of medical technology in surgery

The surgical processes amid medical technology are so powerful. In the case of emergency treatment or the last method, it shows modernity and is a weapon to fight with death in order to prolong the human life. The medical knowledge just explains the malfunction of organs under the lights of local pathology of anatomy related to local organ and local pathology (Portor, 2006). However, suffers of the patient from surgery embraced by medical technology (Good, 2007) are no explained. Surgery intervenes and invades the human body (Stanworth, 1987).

The 20th century became the century of surgery because there is a connection between the pathological anatomy, general anesthesia and asepsis. Surgeons determine to cut off the vascular obstruction by replacing of the sclerosis artery with some parts of the artery or of the vein from other parts of the body by cut and join it. It can ease the symptoms of the disease. The 20th century then became the Golden Age of Surgery (Portor, 2006).

Knowledge of heart surgery began in 1628. Williams Harvey found the blood circulation system in the body and the heart (Weiss & Lonnquist, 2006). Later, there was heart pacemaker to regularize heartbeats (Portor, 2006) including the laboratory test for heart disease. Sciences prioritize the objectivity in formulating truth and localized practice (Good, 2007).

Medical technology used in CABG surgery

Electrocardiogram (ECG)

Electrocardiogram leads to monitoring the heart malfunction (Portor, 2006). Electric wave can identify heartbeats, sizes of atrium and ventricle, pericardium heart disease and myocardial infraction. Electrocardiogram will be malfunctioned when there is severe heart disease such as severely ischemic heart disease, myocardial infraction, and cardiac-arrhythmia. Normal rhythm for the laboratory test does not mean free from heart disease (Somchart Lhojaya, Boonchob Phongpanich, and Phanpis Sakhonphan, 1993; Noppharat Thanachaikhan, 2000).

Heart Ultrasound

Development of heart ultrasound through the principle of high frequency reflexive wave, which will pass through the breast to the heart (Portor, 2006) and the high frequency wave pass through organs, it reflects the signal. Computer will take these signals to create echocardiogram, which will help the physician to find the irregularity in the coronary artery while diagnose and predict disease. However, heart ultrasound will not directly expose the coronary artery (Somchart Lhojaya, Boonchob Phongpanich, and Phanpis Sakhonphan, 1993; Noppharat Thanachaikhan, 2000).

Cardiac catheterization

Development of catheter for testing coronary artery and revascularization (Portor, 2006), currently, it needs to take rest in the hospital for a day and uses of local anesthesia replacing general anesthesia. During the test, patient can see through the screen all the time. Side effects resulted from the test through catheter come from color hypersensitivity, which is the iodine substance used in the injection. Symptoms found are started from mild to severe such as paralysis, arrhythmia and death (Aphichart Sukhonthasalp, 2000).

Technique of CABG surgery

CABG surgery under anesthesia and patient being unconscious allows the physician to operate freely. The anesthesiologist will place tube for helping

breathing and activate ventilator. A surgery team contains more than 3-4 members and divides into two teams working at the same time. A team will operate sternum and join the coronary artery to the cardiopulmonary bypass (CPB) machine. Another team is taking out artery for joint. Usually, vein from leg will be used or artery to foster the breast or vein from either right or left wrist or both as physicians see fit (Noppharat Thanachaikhan, 2000).

Technique of open-heart surgery counted on hypothermia with chilled oxygen. Using cardiopulmonary bypass machine in the medical technology or artifact for the extracorporeal circulation until the completion of joining coronary artery; then the cardiopulmonary bypass machine is stopped. The CPB mechanizes two functions, i.e. 1) a pulmonary for hemodialysis for supplying oxygen for the body, and 2) a heart to pump blood for the body (Portor, 2006).

After cardiac arrest, surgeon will join the start of vein taken from the artery and another end joined to the coronary artery until all are joined and normally around 3-5 arteries. Upon complete by plans, the blood will be ventilated to the heart again. Then the heart tissues are closed by stitching sternum with wire and the anesthesiologist will wake the patient but still with the respiratory tube (Somchart Lhojaya, Boonchob Phongpanich, and Phanpis Sakhonphan, 1993)

Having cardiac arrest for many hours and pulsing again is the suffering of human to admit damage happens to one's body (Portor, 2006). Nervous cells might be damaged when oxygen is not fully ventilated during surgery (Noppharat Thanachaikhan, 2000). Surgery has constraint of success and uncertainty amid the development of general anesthesia, which reduce pains during operation and asepsis. However, the rate of death after over dose of anesthesia during operation endangers postoperative death will rise.

Operation to solve the location of obstruction much involves with scientific knowledge, i.e. physiology, engineering, pharmaceutical sciences, and immunology (Weiss & Lonnquist, 2006). It is the relationship between artifact and human being (Daly, 2001). Steps of operation to solve malfunction of organs prioritize physiology or body and is aimed to repair irregular organs or endangering human life (Portor, 2006). It needs many levels of views towards the medical technology for surgery.

2.2.3.4 The individual level

At this level, illness experience or suffering experience will be considered. The critical approach of the medical anthropology needs to be conscious that the meaning, which society creates from and repeat the experience of the suffering. The socio-cultural oppression affects how the sufferings handle their contexts in their daily life (Bear, Singer & Susser, 1997). The individual experience discloses the interaction between the medical institution and individuals (Williams & Popay, 1994).

Due to the medical technology affecting the individual health doing duty under the social, political and economic context (Dugdale, 2001), therefore taking interest in the individual worldview victimized by technology will lead to an interpretation of the method to understand technology, which individuals wish. It is the health target of individuals and the state (Daly, Guillemin & Hill, 2001).

Biehl, Good and Kleinman(2007) identifies illness experience, movements of the imaging representation through pains and suffering under the modern thought to illness narrative transferred by the suffering experience in the post-modern age has different model of the modern thought and the post-modern thought. The modern thought accepts scientific narrative and biomedicine while the post-modern thought is the different narrative of the patient. It shows the power of creation and narration of the patient.

Subjectivity

Kleinman (1988) criticized the biomedical model. Illness experience helps across constraints of the biomedical model, which diagnoses disease susceptibility, and symptom. The susceptibility disease is from the malfunction of the body or of the mind. Doyal (1994) emphasized that illness experience of each patient is complex and unique related to perception of data and adhering to the medical data.

Illness experience of the patients is usually least interested by the physicians and many of them are reluctant to allow patients to speak up their sickness. Patients also, feel that they cannot express their wishes. Patients' experience is devalued if compared to the knowledge experience, which is the expertise of the

physicians. Many physicians ignore the patients' experience, which victimized them who have no opportunity to oppose medication (Doyal, 1994).

Refusal to discuss negative issue of the complication created by the medical technology may lead to death (Loustaunau & Sobo, 1997) and refusal to speak the truth of the patients' conditions and medicating the patients who are the owners of their lives (Weiss & Lonnquist, 2006), are not only absurd but also spiritually unethical in being humanness (Loustaunau & Sobo, 1997).

Often, the medical technology suffers patients because of its powerfulness and full of dangers in using it which patients have to pay for and to spend time in medical experimentation (Good, 2007) and problems created by medical practices, e.g. unnecessary hospitalization, improper lab-test for diagnosis, which is dehumanization (Loustaunau & Sobo, 1997).

Illness experience gives the meaning and understanding through the social and cultural process (Lupton, 2004). Given meaning by the patients is characterized in the overlapped steps. Hierarchical decoding is through narrative questioning, which is done in details about illness (Kleinman, 1988). On the contrary, the concept of biomedicine using statistics as indicators of the routine function and proper to the body (Loustaunau & Sobo, 1997) ignore the meaning of the rise of disease, which connects to society, economy, and politics (Biehl, Good & Kleinman, 2007). Therefore, pay more attention to the consciousness perspective (Loustaunau & Sobo, 1997) is to holistically view the health.

Religious Belief

It is a theological perspective on illness risen in the form of suffering, confusion, anomie, and the devilish acts against the human health (Kleinman, 1998). Patients will ask in two ways, i.e. 1) why is it me? – a question of confusion; and 2) what shall I do? - a question to create discipline and control considering suffering under the perspective of morals and religion (Lock, Young & Cambrosio, 2000).

Fate and Uncertainty

The cardiovascular disease makes patients unconscious and hospitalized which leads to using medical technology for open-heart surgery though earlier there are no symptoms or any diagnosis pointed to having cardiovascular disease. It is a situation which can be explained with the influence of fate-related (Kleinman, 1988) or coming from witchcraft because suffer happens unplanned and unpredictable in future (Lock, Young & Cambrosio, 2000). It is an explanation of suffering related to the unfairness rising around human beings and it brings death before time one deserves (Kleinman, 1988).

Reincarnation

Steps to operate CABG applying open-heart surgery and using chemical to make cardiac arrest retuned to pulsing can be explained by the Buddhist reincarnation (Phra Wichit Dhammajito, 2011). Making cardiac arrest is similar to death and making it pulsed is similar to reincarnation. The CABG surgery by open-heart surgery using medical technology is the step of a technology to end the life step of the patient. It allows the patient to involve with mechanized technology which is not the human life as before. Therefore, after this surgery, the patient will have scare on their chests over their navels. The surgeon will use sternum, the chest bone will be joined within two months, and the sternum will stay put until life (Nopparat Thanachaikhant, 2000).

Applying subjective epistemology to interpret actions of participants in research is to participate in considering related contexts (Lock, Young & Cambrosio, 2000) in order to find responses to the patients' experience over the medical technology in operating the CABG surgery using open-heart surgery. It involves fate or uncertainty and reincarnation. It is an affair having approaches of much different rationalization. An approach to create truth and meaning is different amid each community and different by each local in the same society.

Cyborg Body

Cyborg is the human subject transplanted with artifact and synthesized tissues to increase its potential with chemical. It has different nature from

the neo-mechanized robots. Donna Haraway postulates the cyborg anthropology analyzing self with feminism under the context and conditions of the technological advancement in the post-modernist life style of the western hemisphere. Haraway uses feminist methodology, psychoanalysis and Marxist integrated in her analyses of the discourses on race, gender and social classes transformed by the technological development.

Marxist thoughts understand subjects through the theory of workforce value, which created integrity in self while the psychoanalysis explains the family background, which originates self in the step of unconsciousness. Haraway believes that self is complicated built by the scientific discourse and the social practices related to delaying death in man and the control and robotic order. Individual is imperfect and universality. This includes fractured identity without any separation between human and machine which meltdowns the concept of scientific duo-identity promoting oppression over the minority groups in societies.

Cyborg is living thing disarrayed and reconstructed into a new thing analogously as an individual and group in the post-modern. Cyborg have both life and machine, a realty in society, breaking border barring human and machine, physical thing and non-physical thing. Cyborg is the product of the scientific discourse of patriarchy, colonization and capitalism (Haraway, 2008).

Pre-operation Body of the Patient

Decision of the disease to face the medical technology used in the operation in order is to create some parts of the body and to correct malfunction in the body under the consideration of good health (Biehl, Good & Kleinman, 2007). The disease deciding for operation is subject to dilemma and the medical technology creates a painful path for the patient and creates the impossible thing for the patient and the beloved ones of the patient. It makes the patient to continue living (Krakauer, 2007).

Lock, Young and Cambrosio (2000) emphasized that the medical technology is not liberate from the cultural context. Identity of the patient deciding to have CABG surgery is related to masculinity, femininity, fatherhood, motherhood, leadership, guardian of the family who needs the strength of life in

leading their lives to the goal of their family life and work life. Upon facing the dilemma, individuals will not use death as an exit to be free from the dilemma. It makes the patient to imagine that the medicine is full of hope in using the medical technology and needs no absorption with death. The patient is amidst the medical scientific cultural context and common civilian culture spinning around them.

The patient is the hospitalization and enters the medical world where they must accept the strict and unfamiliar regulations (Lupton, 2004). Their subjectivity will change upon hospitalization by the specialists and the alarm of the technology which monitor their bodies which will ring periodically in all places. It is the signal of the holy power, which turns all people in the hospital to overlook the scope of daytime and nighttime, life and death, and publicity and privacy (Krakauer, 2007).

The patient under the hospitalization (Lupton, 2004) concern about their future, their subjective physiology, being upset (Chaturvedi, Shenoy, Prasad, Senthilnathan & Premlatha, 1996; Scliephake, Ruffert & Schneller, 1996), their loneliness and unable to contact others (Chaturvedi, Shenoy, Prasad, Senthilnathan & Premlatha, 1996; Scliephake, Ruffert & Schneller, 1996; Lupton, 2004) and vulnerable experiences during medication (Lupton, 2004).

The Body after being Victimized by Medical Technology

The medical discourse of biosecuritization affects idealism of men in society (Fisher & Monahan, 2010) and allows medical technology intervene human body and becomes a part of the human daily lifestyle. It does not limit death and illness for the human body any longer (Haraway, 2008). Some patients are pleased with surgery under anesthesia believing in the antibiotics and x-ray used in diagnoses (Daly, Guillemin & Hill, 2001) which is the fetishism over the medical technology (Clarke, Shim, Mamo, Fosket & Fishman, 2003) amid contexts engulfed with using dome medical technology (Good, 2007). On the other hand, many patients are aware of dangers in using medical technology (Daly, Guillemin & Hill, 2001). For example, quantity of x-ray received may cause mitochondria in the cell nucleus, which increases tissues for tumor and cancer.

Inventions of medical technology are based on scientific concepts emphasizing objectivity. However, using technology as goal in sciences reflects the identity of users and the victims (Krakauer, 2007). The identity reflects thinking, emotion and body exist in the deep level of consciousness and connects the economic and political structure (Good, 2007) analogous to subjectivity reality each one has constructed (Biehl, Good & Kleinman, 2007). It illustrated perspective each one has to the world and each relationship with others and the surrounding (Good, Brodwin, Good & Kleinman, 1992). This is truly constructed from many sources and under variety of reasons which demands to construct such reality (Naphaporn Hawanont, 2011).

Human body though biologically is typical in its personhood and diverse to the shift of societal context and cultures are differed from the concept of human nature, which is universal. It has been mention before, during the modern era, which is a new model of knowledge related to the biological identity (Keller, 2007). It changes the medical practice and creates representation (Rheinberger, 2000).

The medical technology affects thought and practice especially with human health and the identity of the technological victims (Daly, Guillemin & Hill, 2001). Medial technology is diverse beginning from simple devices, drugs and to mega-technology used in the hospitals and healthcare system (Krakauer, 2007) regardless tiny or mega ones, technology becomes part of human life (Daly, 2001).

Medical technology dominates human as if being the biomedicalization through 5 steps (Clarke, Shim, Mamo, Fosket & Fishman, 2003). They are 1) creating the political economy of hope by the distributors of the medical technology (Good, 2007). 2) It is taking interest in health risk and body surveillance with medical technology. 3) It is persuading to use new medical technologies more. 4) It is to creating scientific knowledge and technology from the guinea pig and undertakes the clinical trial as its golden standards in applying the medical technology with patients (Clarke, Shim, Mamo, Fosket & Fishman, 2003). This is through presenting statistical data and figures to build accountability of using the medical technology (Fisher & Monahan, 2011) and promoting information through various media channels to the consumers (Loustaunau & Sobo, 1997). 5) Using medical

technology changes the patients' body and creating new identity of individuals with science and technology (Clarke, Shim, Mamo, Fosket & Fishman, 2003).

After using the CABG surgery under the medical technology, the disease has usually instable mood because of stress and worry (Noppharat Thanachaikhant, 2010). Cleaning the body after surgery needs caution not to make the wound got wet or to stop some activities in daily life after just surgery such as driving car because the physical reflex action is slower and chest pain from the wound it endangers if attempting driving (Aphichart Sukhonsalp, 2010) or climbing stairs which patients having open-heart surgery should avoid (Somchart Lhojaya, Boonchob Phongpanich, and Phanpis Sakhonphan, 1993). Many precautions after the surgery lead the patient to depend on people around and it is the time the patient's self has been decreased.

The patients' experience undergoing the CABG surgery has realized their life fracture. It is the situation between life, death, disability and self-assistance loss, and unable to work. It falls in line with rationalization related to commonsense, religion, and fractures of the medical discourses to understand disease and surgery (Vila, Rossi & Costa, 2007).

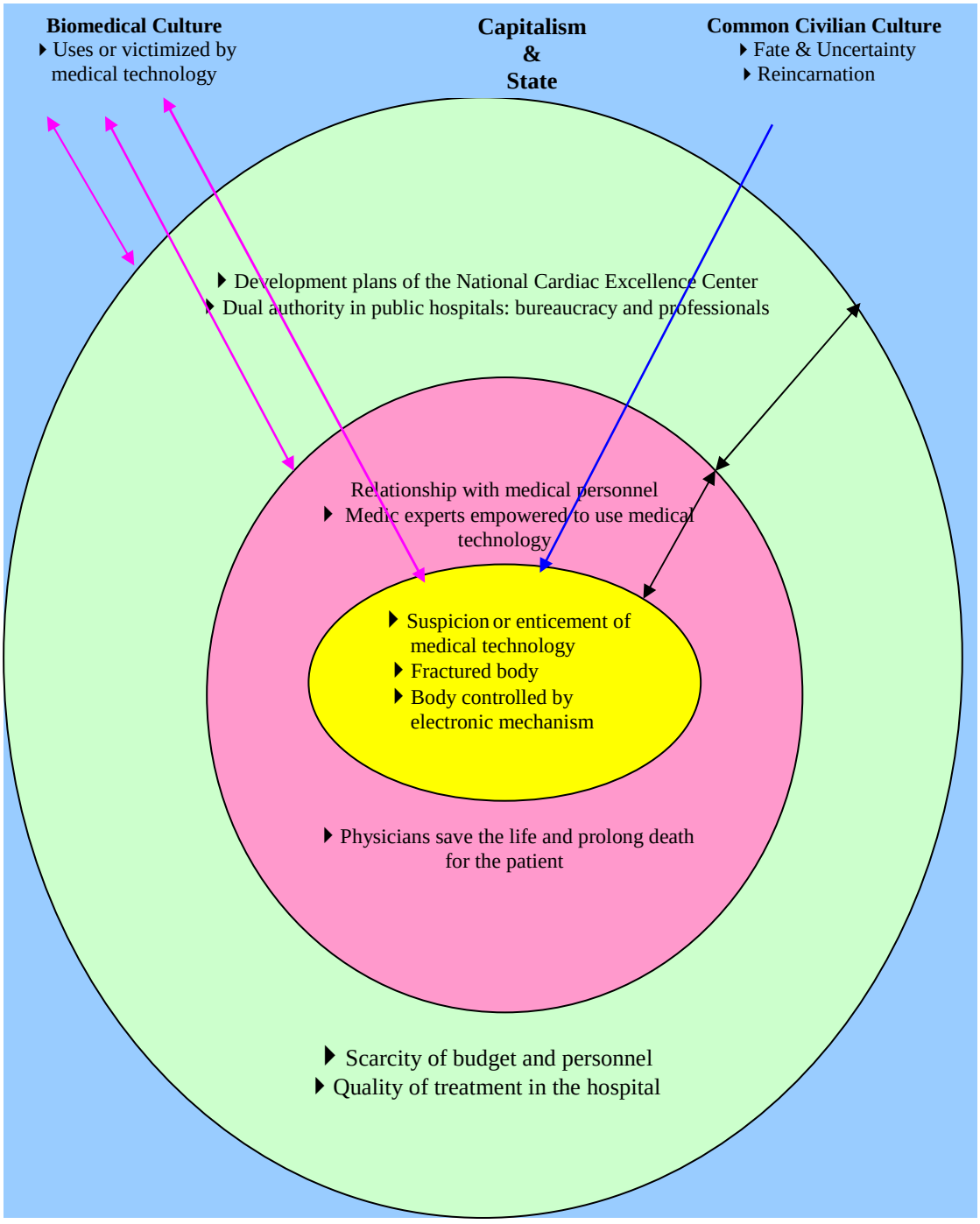

Figure 2.1 CONCEPTUAL FRAMEWORK

CHAPTER III
RESEARCH METHODOLOGY

This is a qualitative research applying CMA perspective, which is the post-modernism in criticizing the modernist capitalism, medical scientific knowledge, which backs the using of medical technology for CABG surgery.

3.1 Research Design

This research has employed variety of methodologies containing illness narrative, participant observation, interviewing experts and documentary researches related to developing national cardiac excellence center in order to explore knowledge through hermeneutic and dialectical (Kittiphat Nonthapattamadul, 2007). In studying experience of patients undergoing CABG surgery treated with medical technology; it is to respond to the question, “To what extent does medical technology affect the patients’ body, thoughts, feeling, practices, self and in handling illness under the dominance of medical scientific discourse under the transnational capitalism (Clarke, Shim, Mamo, Fosket & Fishman, 2003) which are related to the changes of the current social, economic, political and cultural contexts?”

In narrative, the narrators are the subjects who cannot transcend their emotion, feeling, and thoughts from what have been narrated. The narrative reacts and discloses mechanism of the social structure system dominance individuals. The narrative model does not only reflect attributes of the narrators; the narrative structure itself is also revealing interpersonal, linguistic perspective, self and the world around the narrator (Elliot, 2005). By reason, human thinks, dreams, remembers, hopes, expects, believes, plans, and learns through narrative (Naphaporn Hawanont, 2011).

3.2 Research Setting

The research setting purposively selected is the Sithandorn Hospital, which is the central hospital in the eastern region of Thailand. Because the research setting has the cultural context and semi-rural lifestyle different from Bangkok, it is the urban society. The research setting is also the workplace of the researcher and data are easier to access. In addition, the Sithandorn Hospital runs the tertiary care service development plan of national cardiac excellence center in 2002-2005 under the Subcommittee of the HR Investment Advisory, conducting researches and developing medical technology cooperated with and supported by Office of Developing Health Service system, Department of Health Service Support, Ministry of Public Health and the Office of National Health Assurance. By reason, cardiovascular disease is the leading cause of death in the province and it is to help and cure the patient in the eastern areas in order to reduce their expenses in traveling to Bangkok. This is to save life of the myocardial infraction patients on emergency case (Office of Policy and Strategy: Ministry of Public Health, 2008).

The hospital has project to pursue the open-heart surgery patients, i.e. valvular heart disease (VHD), CABG surgery and heart transplantation both from the Sithandorn Hospital and from other hospitals who come to Sithandorn Hospital to take medicine for controlling the symptom to prevent recurrent disease. This includes searching child patients with rheumatic heart disease in communities that they all will be treated. Following the health promotion plans, prevention of heart disease and potential revitalization from plan of cardiac excellence center development is through network established by participation of citizens, communities, public offices and private offices.

3.3 Participant Researchers and Recruiting

Selecting participant researchers in this research is by purposive sampling and initially characterizing participant researchers as below.

3.3.1 The patients undergoing CABG surgery are from the Sithandorn Hospital or from other hospitals that come to Sithandorn Hospital to take medicine for

controlling the symptoms of cardiovascular disease with different expenses from the civil servant welfare and the 30-Bath card. They are patients coexisting with spouses, patients separated from spouses, widow or widower patients and patients with typical way of lifestyle such as priest. Patients are those working and non-working after CABG surgery.

3.3.2 The patients underwent CABG surgery for more than 6 months and not more than 10 years. Because patients undergoing CABG surgery less than 6 months are in the rehabilitation phase and patients undergoing CABG surgery more than 10 years might forget incident or feeling about surgery.

I converse to create familiarity with the patients undergoing CABG surgery and take medicine for controlling the symptoms of cardiovascular disease at Sithandorn Hospital. I select patients in the project of patients undergoing CABG surgery (from Sithandorn Hospital or other hospitals) and take medicine for controlling the symptoms of cardiovascular disease of Sithandorn Hospital.

This project had 75 patients being 62 males and 13 females, 18 patients are between 50-60 years old, 46 patients are 60-70 years old and 11 patients are older than 70 years old. One patient is single, 48 patients coexist with spouse, 11 patients are divorced and 15 patients are separated. All patients are Buddhists. Before CABG surgery, they have been civil servants, employee (mechanic), businessman (shrimp purchaser, Chinese banquet organizer), agriculturist (horticulture, shrimp raiser), priest. 25 patients do not work after CABG surgery and 50 patients are still working. (Statistics of Patients from OPD Surgery Office: April 1, 2011)

Since the critical approach of the medical anthropology has been applied to investigate illness experiences of patients, it is necessary to evaluate medical technology positively and negatively. I interested in the following cases:

3.3.2.1 The patients ever having CABG surgery with appointment, the case of emergency CABG surgery, the case of cardiac arrest before operation and physician used defibrillator. The patients underwent CABG surgery in Sithandorn Hospital or other public and private hospitals. By reason, Sithandorn Hospital cannot provide emergency CABG surgery because the context of the emergency operation is different from the operation by appointment. In addition, the

hospital has just opened its cardiac centre and it was potential for open-heart surgery in 2008.

3.3.2.2 The complete CABG operations are beneficial by medical technology in the heart operation. The incomplete CABG operations (operation unsuccessful to solve the sclerosis of coronary artery) and the case of surgery infection became the disadvantages in using the medical technology.

3.3.2.3 The patients had been revascularization of coronary artery before CABG surgery (accept the medical technology for revascularization).

3.3.2.4 The patients had been refused revascularization of coronary artery before CABG operation (refuse the medical technology for revascularization).

3.3.2.5 The patients undergoing CABG surgery and they had other systemic diseases such as diabetes, cerebral thrombosis, gout and so on. They consumed many types of drugs with drugs synergism and demolish. Drug is a type of medical technology.

3.3.3 Focus at various patients undergoing CABG surgery

This research adopts narrative interview. It is necessary to select informants who perceive and are full consciousness with skills in communication, narration with comprehension, and are willing to cooperate in the investigation with informants with different lifestyle, social and cultural backgrounds. Informants are living in the district town and other district towns where the Sithandorn Hospital is located. There are similarity and differently in comparing between cases.

3.3.3.1 CASE 1 Accepting medical technology for revascularization accompanied with other systemic diseases and living outside the Muang District.

This case was single, male (monk), 79 years old diagnosed of cardiovascular disease and treatment with balloon before having CABG surgery by appointment. There were other systemic diseases including cerebral thrombosis, diabetes and hepatitis. A private hospital in Bangkok provided his CABG surgery and it has been for five years by now. Currently, he is still fulfilling the religious mission.

He had paid expenses in operation, and drugs for cardiovascular disease control because he consumed original drugs apart from the national list of essential drugs.

3.3.3.2 CASE 2: The emergency operation accompanied with other systemic diseases and living outside the Muang District.

This case has separated with her husband, 64 years and never been diagnosed having cardiovascular disease. She has acute chest pain, and been medicated in the private clinic of the physician who worked in Sithandorn Hospital. The x-ray showed coronary artery thrombosis and referred the patient to be admitted in public university hospital in Bangkok. She has undergone an emergency CABG surgery but accompanied by other systemic disease including diabetes. She was operated in public university hospital and it was 3 years since then. Currently, she quits cultivating horticulture and shrimp raising. She partially paid for her CABG surgical expenses, and drug for controlling cardiovascular disease with 30-Bath card.

3.3.3.3 CASE 3: Refusal to undertake medical technology of revascularization and cardiac arrest (advantages of using medical technology) and infected with surgical wound (disadvantages of using medical technology for heart surgery) and living in the Muang District

This case was married and lived with his wife, male, 51 years and diagnosed being cardiovascular disease, and medicated. The physician prescribed for balloon. At first, he refused to have balloon and hospitalized because of unconsciousness. Later he got twice cardiac arrest within a night during his hospitalization (symptom of heart failure). The first cardiac arrest was severely shaken by the nurse and the case returned to consciousness. The second cardiac arrest was under the defibrillator made by the physician and returned heart beating. This case was unconscious for 20 days in Sithandorn Hospital and CABG surgery was provided and return to normalcy. The place for operation was the Sithandorn Hospital, which has been operated for 6 months. There was a complication with this case and that was a month later, this case had to return for re-surgery by incision with the median sternotomy because of infection. Currently, this case organizes Chinese banquet business. He has paid partially the surgical expenses and drugs with 30-Baht card.

3.3.3.4 CASE 4: The case of refusing medical technology of revascularization, incomplete CABG surgery (disadvantage of using medical technology in heart surgery) accompanied by other systemic diseases and living outside Muang District.

This case was married and cohabited with his wife, male, 67 years and diagnosed being cardiovascular disease, and medicated. The physician prescribed for balloon. At first, he refused to take balloon and later got CABG surgery but incomplete result of surgery on 1 sclerosis of coronary artery. This case was accompanied with diabetes. The place for operation was Sithandorn Hospital, which has been operated for a year. Currently, he administrates a company to purchase shrimps. The expenses for the operation and drugs for symptom control were through the civil servant welfare.

3.3.3.5 CASE 5: The case of cardiac arrest and emergency CABG surgery- living in the Muang District.

This case was married and lived with his wife, male, 65 years and never diagnosed being cardiovascular disease, but clashed by an electric auger got fatigue symptom and heavy sweating. He was hospitalized in a private hospital near his home. This case was cardiac arrest because of sclerosis in the main coronary artery. The physician thrice tried for defibrillator machine and the case revived the third time after 3-minute arrest but the patient loses consciousness. The physician of the private hospital referred patient to Sithandorn Hospital. But Sithandorn Hospital didn’t make emergency CABG surgery. The physician at emergency room of Sithandorn Hospital adviced his wife for emergency CABG surgery at private hospital in Bangkok. He passed the operation for 2 years. Currently, he is the electric technician. He has paid expenses in operation, and drugs for symptom control because he consumed original drugs apart from the national list of essential drugs.

3.3.3.6 CASE 6: The appointment surgical case and complete CABG surgery (advantages of using medical technology in heart operation) but accompanied by other systemic diseases living outside Muang District.

This case was married and lived with his spouse, male, 50 years and diagnosed being cardiovascular disease, and medicated. The physician prescribed unable to take balloon. During the CAG (Coronary Artery Angiography),

there was sclerosis with 3 coronary arteries but while operation the fourth one was found. The surgery was completed. The case was operated in Heart Specialized Public Hospital in Bangkok and that was four years ago. The expenses for the operation and drugs for symptom control were through the civil servant welfare.

3.3.3.7 CASE 7: The appointment surgical case and complete CABG surgery (advantages of using medical technology in heart operation) but accompanied by other systemic diseases living outside Muang District.

This case was a widow, male, 69 years. He was hospitalized in the Sithandorn Hospital because of fatigue from running rally for His Majesty the King. The physicians used respiratory machine and admitted the case to ICU without any diagnosis. The case stayed for almost 2 weeks in ICU and move to public university hospital in Bangkok (the case requested for move to public university hospital in Bangkok without refer from Sithandorn Hospital). The public university hospital informed that the case was subject to cardiovascular disease and got CABG surgery and accompanied by diabetes and cerebral thrombosis. The operation was 9 years ago. Currently, the case quits horticulture and shrimp raising. He has paid all the operation expenses and the drugs for symptom control were through 30-Baht card.

3.4 Tools for Data Collection

The research instruments were the researcher, guides used in the narrative interview, equipments and tools in collecting, analyzing and recording data. They are as below.

3.4.1 Researcher as the most important tool

The researcher was a very important tool in collecting data (Chaiy Bodhisidha, 2007). I have prepared to collect data through reviewing contents and literatures related to medical technology and illness experiences of patients undergoing CABG surgery. This allowed me to accumulate knowledge about the content in order to help search data completely and speedily.

3.4.2 Narrative interview guideline.

I formulated guides for interview to be used in narration based on knowledge from literature review related to medical technology and illness experience of patients undergoing CABG surgery. Narrative interview guideline prepared for interviews with the details of CABG surgical experience from medical technology, model of relationship between the medical personnel and patients, hospital, in social, economic, political and cultural contexts.

3.4.3 Participant observation and field note

I involved learning the life of the patients through illness experiences on medical technology by CABG surgery with participant observation, systematic and continuous records focusing on treatment and activities related to the cultural beliefs.

3.4.4 Documentary review

Documentary reviews involving the developing central hospitals of cardiac excellence centers

3.4.5 Key informants: expert of medical technology in open-heart surgery

Interviewing experts who implemented health policy, regulations and practices of the medical technology for CABG surgery and which applied with two cases in the Sithandorn Hospital.

3.4.6 Recording data

Instruments and tools prepared for collecting, analyzing and recording data were recorders, notebook for recording each conversation.

3.5 Ethical Consideration

3.5.1 Informed consent

Before conducting, the researcher proposed the project to be certified by the MU-SSIRB and the researcher has passed the training on human research organized by Graduate Schools and SSIRB of Mahidol University. Verbal consent or inform consent of participant researchers has been made before real research. Objectives and processes were informed regarding data collection through narrative interview and seeking permission for taking notes and records every time before interview. Participant researchers were given time for thinking and opportunity to question if any suspicion arisen before deciding to participate in the research. I have attached topic for narrative interview for the informants before the real interviews were conducted.

3.5.2 Confidentiality

Securing confidentiality of the field notes has been complete through not identifying the real name and last name of the informants but replaced by codes while the field notes have been used only among the advisors and the researcher only. In addition, after three months of conducting research, field notes and records were immediately eliminated after the research has accomplished.

Further, participant researchers could request their data back all the time without any reasoning. Research results for discussion and publication were in overview to serve the research objectives and under the scope permitted by informants only without identifying their real name but in pseudonyms.

3.5.3 Participant researchers' privacy

Interviews were conducted in the private room and free from crowdedness but convenient for informants. If participant researchers felt uncomfortable to respond, they were able to end interviews at any time, which did not affect their future treatment.

3.5.4 Benefit and reciprocity

During interview, I evaluated participant researchers' mental condition and promptness all the time. In the case of melancholy in their life, I stopped and provided mental care until they were ready to provide information. I applied my experiences with patient undergoing CABG surgery relative. It helped create trust and familiarity among participant researchers.

Before every interview ended, I provided positive reflexivity for participant researchers to build their good morale by informing them about public benefits in what they have shared. This was to emphasize their value, and pride of action. There had been medical information useful to them, I were ready to provide and help them as reciprocity.

3.6 Data Processing and Data Analysis

I have collected data by myself with following procedures and details.

3.6.1 I were a dentist in the Sithandorn Hospital and is responsible for treatment and advises on dentistry for patients having open-heart surgery, valvular heart disease (VHD) patients, heart transplanted patients and patients undergoing CABG surgery recommended by thoracic surgeons, cardiologists and nurse in the OPD surgical unit (which is located opposite to emergency room, first floor of OPD Building of Sithandorn Hospital). All open-heart surgery patients and those fetching medicine for symptom control will be advised for oral health examination with free of charge in the dental department where I am working. Medical researches revealed that bacteria in the tooth plaque led to infection in the heart valves and not closing well. Physicians and nurses then advised the open-heart surgery patients especially for the VHD patients needed to have scaling every six month**.**

3.6.2 I checks oral health, advises every the open-heart surgery patient and records their oral health conditions in the record forms. This is the follow-up project for the open-heart surgery patients of the Sithandorn Hospital. All of them have their

medical chart records. I ask permission to see their medical chart records in open-heart surgery and other systemic diseases from medical chart record for the benefits of dental treatment. The open-heart surgery patients have to regularly take anti-coagulant drugs. Before tooth extraction or dental scaling had bleeding, they have to stop taking anti-coagulant drugs for 5-7 days under the permission of the thoracic surgeons or cardiologists. After their oral health check, I have made an appointment for treatment by voluntary and specialized treatment. With working in the follow-up project with this patient group, it has helped me to have data of the patients undergoing CABG surgery who arrived to continuously take drugs controlling cardiovascular disease from the Sithandorn Hospital, their medical chart records and other systemic diseases in detail.

3.6.3 I built trust and selected participant researchers from their medical chart records of Sithandorn Hospital and inquired general background from each patient, i.e. marital status, career, and residence, in order to evaluate their perception, consciousness and efficiency to narrate. Initially, I conversed with patients undergoing CABG surgery who had taken drugs controlling cardiovascular disease in the morning before office hours every workday at the waiting seats in front of the OPD surgical rooms.

3.6.4 I have employed the critical approach of the medical anthropology to significantly attribute patients undergoing CABG surgery for this research and selected patients who resided in the areas of Muang District and in other districts of the province where the Sithandorn Hospital was located. This was to compare their different cultural contexts between Muang District and other districts. This included selecting 7 participant researchers with different lifestyles, different societies and different cultures. The seven selected cases had similarity and differences as being compared as below.

3.6.4.1 CASE 1 was a monk, underwent balloon before CABG surgery with appointment. He had other systemic diseases. He lived outside Muang District.

3.6.4.2 CASE 2 was a female and separated stay with her spouse, underwent emergency CABG surgery. She had other systemic diseases. She lived outside Muang District.

3.6.4.3 CASE 3 was a male and living with his spouse. Before his CABG surgery, he refused balloon for treatment cardiovascular disease. Later, he had cardiac arrest and physician used defibrillator for safe his life.(advantage of using medical technology). After his CABG surgery, he got infection at the surgical wound and repeated surgery (disadvantages of using medical technology on heart surgery). He lived in Muang District.

3.6.4.4 CASE 4 was a male and living with his spouse. Before his CABG surgery with appointment, he refused balloon for treatment cardiovascular disease. Then, his CABG surgery could not solve one of the scleroses in a coronary artery (disadvantages of using medical technology on heart surgery). He had other systemic diseases. He lived outside Muang District.

3.6.4.5 CASE 5 was a male and living with his spouse. He had cardiac arrest and physician used defibrillator for safe his life. He underwent emergency CABG surgery. He lived in Muang District.

3.6.4.6 CASE 6 was a male and living with his spouse. He underwent CABG surgery with appointment. His CABG surgery solved all sclerosis of coronary artery (advantage of using medical technology). He lived in Muang District.

3.6.4.7 CASE 7 was a male and widow with deceased wife. He underwent CABG surgery. His CABG surgery solved all sclerosis of coronary artery (advantage of using medical technology). He had other systemic disease. He lived outside Muang District.

3.6.5 I built relationship with participant researchers through dental treatment, PCU service, home visit, medical mobile for charity in the province. Later, I clarified the significance, objectives, benefits of the research and needed their consent before their participation with inform consent.

3.6.6 Methods of collecting data from participant researchers were through narrative interview accessing the critical event, which brought change to individual

(Naphaporn Hawanont, 2011). I used event of heart surgery as the focus of interest and specified the principles for analysis, which had been twice done. Each interview had been spent around an hour and not more than 90 minutes. Details were as below.

3.6.6.1 Round 1: it was focused on familiarization, inquiries of personal data, symptoms, family, career, daily life, and common lifestyle in order to study their daily file spending. Then appointment was arranged for date, time, and place convenient for them to be interviewed. By reason, the issue for investigation was illness experience on medical technology in CABG surgery, and application of narrative interview to access truth, it needed trust from participant researchers in order to freely and naturally converse with them.

3.6.6.2 Round 2: it was an interview about experience with medical technology in CABG surgery, model of relationship between the medical personnel with the patients, the hospital of operation, and participant observation in the hospital and the ward.

3.6.6.3 In addition, this research uses participant observation in the hospital and the residence of patients, about people who have a role in providing health advice to patients in the hospital. The participant observation in the residence of patients evaluated the relationship between patients and families including caregivers, behavioral of consumed drugs, the type of consumed drugs, consumed drug from one or several hospitals, behavioral in the work especially the work period, leisure time and activities in the leisure time.

3.6.6.4 In conversing with informants, the researcher acted as the interviewer and the listener at the same time. By reason, knowing any individual required to know what the informants felt which will helped understand not only knowing the informants on their intelligence but their relationship between human and human. This allowed them to narrate on their experiences by their own view with freedom and the informants perceived that the interviewer participated and understood their experiences. Ron the other hand, in the roles of a researcher, it was to review what the informant narrated and concluded what have been heard within the researcher in order to organize the content system, primary analyses and pinned point to raise question within oneself for the next interview.

Major principles in conversing with the narrators were the relationship based on understanding, equality, without coercion and oppression to talk, non-judgment; and both the interviewer and the narrators were under the climate of the peace of mind for exchanges. The researcher was not the questioner and the narrators were not respondents but a climate facilitating events to be revised, memory, and communicated through narrative clues (Naphaporn Hawanont, 2011). Observing their facial expression, gestures, and action of the informants brought the meaning of information untold and led to the hermeneutics and dialectics in order to access the real meaning.

Expression of the researcher to allow informants perceive that the researcher was interested, attentive, determinant and pursuit what the informants were talking in their contents, essences, thoughts, and felt emotion with looking, eye contact, gestures such as nods, and verbal supports of compliance. These encouraged informants and they were willing to inform with longer time. They felt pride, self-value, self-respect, and willpower after speaking up their thoughts, emotion, feeling and reflexivity. They looked into their life with new perspective, increased self-understanding, and might find solution by themselves.

3.6.7 Methods to collect data from 2 experts were though in-depth interview for the ones who adopted policy, laws and regulations in using medical technology for CABG surgery in the hospital. This was to find additional information in details and to check consistency of the participant researchers from many sources. In addition, this research uses participant observation about the relationship between medical personal and patients in the hospital, pattern of treatment in the hospital, medical technology, drugs including rapid or delayed medical service.

3.6.8 After data collection, I decoded statements from the tape-recorders into written communication.

3.6.9 I read all the data to understand them in overview.

3.6.10 I underlined statements related to the research questions and retrieved them to respond the research questions.

3.6.11 Analyzing the narrative from the 7 patients undergoing CABG surgery to conceptualize and connect the concepts, which were consistent to each issue.

3.6.12 Describing the meaning of the phenomenon found and based on the data collected from the real experience of participant researchers.

3.6.13 Refining, correcting and writing the final dissertation.

3.7 Data Validity

3.7.1 Creating trust and good relationship with participant researchers

After selecting participant researchers, I built trust and approach them and not immediately conducted interview. I followed-up participant researchers talked and became friendly, had concerns for them every time met until the participant researchers trusted. Later, I asked for permission with narrative interview and waited until the participant researchers were consent so that they could freely narrate. In addition, I coordinated for the next interviews for more information. I were conscious of the data validity by being in the field work all the time during data processing and data analysis. I worked and spent life as a dentist in field work, and I worked a dentist in research setting both with the public sectors and with the private sectors. Therefore, the participant observations were consistent.

3.7.2 Triangulation

3.7.2.1 Data confirmation from the participant researchers

I collected data from the tape-recorder in interviews and decode words by words which checking the ambiguous statements for their clarity

through repeated listening. Then, I took the decoded information to show the participant researchers for confirmation and to add more details on where information was not clear.

3.7.2.2 Confirming data from other sources

In this research, data were, in every step, checked and controlled by the advisor. It was similar to another group of researchers conducting a cross-examination. In addition, this research has conducted interview with experts who implemented policy, laws and regulations related to using medical technology in CABG surgery in the hospital. At the meantime, the documentary reviews regarding developing the central hospitals on national cardiac excellence center also asserted data from various sources.

3.7.2.3 Self-reflexivity

I were aware of bias in the purposive selection of the research setting, participant researchers and the application of narrative interview. I described procedures and decisions in conducting this research in detail, taking records and evidently described steps of interview and collected all related documents in conducting this research such as tape-recorder, filed notes, data analysis forms, records of my feeling and self-reflexivity on what have been observed during data collection. They could be referred to as sources and re-checkable all the time.

Being a dentist in the field work myself, and some participant researchers have been my dental services; they could create trust over some participant researchers. However, being the dentist in the Sithandorn Hospital has affected some participant researchers to avoid the negative issue of the hospital and the application of medical technology in treatment. This was to avoid conflict with the hospital and the medical personnel. Then I conducted interview outside the hospital setting.

Working in the field work in being a dentist allowed me to access experts of medical technology applied in the hospital as a colleague with equal relationship. I can also observed patients and all medical professionals in the hospital during this research and I realized information of running the hospital as hospital personnel.

I were a dentist using medical technology in the routine works and had to attempted to remove the dentist-self with the idea of using medical

technology as a one-sided expert. Then I applied the experiences of the heart surgical patients' relatives in collecting data, CMA perspective in this research is the concept to raise questions with medical scientific knowledge, which backed the uses of the medical technology in treating patients.

CHAPTER IV
NATIONAL HEALTH POLICY: DEVELOPING CARDIAC CENTER OF TERTIARY HOSPITALS

Applying medical technology for open-heart surgery to treat sclerosis of coronary artery has been created under the worldly capitalist concept. It involves the social, cultural, political and economic contexts. The medical technology for open-heart surgery is not the balanced truth or not the truth without prejudice. It is also not the health victory or public allowance in a country (Bates, 1990). The political idealism and the economic contexts drive to establish cardiac centers. It is the way of thinking in developing a country under the world capitalism, which are only aware that a developed country needed to have cardiac centers covering the entire country. However, the efficiencies of the centers and the open-heart surgery to treat sclerosis of coronary artery have never been seriously evaluated.

4.1 The Social, Economic and Political Contexts of the National Health Policy of Cardiac Centers

The cardiovascular disease is today one of the leading health issues in every country both the developed countries and the developing countries, which include Thailand. Besides, it is the first critical cause of death to the world population. Among the non-infected diseases within the males and the females, WHO reports that the cardiovascular disease takes lives of the 7.1 million-world population in 2007. For the past 10 years in Thailand, it is top five for the cause of death. In 2009, the cardiovascular disease took around 40,000 lives, in Thailand (Office of Policy and Strategy, 2009).

The rise of the cardiovascular disease phenomena is found in the industrial and the capitalist societies. It connects with social relationship with oppression, exploitation, lifestyles, and working conditions where gains are more necessary than

basic living, which is related to health, satisfaction, and income of workers amidst rivalry economic system (Bates, 1990).

The lifestyle stress has been restrictive by the situation of the modern life spending which needs to dominate economic resources. Reactions to the lifestyle stress are found with rage, moodiness, instable moods, alcoholic drinking and smoking (Davidson, 1991).Stresses from working in the industrial societies lead to the cardiovascular disease and makes death rate rise (Bates, 1990). Stress increases the risk of eating more (Davisson, 1991) and affects the physical weight and cardiovascular disease.

The increase rate of cholesterol of the societal members is related to the rise of the new food markets in each regions of a country (Bates, 1990). Causes of having the cardiovascular disease connected to the condition and the behavior of the industrial societies and the capitalist system where the cardiovascular disease could be seen its relationship with the oppressed, isolated and exploited societies.

Open-heart surgery is one the major treatment where medication is insufficient. The present advancement of the heart surgery in public hospitals and in private hospitals can save the lives of patients more. However, the craft of cardiovascular surgery is highly expensive. In association with the increase of patients each year, patients have to wait in long queue for surgery. It affects their health and becomes burdens of their families, and burdens to the service units, which continuously take care of them.

Major concepts of health policy under the administration of the Nation Health Security Office (NHSO) besides the targets of all coverage of health assurances; it needs the equal treatment. Establishing the cardiac centers in different regions in a country for the patients to have qualified and standard surgery helps reduce the surgery queuing but their recovery after surgery is improved, closed to their homes, closed to their dear ones and better quality of life. Nevertheless, the open-heart surgery is prescribed as a benefit rights in the all coverage health assurance policy. In fact, however, the numbers of patents accessible to the open-heart surgery service do not meet the demand.

Implementing the all coverage of health insurances under the project of disease management is expensive or a vertical program especially the heart disease. It enables people to access health services more. However, there is problem of budget allocation to the public hospitals with the calculation of capitation, which is less than the real cost. It makes the allocated budget insufficient. The public large-size hospitals meet with debt and cash flows and become the public health expenses in the future (Office of Policy and Strategy: the strategic sphere of health promotion and the national disease protection, 2011-2016). So, the 2nd expert working in the Sithandorn Hospital said, " the hospital service income reduces because of the populist policy but the capitation-based pay, the hospital can treat whatever it likes. The government pays around 800-900 Baht per head per year. The capitation pay is good for the government administer since it is not troublesome with propaganda that treated all possible hospital services to any disease. Therefore, patients arrive at the hospitals with high expectation but burdens of expenses are loaded on the hospitals."

The knowledge to treat cardiovascular disease is influenced by the social construct. Applying medical technology for surgery is primarily important but does not solve any issue of the social structures related to career and social environments, which bring disease. That means the alleviation of stresses in workplaces, taking physical exercises, stopping smoking, and reducing taking alcoholic and caffeine-mixed drinks are not adopted to constructively design the health policy.

4.2 Plans of Developing Cardiac Center of Tertiary Care Hospitals

Deadly disease groups today are cardiovascular illness, CVA (cerebrovascular accident), cancer and low birth weight infant services and critical to the Thai health system. Treatment of the deadly disease group in the past was problematic with service refer either to the higher potential services or to the near-home service for continuous treatment. It disables patients to access necessary services (National Health Security Office - NHSO, 2011).

Since 2002, the Ministry of Public Health by the Department of Health Service Promotion developed the potentiality of the provincial or central hospitals enabling them to treat heart disease in full cycle under the name “Project of Tertiary Service System for Cardiac Center”. Cardiac centers were established in the public hospitals under supervision of the Ministry of Public Health. Their potentiality was classified into 4 levels (NHSO, 2010), i.e. level I-II was capable to provide full cycle of the service and mostly was located in Bangkok or in the university hospitals. The cardiac center of level I was Julabhon Hospital and Siriraj Hospital. The cardiac center of level-II was Ramadhibordi Hospital, Maharaj Nakhon Chiangmai Hospital, the Sirikit Center of the Northeastern Region, Srinakharin Hospital: Khonkhaen University, Songkhlanakharin Hospital: Songkhlanakharin University, Vajira Hospital, Rajavithi Hospital, Queen Sirikit National Institute of Child Health, Central Chest Institute of Thailand (CCIT), Bhumibhol Hospital, Phra Mongkutkhlao Hospital, and Royal Thai Police Hospital.

The cardiac center of level-III was the large-size hospitals with capacities to provide open-heart surgery, PTCA (percutaneous transluminal coronary angioplasty), CAG (coronary artery angiography) and needed to install electrocardiographic equipments, with expert physicians, which were Maharaja Nakhon Ratchasima Hospital, Sanpasidhiprasong Hospital: Ubonratchthani, Cholburi Hospital, Yala Hospital, Budhhachinnaraja Hospital: Pitsanulok, Naresuan University Hospital, Phra Pokkhlao Hospital: Chanthaburi, Suratthani Hospital, and Thammasart Chalerm Phrakiat Hospital.

The cardiac center of level-IV was capable to primary care but disabled to provide surgery or electrocardiography. When patients arrive at this level, doctors will inject in the artery with anti-coagulant drugs for thrombus dissolving. Then, the patients will have referred to 7 hospitals of the level –III spread around the regions, i.e. Budhhachinnaraja Hospital in the north, Ubonratchathani and Nahonratchasima in the northeast, Cholburi and Chanthaburi in the east, Suratthani and Yala in the south. There are 40 cardiac centers of level-IV. Decentralizing the centers to regions is counted enabling patients to best access medication on time and reduce death-risk.

The cardiac center of the Sithandorn Hospital has been instituted in 2008 under the master plan of Developing Cardiac Center of Tertiary Care Hospitals 2004-2008. It was the new cardiac center establishment enabling tertiary service for some types of the open-heart surgery. There was moderate jobs and classified as the cardiac center of level –III (NHSO, 2011).

Following the plans of developing cardiac center of tertiary care hospitals met limitations of personnel scarcity where societies recognized treating diseases and illness of the medical scientists. The state allowed the private sectors to conduct researches on chemical composition of drug tests and innovated medical technologies. They became the medical industry pairing with power-built for the western medicine over other medical systems in societies. The focus of chemical researches and medical technology misled the health service system to be unaware of preparation on places and personnel to attend the rise of chronic patients in the now era.

4.2.1 The Corporate and State Sectors

The project of developing cardiac center of tertiary care hospitals of the country allows the transnational medical corporate to open markets for selling drugs and medical technology (Bates, 1990). Hewlett-Packard, the US medical exports and the Warner-Lambert Pharmaceutical Corporate are giants manufacturing medical technologies for cardiovascular disease and surgery (Wheatley, 2003). These medical corporate employ incentive to sell drugs and medical technologies to the state by providing medical scholarship for medical training in abroad and research funds with using medical technologies and drugs for treating cardiovascular disease to the state agencies (Bates, 1990). The state then ignores researches focusing on preventing cardiovascular disease in order to reduce stresses, food changes and lifestyle changes.

The transnational medical supplies corporate employs medical researches to support humanism that patients of myocardial infarction treated in the cardiac center have lower death rate than patients treated at home and in general hospitals (Wheatley, 2003). It makes people in societies believe in the accuracy of science and technology leading to the birth of the government projects to solve public health problems with medical technologies (Fisher & Manahan, 2011) by establishing cardiac centers in

every region of the country. The transnational medical supplies corporate gain large sum of money in purchasing medical technology for the cardiac centers.

The expensive establishment of cardiac centers helps patients with sclerosis of coronary artery hide the question to the medical technology what if the technology fails and the cardiovascular patients have to meet death and paralysis. This is because of being positioned since given medical researches support that technology can prolong the lives of patients, preventing heart attack, killing pains of angina pectoris and medical obligations of the state impose using medical technology for medication.

4.2.2 Policy and decision-making

The establishments of cardiac centers around the regions of the country are to serve capitalism. Since Thailand has opened specialty medical training of thoracic surgery in 1981 until today, there were only 4 graduates by average each year. The spread of thoracic surgeons is still around Bangkok and the perimeter in the university hospitals and the chest hospital. There are not more than 2 thoracic surgeons in each hospital in the provinces, i.e. Chiangmai, Pitsanulok, Khonkhaen, Ubonratchathani, Nakhonratchasima, Chanthaburi, Yala, Had Yai (Songkhla), and Suratthani (Phanpit Sakhonphan, 2003). At present, Thailand locates 46 hospitals attending cardiac centers and two thirds are located in Bangkok and perimeter.

Provinces locating the cardiac center are the economic area where the economic wealthy person can live and have their careers under capitalism, which compete with time and favor to have treatment from the private hospitals. This is because new medical technologies are rising for solving heart disease all the time through media dissemination such as internet, medical and health journals. It demands thoracic surgeons in both public hospitals and in private hospitals.

4.2.3 The capitalism-propelled medical service system

The action taken in the policy of 30 Baht for all disease treatment is impossible since Thailand wheels along with the global capitalist system. Auntie Ampha described her expenses of CABG surgery in a public university hospital in Bangkok and she used the 30 Baht-card for the surgery. There was additional expense.

"At that time, I paid more than 100,000 Baht." Before surgery, the doctor asked her daughter whether she had 50,000 Baht for deposit. Her daughter told the doctor to go ahead since she was ready to pay.

Venerable Abbot Suwan narrated his heart surgery in a private hospital in Bangkok, "The expense of the surgery is 400,000 Baht with discount because the surgeon is the teacher of my step son." Being the foster parent of a physician who is in the cycle of heart surgery has gained discount in the private hospital. However, the private hospital rate is not loss. It is separated from the charge of accommodation and food. In the early period after surgery, he still took treatments of the cardiovascular disease in the private hospital with the expenses around 20,000 Baht per month.

4.3 The Context of Sithandorn Hospital

It is a 755-bed size located in the eastern region of Thailand on a 200 rai land (around 80 acres) installing modern devices and medical equipments for variety of diseases. It provides general medication services, cardiac center, cancer center, emergency center, and neonate center. 1,996 outpatients are attended daily (469,089 cases/year).Daily admission is 575 cases (42,250 cases /year). The hospital provides health service for the Muang district residents, the transferred patients from 11 community hospitals in the province and another 3 neighboring provinces. The bed occupancy rate is 79.35%.

Moreover, it is also the medical center studies at the clinical level of a public university in Bangkok where the senior medical students of Year 4-6 having their classes here. It includes additional institutes for training on medical specialization of pediatrics and internal medicine in the co-projection with the public university in Bangkok and the Sithandorn Hospital. The hospital has organized its own training of medical specialists in family physicians.

The hospital has passed the second service evaluation and quality assurance with re-accreditation on July 27, 2011 –July 2014. In addition, it has been rewarded the Sai-yaai-rak (Fiber of Love) Hospital, Health Promotion and Environmental Health Hospital, and Tertiary Cardiac Center in December 2010.

Running the large-size hospital with instruction for medical students, nurses and medical specialists, it needs to use expensive drugs, advanced technology and doctor over prescribing medication and diagnosis in order to prevent lawsuit (Office of Policy and Strategy, 2010). The 1st expert stated, “Developing quality of a hospital with technological assistance for speed service such as computers” brought burdens for the hospital expenses. This made the Sithandorn Hospital almost lost 200 million Baht (Financial Section document, July 2011)

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4.3.1 The Cardiac Center of the Sithandorn Hospital

The first CABG surgery to a patient was in 2003 using on-pump technique. Later in 2006 the thoracic surgeon for CABG surgery used off pump technique. The 2nd expert is the senior nurse of the OPD surgery office with 20 years experience described the establishment of the cardiac center pioneered by doctors in the Sithandorn Hospital, “As when the hospital was without the cardiac center in 2005, doctors graduated from public university and are positioned here. When there was patient for CAG (Coronary Artery Angiography) and cardiac catheterization, the doctor had to take refer ambulance with the patient to have cardiac catheterization in the public university hospital. After finishing, the doctor had to return with the patient. When the public university hospital made the appointment for the heart surgery, the doctor had to bring the patient again and the doctor had to go and to operate. Finally, the hospital established the cardiac center. When we had equipments, we trained nurses for open-heart surgery assistance, and formed a open-heart surgery team. Even the doctors in the public university hospital told the emergency-surgery patient to return to take drug at the Sithandorn Hospital because the drug had better quality than those in the public university hospital. Last year, our hospital has been rewarded the Cardiac Excellence Center”.

In 2007, the thoracic surgeons can operate patients with poor function in the left ventricle who ever had heart failure before CABG and counted high-risk cardiovascular disease. In 2008, the hospital has been established, as the cardiac center with potential to provide the cardiac catheterization, open-heart surgery both CABG surgery and heart valve operation and in future it will be developed its potentiality into the emergency heart surgery.

At present, the hospital has 1 cardiologist, 2 thoracic surgeons, CABG surgery with on pump and off pump technique. 134 patients have undergone CABG surgery since 2004. Since its ICU can accommodate only 3 beds and co-uses with other types of surgery which are overloaded in the provincial rural hospitals. The 2nd expert informed, “In our hospital, we can operate open-heart surgery for only 2 patients a week because the ICU can accommodate just only 3 patients. The open-heart surgery patient must stay in the ICU at least a day then is moved to the common ward or the special ward. Our hospital is not just only for the open-heart surgery but other surgeries too and accident surgery. Patients have to queue for 30-45 days. During the early year when the hospital could just provide the open-heart surgery; there were some patients, who postponed their surgery. But later, postponement was less.” The cause of postponement at first that the hospital has provided the open-heart surgery was the patients and relatives were not confident with safety in the open-heart surgery of the Sithandorn Hospital (Documents of the CLT Indicator –surgery, 2008). After the cardiac center has been opened, the hospital has heavily invested with its medical equipments for treatments and heart diagnosis for confidence of the treatment.

Uncle Soros narrated his incident after his operation and admitted in ICU for a day and the nurse had to move him to the common ward, he told the nurse, “I shall not move, I get deadly pain and how can I move.” Finally, he has to move from ICU because the beds in the ICU are insufficient for the next surgery patients to stay. “There will be another patients and I have to move out since I am better”. Therefore day and time when the open-heart surgery possible is only when the ICU is vacant and the anesthetist is free. That makes the number of the open-heart surgery in Sithandorn hospital is less than what it should be. This includes limitations of other personnel such as the post-surgical care team, nurses and surgical assistants, which disable to operate the emergency open-heart surgery.

4.4. The Bureaucratic System in the Public Hospital

Max Weber recalled the major attributes of bureaucracy that it clearly and formally divided units (Gerth & Mills, 1946 cited in Komart Juengsatiansap, 2001). The Sithandorn Hospital is central public hospital accommodating large number of interdisciplinary personnel. Association among professionals is found in meeting and working together. My senior is a dentist working in the Sithandorn Hospital and few personnel know her because most dental works are among dentist jobs separated into another unit in the hospital. Dentist works unlikely coordinate with other units in the hospital.

At a night, she got sharp pain in the stomach and called the hospital ambulance where she worked but the personnel responded that there was no home service for patient. She called me for help and I advised her that it was better to pay. I then called a private hospital ambulance to bring her from the residence outside the Sithandorn Hospital and got diagnosed in the emergency room of a private hospital by a surgeon on duty, who also worked in the Sithandorn Hospital and found that she got an intestinal obstruction.

After introducing each other, the surgery referred her to the Sithandorn Hospital by the same private hospital ambulance. The surgeon on duty called the Year One Intern on duty to prepare for emergency operation and she was treated appropriately. During waiting for moving to the operating room, another doctor on duty unknown to her approached and kidded that “Untie, when will you deliver?”

The world of the executives treating their organizational personnel is the same world where the personnel treat clients. The provincial public hospitals have no ambulance service to bring patients between homes and hospital. It reflects the managerial vision of the hospital executives. Providing ambulance from home to hospital increase more responsibility of the organization; and increase accident risks or unpredictable loss. It affects both discipline and law for the personnel and administrators. The bureaucratic system imposes both disciplinary and legal punishment where officers lack new creativity beneficial to public, societies and the nation. Therefore, the public hospitals, which are under bureaucratic system, thus do not emphasize response to the need of public as emphasize managerial security and the organizational survival.

Emergency Room of the Sithandorn Hospital – the morning of Monday is the first weekday of the hospital and likely flocks with patients during around 7.00 hrs. In the morning in front of the emergency room adjoining the OPD Surgery Office, human sounds are echoing. Just I arrive in front of the OPD Surgery Office; a bus has collided with a truck at the entrance of the provincial route. Tens have been injured and transferred to the hospital.

Cries of bruised infants holding with their bleeding mothers sat in queue with pale faces. A serious injured man has been carried on a stretcher passing me into the emergency room. Many are bleeding but unable to enter for treatment obstructed by the card counter. Some curse on slowness while the staffs are preoccupied with historical records without looking at anyone. Nurses in front of the OPD Surgery Office have no work but decline to help preparing cards for the emergency room. All staffs are preoccupied with their own jobs. Organization emphasizing specialization and division of labor decreases work efficiency.

I hear a female staff asking the patient's relative to wait outside. There is a regulation of emergency room that relatives have to wait outside and allow them to enter just only to question about past medical history of the patient only. Significantly, asking relatives to stay outside allow detecting the patient and relatives don't hinder the staff working and it creates privacy for each patient. Since diagnosing patients, it is necessary to check up organs under dresses. All staffs inform that asking relatives to stay outside is useful to patients and treatment can be faster and prevailed.

Regulating for the public hospitals is to provide convenience for staff in the case in the wards free of charges and hospital dependency. If it is a special clinic and pay, the hospital staff will allow relatives to attend the patient. Money charged from patients is a considerable condition over their behavior expressed to the patient.

The same staff shouts for leaving the room and questions why they are flocking there. Those who are onlookers and relatives leave the room except the patient. When one aged uncle does not leave the room but carry a white paper; the same staff shouts, "Why are you standing here? Leave, just leave please! What are you looking for?" He responded that he is a patient waiting for drilling blood vessels and said he is so sick. The patients' relatives outside the room reprimand the staff why she chases out the patient. It reveals the agency of the clients in the medical service who

dare to react the medical staff for the infirm uncle are those who have been asked to leave the emergency room.

A mother carrying her 3-year baby walks into the emergency room and informs the physician on duty that her baby has been waiting for an hour and gets high fever to death. The physician response is "…Your baby get fever, coughing, sore throat, conscious and can eat; if by nature, the baby will recover within 7-10 days but if medicated, it will be within 3-4 days. It is not called going to die and please turn to look at those lay bleeding." The mother asks for the telephone number of the doctor but the nurse declines because his duty ends on 8.00 o'clock in the morning and he has no duty here. The public hospital is a bureaucratic system and run with scientific rationales ignoring emotional dimension of the patient by using work regulation and the medical staff responsibility by time of duty. The medical personnel has idea in treating the patient by level of physical seriousness affecting death rather than petty illness such as fever, cough, sore throat and high temperature.

OPD Surgery Office: Around 8.00 o'clock in the morning of Monday when there was an accident of a bus collided with a truck at the entrance of the provincial city; I met nurses in front of the OPD Surgery Office and explained the reason of observation. I asked permission to observe the 4 rooms for diagnosis. There was a partition between the diagnosis table where the doctor and the patient facing each other. At the back of the doctor, there is a connecting walkway between the 4-diagnosis rooms. On each table lays a stethoscope, a manual pressure gauge, metal type of wooden tongue depressor in metal cylinder, a gauze cloth kit, and a medicine book. Each room accommodates a sick bed placed near the wall on the other side. When the patient enters, they can see the sickbed parallels the diagnosis table. At the back of the diagnosis room installs a sink of hand washing and the window was opened for ventilation with the breeze blew in the diagnosis room.

Seats for waiting in front of the OPD Surgical patients are full. Climate of waiting was not so warm since the ceiling fan was working. It was noticed that every patient was waiting for their call and less talk exempted among their accompanied relatives. The nurse in front of the OPD Surgical Room puts on a mask covering her mouth and nose while interviewing historical records, checking blood pressure with

automatic apparatus and ordering patient for checking with indifferent face. The Sithandorn Hospital does not make any appointment in each week for the patients undergoing CABG surgery to pick up their drugs for their cardiovascular disease but they can do in everyday of the week. On that day, there were many surgical patients to pick their drugs and those to have operation arrived for their physical check.

In the case of patients to have an open-heart surgery or have it already, during their interviews for personal data, they were provided with advice for around 5-10 minutes; the contents were about disease explanation, self-care, and recommendation for dentistry check up and treatment. The nurse will conclude issue of advice in the heart patient notebook but no follow-up after consultation whether the patient followed or change any behaviors.

Moreover, the nurse would encourage the open-heart surgery patients to join membership the self-help group by their volunteers. Treating the open-heart surgery patients was not saving them from their critical situation, but there were needs of continuous self-care before treatment, during hospitalization and continuing treatment at home for enhancing their better health. Supporting them for their own self-care was very important. They had to develop their knowledge of self-care, to adjust their plan of living and appropriate behavior in order to reduce and control risk factors of the disease. At present, a self-help group has been introduced and popularly used among the chronic patients. It allows patients association, conversation and exchange their experiences and knowledge, which enable them to happily adapt themselves into communities with better quality of life (A heart patient notebook). However, a number of patients refuse to join the membership of the self-help group because they do not live in the Muang District but in other provinces.

4.5 The Scarcity of Budget and Personnel

Though the Sithandorn Hospital follows plans of developing cardiac center of tertiary hospitals but it is underachieved because of its scarcity of budget and personnel. Each hospital receives budget by number of population who are clients. Nevertheless, the hospital is the large-size hospital and organizes instructions for

medical students, nursing students and training for medical specialization including being the center of many specialization treatment for diseases and using expensive drugs and advanced technology; its expenses are then also high.

Narration of the 2nd female expert was at the ages of 50. They were slim, tan and around 155 cm height with bob hairstyle at earring. They put on glasses with golden frame and wore the nurse white dresses, used stocking covering their foot ankles and white shoes. Their heads were capped with nurse caps with many black strips identifying many years of nursing professional. She narrated, “If they are the heart disease patients and cancer; they must be sent to the central hospitals. The central hospitals are also at a loss because they are paid similarly to the community hospitals. Complexity of diseases is growing and driving costs higher. Expenses tend to be growing from the advancement of technology which is speedily changed.” This has been reflected through the 2nd experts working as the nurse professional until today for 27 years in the OPD Surgical Office, and she is also instructors to the nursing students in the provincial nursing college.

The Sithandorn Hospital has met brain drain of its medical personnel to private hospitals. It involves with working responsibility and increasing variety of skills in working, which includes increase the service quality meeting the current trend of the quality assurance and evaluation on service but unconscious of their poor remuneration compared to their responsibility. Through the narration of the 1st expert who is the thoracic surgeon in the Sithandorn Hospital and works for over 10 years, “ there is the problem of high turnover rate, bored with bureaucratic system, turning each department runs short of personnel, incomplete number of physicians, insufficient quantity, and it is impossible to gain quality. A department with 3-4 doctors but demands like having 10 doctors is impossible. All have to work with unfamiliar jobs because none does but it is necessary. More when the policy arrives and there is a lot of things off-duty to do such as Tumbol Hospital (Sanatorium), distributing drugs which leaves our routine job with someone to attend. However, we have to do though we are the specialists. We must undertake GP more but less doctors and less specialists like us. To make job good is impossible. The ward jobs are restricted with less personnel and the budget to hire personnel more run short while the remuneration is low compared to the private hospitals. The private hospitals pay

higher; then the personnel quit and go to work with them since their remuneration is ten times."

In addition, the number of doctors and nurses are not enough for treating after the cardiac center has been established. The 2nd expert narrated, "Personnel are raked for works that two retirees must return one." Thinning the number officials comes from the Thai Official Reforms. It is to reduce the production costs and minimizes the number of the personnel. Almost 40% of budget for personnel has been spent with public service system (Office of Policy and Strategy: Strategic Frame of Promoting the National Health and Disease Prevention, 2011-2016).

4.5.1 Causes of loss for the Central Hospitals

Today, doctors in the community hospital almost stop surgery nationwide. If there is problem with surgery, doctors will be subject to lawsuit by the patients. Benefits are they can have operation in the provincial hospitals or the central hospitals. Risk of fallibility or death is reduced but patients have to wait for the very long queue. In fact, doctors working in the community hospitals can operate some diseases and if they do not, patients are congested in the provincial hospitals or the central hospitals.

Surgery stops in the community hospitals by fearing lawsuits and the hospitals accept that there is no work efficiency evaluation for doctors whether it is worth the salary which the state pays or not. In the Thai medical history, there is not even one doctor resign from this bureaucratic system because of low performance targeted in the annual appraisal. It is true that operation in the provincial hospitals or the central hospitals on appendicitis or delivery surgeries are operated by the juniors graduated after doctors working in the community hospitals. This is because the first year intern must work in the provincial hospitals or the central hospitals. Sometimes they have to assist surgeons to increase their medical skills. Many times the first year interns operate by themselves and if there are problems, they can fetch the senior surgeons in the next rooms operating since surgeons run short in the rural hospitals. When they are in the second and third year interns, they work in the community hospitals and stop surgery.

Stopping surgery in the community hospitals increases the number of patients needed surgery in the provincial hospitals or the central hospitals more. It leads to applying the medical technology and large amount of drugs in the provincial hospitals or the central hospitals. It brings loss in the large-size hospitals because both small-size hospitals and the large-size ones receive the allocated budget with capitation of people.

4.5.2 The economic recovery plan of the Sithandorn Hospital

The hospital runs short of its liquidity and is indebted with 350 million Baht with cash of 150 million Baht. The hospital board imposes measure to reduce expenses which are suspension of building investment, stops expensive hospital durable goods, stops hiring new personnel, reduces expenses of disposable materials, reduces expenses of public utility, controls expenses of personnel training and controls of OT expenses.

Donations for the purchasing technology of the cardiac center- With the hospital restricted budget with capitation and at loss of the hospital. The cardiac centers needs large amount of money to purchase medical technology; the hospital board plans its recovery by pleading donation from the donors, public and private sectors, charity organizations, and organizing alms procession (Pha-pa) to purchase medical technologies for the cardiac center.

Purchasing drugs and medical supplies cheap – the narration of the 1st expert is “everything is our hospital must be from bidding. We have to buy the cheapest ones. Any too expensive drugs we have to cut them. If we use them, the hospital will be at loss. The budget provided is even not enough for the drugs. Medical equipments are less purchased. Training personnel has been cut and meeting spending is less.” The 2nd expert narrated, “Income is from only the state alone which turn the service or the quality of drugs and medical equipments purchased has to be with low cost or cheaper.”

4.5.3 Staff with low morale

The loss of the hospital so much affects the staff morale because budget for academic training for them is restricted. The 2nd expert narrated, "Now, budget provided is less and training or additional seminar for knowledge is restricted." The remuneration of the hospital was uncertain to be paid every month. The 1st expert said, "Salary around 20,000 Baht and other remunerations which is not certain to be paid each month and how much is unknown?"

4.5.4 Scarcity of thoracic surgeons in the bureaucratic system

Gaps of payment between the public and the private hospitals attracted all thoracic surgeons to quit and apply to work in the private hospitals including workload in the private hospitals. The first expert said, "Now, there are only 4 CVT (Cardiovascular Thoracic) surgeon in the bureaucracy of the eastern region and attend population of 7 provinces because all quit to work in the private hospitals."

4.5.5 Hidden scarcity situation of the thoracic surgeons in the public hospital

Due to thinking like the capitalism in running the western medicine of hospital, besides full-time jobs in the public hospitals, thoracic surgeons spend their free time to work part-time jobs in the private hospital and private clinics. They are overloaded and at risk in the open-heart surgery. It is the systematic factor of the thoracic surgical works related to capitalism and beyond the medical factors related to the internal medicine complication for patients admitted for the open-heart surgery. Upon on duty in the private hospitals, they have to stay until 1 o'clock in the morning to operate emergency case and the next day they have to operate the patient in the public hospitals from 8 o'clock in the morning. Their physiology will not be ready and the patient is at risk.

Overloaded surgeons – their jobs begin at 8 o'clock in the morning when they arrive at the hospitals. They begin with checking patients at wards for an hour and continue to the ICU. This is to check how symptoms of the patients from the operation and move to the out patients in the OPD Surgical room at 10 o'clock in the morning.

The 1st expert said, “When I arrive at the OPD Surgical room, I see over hundred patients. Some look at me suspecting that why do I arrive just at this hours. Then I just bend down and look up to diagnose more than 100 patients. Some days there are 300 patients and all must be ended at 4 o’clock in the afternoon. Some days it prolongs to 5 o’clock in the evening. Nevertheless, a physician must check every patient and no way to say that this is already 4 o’clock in the evening and please come again tomorrow.”

Outside of office hours, the surgeons have to be on duty either at the public hospitals or at the private hospitals including treating the patient in the private clinic, which might be their personal business affairs or cooperate with other medical professionals as partnership or a part-time job. Their duty shift begins from 4 o’clock in the evening until midnight and another duty shift begins from midnight until 8 o’clock in the morning. During their names are posted on duty; the nurse will follow up the surgeons to take care the patient all the time. The 1st expert said, “During eating, or toileting, or sleeping or talking with lovers, I must leave. Last night I left home at midnight, at 4 o’clock, a nurse called another call at 5 o’clock and the last call was 6 o’clock in the morning. Then at 7 o’clock in the morning I woke, took bath, brushed and came to work.”

The surgical tasks in the public hospitals are checking outpatients during daytime while on duty at nighttime. The 1st expert said, “I was preoccupied and did not take meals for 27 hours and a non-sleeper for over 60 hours continuously. I ever slept during writing my last name in a medical opinion and when I opened my eyes with a pen in hand, I found disordered opinions. I did not know what I have written. Then I looked up and found the smiling face of the patient, he would understand me.”

All humans are alike even the physicians can be exhausted, stressed and also needed spiritual supports. Overloaded professional jobs reduce life expectancy of doctors than common people or less than 70 years. The jobs of the thoracic surgeons attended are with stress and speedy with restricted time and staying the near death people all the time. Some are cardiac arrest and how long can a human endure such cardiac arrest. Moreover, how much opportunity will their hearts return beating? It is also the time, when the patients or their relatives are uneasy to control their moods. Nevertheless, the job of the thoracic surgeons is to make the patient smile and walk home with happiness.

4.5.6 Solutions of scarcity on thoracic surgeons in the bureaucratic system

To have more thoracic surgeons in the bureaucratic system is by penalty higher pay for them to quit and go to work with the private hospitals or by prolonging their intern period after graduation. The 2nd expert suggested, "Doctors awarded scholarship from the public hospital to learn specialization must pay back with double period of their study time, especially, the thoracic surgery takes 4 years and must pay back 8 years. If they are unable to pay back by this condition, they must pay two million Baht. They can collect such the amount in the private hospital just only one year." Therefore, it is necessary to increase fine to compensate scholarship for their higher education and take the fine to rake among doctors working in the public hospitals which will reduce gaps of remuneration between the surgeons working in the public hospitals and the private hospitals.

4.5.7 Improving other welfares to attract the thoracic surgeons stay in the bureaucratic system

Not all of them see money as the important remuneration in choosing to work in the public or private hospitals. They also concern about the public welfares such as having residence in the hospitals, proper schools for their children in each age span, additional training for their profession domestically and internationally, disbursement of Medicare for their family members, disbursement for their children' school fees in each age span, promoted position and bureaucratic job advancement.

4.5.8 Permanent solution for the scarcity of the thoracic surgeons

The above solutions were unlikely successful because most board members of the Medical Profession and the Medical Specialist Council are the counselor board members in the private hospitals. They will not accept such solution. Increasing the rate of scholarship compensation for higher studies of specialization will be more difficult to attract doctors from the bureaucratic system. It shakes the private hospitals. The simplest solution is what makes human stop repair health but building health. The rational truth is that building health has far lower costs than repairing health.

4.6 Treatment Quality in the Public Hospitals

The overall coverage health insurance allows people to access medicine service more. However, what needs to be improved is the treatment quality and treatment equality among people enjoying their privileges. Fairly examining, in accessing the medical service by people from the service basic program; it is found better with the outpatient services. There are some problems with the inpatients or the medical specialization services since it flocks in cities. Nevertheless, service decentralization is better. Considering the case of heart surgery during 2004-2007 among patients with the rights of overall coverage health insurance, there is more decentralization unlike the first year of imposing. However, there is high rate of service in the provinces of locating the cardiac centers especially in Bangkok and perimeter (The National Health Security Office, 2010).

The attempts of the state in managing the 30 Baht policy split the public medical service into 2 models. First, the patient-pay system allowing providing special clinic services which are outside of office hours where drugs and medical supplies have good quality and the hospital staffs pay attentive care and take interested care the patients because remuneration increases in working; it is the public hospital providing semi-privatization. It is a way to find monetary privileges for the organization similar to the private hospitals. Second, the golden card system is the free service but poor treatment and large amount of people seek its service. The 2nd expert said, “Establishing the cardiac center in the Sithandorn Hospital pays so good part enabling to help the poor more. They need not travel long distance but there are too many patients and the staffs cannot avail the service for all.”

After the announcement of the 30-Baht policy, there was a survey for those who use the golden card. It was found that majority of the poor people use the golden card. The 1st expert narrated the nature of working and the patients seeking treatment after the hospital has established the cardiac center, “When the cardiac center was established, the refer patients to the neighboring central hospital or in Bangkok turned to have treatment here. The 30-Baht card could also be used. The service fees were far cheaper than the fees in the private hospitals. Such this economy, floods, closedown factories, unfruitful horticultures, and loss in shrimp raising, people will not go to the private hospital but the public hospitals. Their queue is congested.

For example, the heart disease when taking OPD checks, there are around 300 patients in queue in a day to receive drugs from the public hospitals."

While the services in the private hospitals are provided with more convenience than the public hospitals but expenses for the treatment are costly. It turns a specific number of people only to access the service. Through the 2nd expert's narration after establishing the cardiac center in the Sithandorn Hospital, "more patients; drugs for heart diseases cost many thousands and if buying in the drug store or the private hospitals are costly. Heart surgery costs many hundred thousand. Now, people admitted in the private hospitals have to return to our hospital because they can't affordable. Some patients have to begin with new drugs and with milder drugs. Humans must adapt themselves. If they are really rich, they have no need to adapt them because they can meet doctors once and get better. But some have not much money and they can't affordable."

4.6.1 Discrimination of receiving drugs between the gold-card patients and the bureaucratic welfare patients

Receiving drugs and medical supplies of the gold-card patients and the bureaucratic welfare patients are drastically different. Uncle Soros who have passed CABG surgery told that medicine for patients of heart surgery was not the same because of the different severity of the disease especially those using the bureaucratic welfare "gaining stronger medicine". However, he thought that the 30-Baht card patients could possibly be treated. The narration of receiving stronger medicine in the bureaucratic welfare patients revealed the discrimination of drugs received between the patients using the bureaucratic welfare and the 30-Baht card in the public hospital.

Uncle Piti narrated his expenses for the CABG surgery and drugs in controlling the symptom of cardiovascular disease in the Sithandorn Hospital. "The expenses for the surgery and drugs I can disburse because I have been civil servant before and quit to receive a monthly pension. I pay nothing. Drugs for the bureaucratic welfare and the 30-Baht card have some differences of around 20%. Those who can disburse are better chance of having foreign drugs and the doctors have to recommend that those who can disburse have to use the foreign drugs for control symptom and need not pay."

4.6.2 Needed drugs for patients unlisted in the list of essential drug of the public hospitals

Distributing the B complex and DHA classified as synergizes, the 1st expert said, "the B complex distributed in the hospitals are local made and distributed to patients with peripheral neuropathy such as patients with diabetes while DHA is the cod liver oil which is unlisted in the list of essential drugs of the public hospitals. Our hospital is not the private hospital where drug is used irrationally. Because DHA, in reality, there is no clear evidence that DHA is necessary. It is useful to the medicine regardless in Thailand and in foreign countries do not accept it. Significantly, all public hospitals resist using drug as prescribed by the patients because it is irrational academically and medicine needed by the patients is outside the list of essential drugs of the hospital."

The symptom of angina pectoris is temporally less after the CABG surgery because its disease nature has more developed. The symptom of angina pectoris and endurance of the physical exercise have returned after many months or 2-3 years after surgery (Bates, 1990). Auntie Ampha narrated, "After my surgery until today, it is not better if not taking drugs for two times there will be the symptom of angina pectoris. I have to regularly taken drugs. Sometimes, Auntie Ampha feels angina pectoris. In the public university hospital in Bangkok, doctor gives sublingual tablet. But after transfer to the Sithandorn Hospital, the doctor prohibit sublingual tablet."

Now, if Auntie Ampha has the sudden symptom of angina pectoris, she will use the balm to rub her chest area, sleep still and recognize nothing. Doctors in the Sithandorn Hospital do not distribute sublingual tablets for patients had CABG surgery before believing that CABG surgery helps stop angina pectoris but in reality, the patients have to experience it sometimes and need sublingual tablets to ease angina pectoris and better quality of life.

4.6.3 Public hospitals with complex regulations and long waiting

The medical service system by the 30-Baht policy turns people hoping for the hospital and doctor-dependency. It is a phenomenon of overcrowded hospital as Uncle Weera, who has ever passed medical technology for CABG surgery narrated, "Since having the project of 30-Baht and patients who should not visit the hospitals

are doubly increasing. For simple examples, when I was small and caught cold; my mother would tell me to sleep at home, drank warm water, took warm bathing, and got well because to there was cost to meet doctors but now meeting doctors pays no cost and get free drug." To reduce number of patients to visit the hospital is important because many diseases can be treated by oneself or can buy panacea for dosing. Patents to meet doctors have more than half been reduced and the doctors can attend patient with more serious symptom and needed closed treatment.

His Venerable Abbot Suwan who have got CABG surgery from a private hospital in Bangkok and visited the Sithandorn Hospital for received drugs controlling cardiovascular disease after being operated. His Venerable Suwan narrated that before this he has been admitted in a private hospital being a heart disease and sudden illness, could not be waiting, if waiting, it is death because the public hospital needs to make a hospital card and if serious, the private hospital will admit the patient into ICU and complete the card later. His Venerable Suwan reasoned, "The private hospital is speedier and more convenient but the public hospital has to wait for long time."

His Venerable Suwan narrated the incident before the CABG surgery with severe angina pectoris and could not breathe. So, His Venerable Suwan went to a private hospital, "the doctor admitted me to ICU and provide respiratory machine without waiting for doing a hospital card. After in better condition, the hospital card could be complete." His Venerable Suwan estimated that if going to the public hospital, he had to wait and sudden life assistance will be late to the situation."

4.6.4 Diminishing of the patients into the queued cards

Uncle Siri given a CABG surgery from a public university hospital in Bangkok and comes to take drugs for controlling cardiovascular disease in the Sithandorn Hospital. He narrated what he received drugs from OPD Surgical Office, "I got the third queue but the nurse in front of the doctors' rooms called No. 8, 9 and 10, which overtook my queue. My daughter went to observe and found that those had diagnoses before me brought some souvenirs to the nurse and got the faster queue than I did. Later, my daughter bought some souvenirs for the nurse and she called me the first number. But now, I do not where the nurse is and the new one calls but queue number."

4.6.5 Lack of empathy from the medical personnel

The gush of blood – large amount of patients visit the public hospitals for the service. The attentiveness to petty things of the staff is faded out. The narration of Auntie Ampha a CABG surgery patient and diabetes patient has to pick up drugs every 6 month and she picks drugs for diabetes every 2 month in the Sithandorn Hospital. She narrated about drilling blood vessel for testing blood sugar every 2 month, "I do not like drilling blood vessel, the staff use so big syringe and cut the artery making gush. I ever ask the staff in the hospital don't they have the smaller one?"

Ask if know not - diagnosis in the public hospital where there is a large number of patients lacks questioning in other life dimensions related to disease such as food, physical exercise, and obstacles in life but focusing on medication. Patients usually say that when they arrive for treatment they know nothing what have they been treated. I ask the 1ST expert and he responded, "If the patient do not know; they must ask and the doctor is ready to talk. If the patient do not talk, why should the doctor over speak? Some say, the doctor is too talkative and advising here and there where they do not want to hear. It is the duty of the patient to ask how it is. What should one do? Because sometimes, when I advise the patient, they look away and seem never wanting to hear except to get drugs and return home. It is a waste of time. If the symptom is serious, I shall explain. But it is minor disease and without question, sometime I do not speak since each day there are 150 200, and 300 patients. Who can talk all the time?"

Duty of the public hospital patients has to count tablets – the state finance is a continuous great loss especially the 30-Baht project. Therefore, the patient should be frugal thought he public hospital gain part of the public tax for its management. The 1st expert narrated, "It is required the patient to count tablets. It is not should do but their duty. Here is the public hospital; its duty is to treat and not providing every service like the private hospitals. The basic matters such as counting tablets, which the patient must do and I ask the patient if there are many left I will not prescribe more tablets for piling up at home. Generally, I shall ask by overall and do

not want to know how many tablets but to know whether they could be enough for the next appointment or not.”

CHAPTER V
RELATIONSHIP BETWEEN PHYSICIANS AND THE HEART SURGICAL PATIENTS

Time to meet physicians; believe it or not! You feel better especially in the case of heart surgery. Some incident cannot be explained by medical sciences. Some smoke two packs a day but having long life for 80 years but some take physical exercises everyday but die at the age of 30 with heart disease. None is 100 % in the medical knowledge. Physicians learn and medicate from possibility.

Doctors do not so much know about human body. The knowledge of CPR (basic life support) is a medical science just developed recently around 50 years back. Originally, saving the life of the cardiac arrest patient is through first respiratory machine and then defibrillator. Three years later, the American Heart Association (AHA) provides Guidelines for Cardiopulmonary Resuscitation and Cardiovascular Care but changes to defibrillator and to respiratory machine (Link, Atkins, Passman, Halperin, Samson, White, Cudnik, Berg, Kudenchuk & Kerber, 2010).

Medical knowledge has changed all the time. There are more than new 100 research reports each day. Some are real researches and some are the studies hired by the medical supplies companies. The work of physicians, diagnostic and medicated knowledge are surplus, uncertain, ambiguous, incomplete and all-time changed their works by the influence of new emerging knowledge. This includes the current Thai social condition raising questions about the knowledge and medication expertise of doctors more.

Common people raise question and altruism of doctors. It begins from studying medicine in the public universities with low fees since they are funded by the educational budget of the country. This includes the medical students know organism and its function from the donated corpses for their studies without charges. The medical resident is also included and they are trained when patients are admitted in the public university hospitals. Then, how do physicians repay societies? Even today, the

educational system of the medical students responds to capitalism and speed to graduate them until their exposure to experience is so few left. Some graduates never attend delivery since number of the pregnant is fewer than their number.

The relationship of doctors and patients under the medical technology for CABG surgery is distant since the medical service especially surgery is differed from other common treatments. The service is detailed with highly advanced medical technology and prescriptions such as diagnosis and medication and so on. They are the medical services, which likely excludes patients or medical consumers in decision-making for their own choice. Because patients lack information to help decide their medication or surgery, the medical personnel decide and represent patients.

At present, thoracic surgeons view that the heart is a human spare part with physiological mechanism but changeable or repairable with invention or medical technology. The surgeons' viewpoint responds with the biomedicine that the human body contains with various parts working freely from the human mind. The biomedical model solves the problem of cardiovascular disease by the medical technology.

5.1 Protecting Physicians by the Medical Service System

The open-heart surgery begins with the anesthetization provided by the anesthetist and checks the physical readiness of the patient, placing equipments with 2 nurses to hand the operation tools and check the order of the electronic devices. Moreover, there are 2 nurses outside the sterile area the help passing operation accessories.

All instruments for surgery have been sterilized every time to prevent infection on patients before operation. Surgeons have to test instruments to be ready for operations and for patients' safety. There is always risky on operation bed. Error could happen in very process and in every step beginning anesthetization, vascular access, open-heart and stitching.

Real work is unlike idealistic work. Surgeons being one of the medical specialists are primarily sued like physicians and obstetricians. Surgeons besides

facing risk of infection and death-risk of the patient during operation, they have to face risk of lawsuit by the patients or by the patients' relatives. Words of the 1st expert working as a thoracic surgeon in the Sithandorn Hospital are, "doctors have to seriously cautious. Sometime, they do not really know what it is happened from though follow every step but the patient's relatives do not understand. The patient walked in when arrived at the hospital but why the left with death. In fact, none wants to make error happens. The doctors do their utmost because a life is the 100% of the family."

The medical documents reveal that death rate during CABG surgery is 9% and post CABG surgery during follow-up is 10% (Wheatley, 2003). The patients do not receive this information from surgeons though it is confirmed in written by medical texts. However, surgeons view that this is the minor thing and normally happens with heart surgery. There are no official researches indicate that what is the death and disability rate in open-heart surgery patient, that depend on symptoms before surgery and severity of disease or the medical technology is inefficient to address the disease. It needs to examine the medical technology on its advantage and disadvantage to human body. This is to prevent error in the heart surgery, which might happen unexpectedly with death and disability. Surgeons have to demand patients or relatives to sign consent before surgery.

5.1.1 Culture of Surgical Inform Consent

There are almost 20 inform consent: its meaning is the exchange of death. Auntie Ampha narrated that when she arrived a public university hospital in Bangkok; the doctor used medical technology for repeat check to confirm that she has got cardiovascular disease as diagnosed by the refer document from the doctor's private clinic.

After recheck by the medical technology, the doctor questioned her. "Will you consent for surgery? I will. The doctor asked me to inform the consent for almost 20 signatures. The doctor told me that I could not be pleased if surgery cures me. I could also die because it is too serious. The doctor gave no goodwill and asked my husband to sign also. Therefore, I asked my husband to sign. I am a country woman and can decide by my own and the doctor should not ask me to sign more. During

signing, I was lying and did not know right or wrong; I just signed and told the doctor: do operate me." The doctor still asked her whether her daughter accompanied her. She admitted and the doctor asked her daughter to also sign the inform consent.

In addition, the doctor emphasized with Auntie Ampha that if anything happened after the surgery she could not blame the doctors because her symptom was 50-50. The doctor repeated only death, which feared her. So she cut off the "I do understand. If I die, I will not sue you while at that moment my breathing is softer." After her consent, the doctor wheeled her to the Coronary Artery Angiography-(CAG) room to check how many arteries got sclerosis and on what spots.

Her narration revealed the medical professional power and bureaucracy of the public hospital, which indifferently treat a patient. They emphasize watching value of figures from the medical technology in case of emergency heart surgery. If the patient is dead, none can blame the surgeons since death during emergency surgery was force of majeure (act of god). The surgeons had no intention to make the patient dead especially, working in the public hospital was a social work of the surgeons since their remuneration was many times lower than the private hospital paid.

Wife's signature for consent – before the heart operation, Uncle Weera was cardiac arrest for 3 minutes and the doctor has to give defibrillator for 3 times and the beat returned on the 3rd time. He was referred from a private hospital near his home to the Sithandorn Hospital but the hospital was not potential to provide an emergency heart surgery. The ICU doctor advised his wife to contact a private hospital in Bangkok to take him for surgery.

Before entering the operating room, the doctor asked his wife to sign the inform consent while Uncle Weera was unconscious in bed. "When the doctor told my wife to have surgery, he dared not verified my survival and just told my wife that I shall have bypass operation. Such action taken because, I got cardiovascular sclerosis. If not, there was no way to better cured or die. My wife told the doctor what was good for him just done. I was unconscious. At that time, decision was with my wife and my children." This was a relationship between the doctor, the patient's relatives and the helpless patient because, it was well aware that the cardiac arrest patient met death-chance all the time. For how long, could a human with cardiac arrest tolerate? And

how much chance would heart beating return? Applying medical technology in heart surgery was full of hope to see the patient return to spending their normal life again.

The patient and children sign consent – Uncle Siri narrated his incident leading to his heart surgery, "When I was 59 and my wife has died; there was a running rally for honoring His Majesty. I applied every time but his time I could not, too exhausted and got pain on the left heart." After a brief rest, the symptom was gone but when I started running and the symptom returned and found rigid at my chest, uneasy and unable to breathe. The committee members found him too exhausted and refer him to the Sithandorn Hospital.

During 15 days admission of Uncle Siri in the ICU, "the symptom was not better and doctor did not know what my disease was." The doctor wished him to return home but his symptom was not recovered. He decided to be treated in a public university hospital in Bangkok. At that time, his disease was unknown. Treatment was then begun from the emergency room first and referred to the heart specialist clinic. After he was checked by medical technology, "the doctor prepared operation at 4 o'clock in the evening and the doctor told me that I have glucose and medicine for many days and my body was the ready for operation." the doctor verified his safety of heart surgery, "100% alive and safe (no death and no danger)". Before operation, the doctor asked his 2 children to sign his operation consent.

The case of Uncle Siri with moderate cardiovascular sclerosis without dysfunction of left ventricular and the surgeon viewed it not complicated. Doctors dared to verify safety with him. However, on the operation bed, any risk could happen at any step, and not to be negligent and to prevent difficulties later, surgeons asked him and his 2 children to sign consent. The operation expense in the public university hospital where Uncle Siri has been admitted was just 60,000 Baht, "The nurse asked for deposit before operation for 30,000 Baht and after surgery for the rest. It was not expensive compared to return to normal life again."

5.2 Medical Professional Power: Bureaucratic and Private Physician

5.2.1 The bureaucratic physician power

The bureaucratic physicians less care about medication: after Uncle Siri ran the rally for His Majesty and felt chest pain and referred to the Sithandorn Hospital and he stayed 15 days in ICU but he was not improved. The physician examined that he has been in the hospital for many days and the ICU beds were insufficient for the acute cases. It was decided he had to be discharged. He narrated that, “Doctors want me to leave the hospital to my home.” He informed the doctor that he would not leave the hospital since he still could not walk and could not walk to toilet room by himself but needed someone to support. “I am still not recovered how can I leave the hospital?” but the doctor told him, “Are you going to take hold the hospital as your home? Do you think to stay in the hospital and never return home?”

His children brought him to be medicated in a public university hospital in Bangkok, “My children brought me without refer.” The reason, he moved to other hospital because, “The doctor took no interest.” He narrated further, “I think that the Sithandorn Hospital cannot medicate complicated disease but just common ones such as providing glucose, oxygen and sustaining symptoms.”

The patients fear the bureaucratic physician power – after Uncle Siri had heart surgery, the doctor in the public university hospital in Bangkok asked him to tell the doctors in the Sithandorn Hospital that anyone needed heart surgery; they had to be referred to the public university hospital. He narrated, “I fear to inform the doctors of the Sithandorn Hospital, who will damn at me.” But he told his friends and relatives if anyone got heart disease, they should go to the public university hospital in Bangkok. There all will alive. Works of doctors in the public hospitals as bureaucrats had to be for the benefit of public rather than for private affairs. It made patients fear to criticize their work or suggest any recommendations.

Auntie Ampha narrated that before her heart surgery, she has her medical check in a private hospital in the neighboring province, “After check, the doctor told that I have little cholesterol. Take medicine first, and after that seek medicine from hospital near your home and need not come to meet me. It is too far. If you come, just

come for medicine." After medicine from the private hospital in the neighboring province her home ran out, she went to the Sithandorn Hospital and met Doctor D. who was the physician in the hospital. She kept the tablet samples and, "I asked Doctor D whether he has such tablets. The doctor returns the question what I got the disease. I told him I have medical check in a private hospital in a neighboring province. The doctor told me I have high level of cholesterol. I asked Doctor D again whether he has the tablets. He responded he has none. I asked again about the similar ones. Doctor D. said if I have checked there and got medicine I should went and got medicine from there. I felt disapproved"

The medical profession power and the bureaucratic power make one command more and talk less because there are more patients with restricted time. The doctors cannot give details to every patient. Their behavior in the public hospital contain both bureaucratic with higher privilege that common people and medical which full of knowledge in medication and prescription more than the patients. They push the patient who take shortcut in the diagnosis of the public hospital having the patients telling the doctor about their diseases and what tablets they need rather than the doctors diagnosing and prescribing tablets for the patients.

The first recommendation of the patients in the public hospitals under supervision of Ministry of Public Health during 2010 was providing service, manners and reception of the staff (National Health Security Office, 2010). Negligence to improve the public hospital services having doctors as the hospital board both on time waiting for medical check and too long waiting of receiving medicine, manners, staff reception, medication quality, drug quality, poor medical or low standard of equipment; drive the private clinic and private hospital where the public doctors go to work part-time. The growing numbers of patient who are dissatisfied with the services of the public hospitals turn to the private hospitals for medication. The health discourse under capitalism and consumerism believe that money can buy all even life and health.

5.2.2 Economic advantages of the medical profession

Private clinic income of the doctors: dissatisfaction with the public hospital services on unable to satisfy Auntie Ampha, she decide to go to the Doctor O. clinic, who worked in the Sithandorn Hospital. She narrated that expense for high cholesterol was more expensive, “800 Baht for the first month; 1,000 Bath for the second month, and 1,500 Baht for the third month but cholesterol does not decrease.” She told Doctor O. that she took tablets every month but her cholesterol rose, which should usually decreased. However, the doctor’s wife (who sat on the cashier counter of Doctor O clinic) told Auntie Ampha, “Eat by money power. If little amount, eat little. If more money, eat more. Then I asked if there were more money, would you not eat until death? The doctor’s wife said for Auntie is not yet eaten enough and it must be more than this.”

Auntie Ampha returned home and thought, “The doctor may give drug to increase cholesterol. At the Doctor O clinic that my neighbor came to treat high cholesterol and died after seeing the doctor, he drove home and shocked in his car. The more he took the medicine, the higher cholesterol he had.” Running private medical clinic business under capitalism focusing on drugs and without advice on physical exercises, nutrition, and relax stress increase the medicine expense.

Income of the public hospital: Finally, Auntie Ampha returned to cure high cholesterol in the Sithandorn Hospital because one day steel pierced and wounded her foot and she had to been treated in the emergency room of the Sithandorn Hospital. She had met Doctor N. who was the 1st expert in providing data in this research. She narrated to Doctor N that she had met Doctor D., and asked for tablet to reduce cholesterol level but Doctor D declined and reprimanded her. Doctor N asked her to return to the Sithandorn Hospital and this time thing changed.

She returned to meet doctor in the hospital as Doctor N advised. This time the nurse did not call her to meet Doctor D., but to other doctors. She narrated, “The doctor check and cried that I had 600 of cholesterol level and asked where I have been. I told the doctor that I was not going anywhere but taking the medicine from the clinic of Doctor O” when she came to treat her high cholesterol she had to pay because the doctor told her that medicine was foreign drugs. “800 Baht for the 1st time and after

taking, it reduced until now I pay 200 baht and get heart disease and got operation. Then I stop taking medicine but I took medicine from the public university hospital in Bangkok" she took medicine to reduce her cholesterol prescribed by the Sithandorn Hospital for 3-4 years and it reduced cholesterol level until she realized she got heart disease and underwent operation.

Life exchanged with a large amount of money- relationship between doctors and the patient taking open-heart surgery in the emergency room of a private hospital had been dictated by capitalism underlying the private hospital affairs. Uncle Weera had to pay 800,000 Baht for the surgery and he narrated, "Doctors in the Sinthandorn Hospital never talked about the public hospital but only the private one. Because of my acute case and cannot wait for queue or impossible to wait; then the doctor introduced a private hospital and he did not ask my wife whether we had money."

Uncle Weera thought that the important reason that the doctor at Sithandorn Hospital advised his wife to bring him to a private hospital for emergency operation, "If the public hospital operates on emergency and it is normal if the patient is alive. But if the patient dies, they will be sued. So, the doctor must refer to a private hospital where patients pay expensively. If being dead by operation and sued, the hospital will spend the costly amount to pay." Expenses of heart surgery in the private hospital are ten times the public hospitals. This includes risk from operation in case the patient dies during operation or disability after the operation. The private hospital charged directly with Uncle Weera's wife.

5.3 Doctors are Experts and Justified to Use Medical Technology with the Patients' Bodies

5.3.1 The scientific logic of doctors

The 1st expert or Doctor N.,a thoracic surgeon in the Sithandorn Hospital, 10 years experience in medical working had attitude on current patients, "Doctors and

nurses don't wish to harm over patients. What is the benefit, that doctors and nurses libel patients? This is the real world not fictions or dramas in TV where the jealous are doctors and nurses who libel heroes or heroines who are patients. Today, dramas popularly consumed and shot for watchers to think that it is the core of living for people today through looking and accuse the consequence of being ill rather than looking at the cause. It is not the patient themselves which causes the diseases in oneself. Admitting in the hospital is to find just the scapegoat for the disease and the victims are doctors."

Besides the 1st expert relieved his uneasiness in working as a doctor, "Now, there are lawsuits against doctors. It threatens us and fear to treat the coma patient because even not attended they are potential to die. When the doctor treats and the patient dies, doctor is accused of poor treatment and enter lawsuit. Sometimes, doctor does not err. For example, the case of drug allergy; it is possible without being recorded as allergic before. Doctors treat as being taught but why does the patient get acute allergy to death. Don't be serious, birth and death are paired. Even doctors must die. None is infinite. I am a doctor for over 10 year and meet many patients. Some are so good and become spiritual support for me to work on. But there are some patients and at present there are more who prioritize their mood. When doctors or nurses advise, they do not want to hear. For example, to care for their own health, doctors and nurses explain but they listen with wry faces decline to hear. Arriving home, they cannot take care themselves. When they are not improved, they return with shouting, blast at the doctors and nurses on poor medication. Patients today help themselves less but demand doctors and nurse to be their mood landing."

5.3.2 Contradictory logics among medical personnel and the patient

The medical personnel hold legal power to use medical technology over the patient's body. But there are different viewpoint between the doctor and the patient, i.e. idea, belief, sense about technology. These lead to conflict between the medical personnel in the Sithandorn Hospital and the patients including their relatives. There have been violence and emotional burst between both parties. From interview the 2nd expert, who is the senior nurse chief of the OPD Surgical Unit. She narrated incident happened the day before, "A woman from our province, she is the wife of a

garage unnamed but you (I) would know. She suffers cardiovascular disease and needs bypass surgery because her Coronary Artery Angiography (CAG) reveals 3 coronary artery scleroses. During the CAG she quarreled with a cardiologist and the nurse of cardiac catheterization on the 5th floor accusing that the doctor made her painful, the nurse gave poor attention and she claimed the Hospital Director to move her to 4th floor reasoning that the nurse at 4th floor took better attention. The director declined her claim that 4th floor is treat for other diseases and not for heart disease. She was told that any CAG is painful since the needle has been pierced through flesh. It was unavoidable but it is the only way to make the quality life of the patient better. The hospital director told her that she had passed through many tablets taking and knew that the disease is not relieved. This needs patience for medication. Such explanations were from the Director but the woman still did not understand."

The 2nd expert added, "this woman, if displeases anyone, she will blast or punish the person without delay. It is witnessed when she comes to wait at the OPD surgery unit and I hear a call, she blasts back to the call impolitely. Being working here for many years, I can guess that she is frantic and egoistic. She has thyroid toxicity. It involves her mood instability and the doctor diagnoses that she must have bypass surgery. Being never meeting difficulties before or exposed to life difficulties but surrounded by flattering people, she never meets any life failures. I do not reproach the patient but disseminate variety of her dimension. When the doctor tells, she has to undergo heart surgery, she starts outcry, dispraises doctors and nurses that she is being bullied and returns to reprehend cardiac catheterization unit accusing to make her pain, and swollen. The doctor mannerly asks if she needs any help but she returns that she comes to reproach doctors only and starts dispraise doctors and nurses in the presence of the innocent patients. Do you (I) think; it is rational? I admit that it is immoral just thinking that doctors and nurses are assaulting and irrationally dispraises them. Why must doctors and nurses hurt patients? What are their benefits?"

I asked the 1st expert or Doctor N a cardiovascular thoracic surgeon about the wife of the garage's owner located in the province where the Sithandorn Hospital situated. Doctor N. told, "… This woman! Madame, the Surgery Department refuses to medicate. She needs spiritualization and be optimistic with people around especially doctors and nurses. No doctors or nurses wish to harm patient. The Cardiac

Catheterization Unit, where she runs into the problem with, has been reported by the senior nurse of the cardiac catheterization unit that her daughter blasts that doctors and nurses treat her mother poorly. The cardiologists work with pure heart without thinking of compensation. The senior nurses almost on retirement have worked to really want to help patients. But she impolitely blasts at them. They wanted to send her to the surgery department. I beg not to send such the patient here. There are so many pitiful patients and understand the innocent intention on our medication and the nurses. The national resources should be used with quality persons who know how to live in societies with harmony…"

The 2nd expert added, "… the occurrence so much disheartens our doctors and nurses' spirit. We work without thinking of compensation. If such of this type increases, doctors and nurses will feel more uneasy. I do believe the Thai proverb – view an elephant at tail; view a girl at her mother but for better view also her grand mom. This girl is not twenty but impolitely blasts at doctors and nurses with double haired color without reasons…"

The 2nd expert continued an incident when the heated patient and her daughter berated doctors and nurses, "…On the day I was in the incident and I could not tolerate any longer so I asked her where she had studied. She returned me why did I ask her. I told her that I would keep as a hint not to send my nieces and nephews to study there because I did want them to be narrow minded, self-centric, and pessimistic. Such deep blows like that she did not stop…"

The 2nd expert furthered, "The girl yanked a nurse aged as her mother and threatened that who were doctors and nurses hurt her mother. I told her would she hear me out…neither. Neither doctors nor nurses even thought to hurt her mom. She could normally walk, eat, nothing was irregular, and why did she stood and shouted that CAG (Coronary Artery Angiography) made her swollen and it was not. Her mom was too obesity before taking CAG. If she did not believe, I asked her to weigh whether her mom was overweighed. So keep cool and hear the elders out not just blasting at elders…"

The 2nd expert continued, "….the girl said she had taken her mom to another public hospital and the doctor and the nurse said that our doctor and nurse did poor CAG. So, I asked her what the name of the public hospital was, what the name of

the doctor said the name of doctor who treated badly. She returned why I must ask her about the name of the public hospital and the name of the doctor. I told her that we were in the same medical field. All knew each other well. The girl skipped the question to a private hospital. So I asked which private hospital and the name of the doctor said. Our hospital would coordinate to request for medical information. She returned me with berating doctors and nurses treated her mom poorly. So, I said that she did know what she talked about. So I asked what she wanted since her mom arrive here, she had already yelled and the doctors and the nurses had asked what did she wanted for assistance, how did she want medicated or taking pills …and how dare she accused our hospital treated her poorly…"

The 2nd expert narrated the conflict, "The girl said she told her mom that not to come to this hospital for medication again, and that day she said she had brought her mom to a private hospital. I said that was good. Next time she should bring her mom to the private hospital straight and never came here this hospital; because this hospital was not a private hospital. No doctors here would medicate your mom. Just only, your mom, all the hospital was chaotic. Instead, the girl said bitch like me chasing her and her mom to other hospital. I told her that she said this hospital was not good and why she was here. This hospital was useful to many others and if she and her mom just the two were not medicated here, the hospital would not be discredited. But what she yelled at the doctors and nurses was like a fresh market and disturbed other patients. She would be sued as defamation. I am not a staff of the cardiac catheterization unit and allowed her as a kid to blast as us…."

The 2nd expert cut short, "….What she was all yelling, I had all recorded and if she did not stop blasting, I would notify police. The girl said she would also notify police. I told her that she stood yelling to others in their offices and she would notify police and who would the police believed; she or me. I had evidences and witnesses were patients, doctors and nurses. She would not only be fined but imprisoned because she defamed the professions of doctors and nurses and the hospital created benefits to societies and she still disturbed others patients in the wards. Both fled. I hurried to pray to the Lord Buddha and all holies not to both back again and they went where they wanted medication. Women with problems never followed what others order but ordered others. When they are dissatisfied, they blasted at others, as

they liked. It became habitual. But I thought that they thought they were rich with money and all must bow to them. But anyone would like to stay happily in a society, one must be compassionate and understanding others. I had ever found this woman driving and yelling at drivers in the roads. It was senseless. The doctor was right that they refused medication both physically and mentally and goodwill of others in societies too…"

The incident of CAG patient with moodiness whom the 2nd expert narrated became talk of the Sithandorn hospital. Viewpoints between the medical personnel and patients in the case of medical technology alienating the different human bodies required solution of putting-on-other-mind. This would gradually narrow the gap between the medical personnel and patients. This is not to be subject to patients or to do everything as patients want but exchange with rational rather than emotion because suspicions and prejudice turn one to think that one dominates others.

Honoring others and realizing that others are humanly similar regardless social classes or wealth. Meeting half way of doctors and of patients makes societies happy. We cannot object that in every society there are good doctors and bad ones as well as good patients and ferocious ones. Reducing accusation of others but empathizing to develop oneself and creating culture to instruct children to be optimists and compassionate will help reduce violence in societies and eliminating some patients are uncreated but disregarded from medication and it will rotate in societies.

5.3.3 Dehumanizing for treatment with medical technology

Uncle Soros narrated that yesterday he went for his medicine to control cardiovascular disease at OPD Surgery Unit in the Sithandorn Hospital. He met a female patient waiting for open-heart surgery and yet to be though her queue has arrived long time ago. She asked the doctor, "I have 100,000 Baht can I have my surgery since I have come here 6 times already. The doctor tells her that she has applied 30-Baht card and at all cost the doctor cannot take the offer. Though she pays the hospital 100,000 Baht, she cannot have surgery. She is not ready she has both diabetes and high blood pressure…"

Medication-based treatments without inquiries of other life dimensions are nutrition, emotional state and exercises. Uncle Soros told about the explanation of the doctor to the female patient waiting for open-heart surgery, “your heart surgery is not taken in the past but the hospital provides preliminary treatment and has already paid for more than 80,000-90,000 Baht. The 6 appointments for surgery are just once the doctor misses because of training to USA, and never distrust the doctor…” Doctors in the public hospitals are the civil servant and gain opportunities for foreign academic conference. They also ask for state affair leaves without thinking on patient treatment since they get salary from the state not by each patient treatment.

Finally, the doctor proposed a solution to the patient, “…If you want to have faster surgery, the best way is to take admission for diabetes since you return home and I am not certain you can treat yourself as this and staying in the hospital for not more than 15 days…” Expenses for physical preparation of patients in the heart surgery in the public hospital have been subsidized by the national budget and the medical technology for treatment increases the national expenditures.

5.3.4 Authority of doctors to decide heart surgery

The advancement of medical technology for heart surgery is popular among the thoracic surgeons but for the common people especially the patients do not realize its advantages and disadvantages. This allows medical profession empowered with knowledge and commands to apply medical technology (Bates, 1990). From Uncle Mana’s words, “…I have been waiting for heart surgery in a Heart Specialized Public Hospital in Bangkok for 7 months. I never miss doctor’s appointment once in 7 days or 15 days as that …”

Uncle Mana told about his heart surgery whether to be fast or slow; the doctor considers who is unsafe then the surgery will be taken. If the doctor considers the patients are still living on, they will be medicated. “My case is slow and medicated for 7 months and still alive. The doctor is still withholding my surgery but taking pills. If it is really serious, I’ll get surgery…”

The CABG surgery is based on the eroded pipeline theory and having cardiovascular disease (Wheatley, 2003).Uncle Mana narrated that before surgery the doctor explained the open-heart surgery, “Arteries are like a pipe and after sometimes

using it is eroded, blocking and unable to cure except changing the pipe. If taking PTCA (Percutaneous Transluminal Coronary Angioplasty), it is like cleaning the old pipe by running the artificial artery. Later, there will be new sediment. The arteries with the PCTA will not stay forever but retaking. There are chances of blocks…" PCTA is a temporal treatment unlike heart surgery, which is changing the entire artery because a new artery is cut from a place in the body and joins in the other place.

Surgeons adopt the human model as a mechanism as the principle of surgery. It, therefore, arises to repair the part of disease, injury, damage or defective since birth. This is by taking out its pathology and replaced them to rebuild the new body in order to responding the needs of the patients and society. Operations are to repair the body and rebuild it or re-assembly engines.

Besides an open-heart surgery, there is another type. Uncle Mana has told me that, "the surgery of valvular heart disease also takes an open–heart surgery and places artificial heart. It is much easier than CABG (coronary artery bypass graft) surgery but living is more difficult since the artificial heart valves work unlike the real ones. It poorly close unlike the real heart valves with hemorrhage and it needed to take anti-coagulant drugs always. Thrombus blocks and endangers and the cardiovascular thoracic surgeon also operates…" There is, moreover, an operation for heart pacemaker.

5.3.5 Authority of doctor to experiment the new medical technology

The new medical technology for heart surgery does not reduce death rate or prolong the life of patients. Choosing it for the heart surgery without evaluating its efficiency comes from the research funding and medical training offered by transnational companies which manufacture the medical technology (Bates, 1990). A narration of Uncle Mana, "…My friend took a cardiovascular laser surgery with just a small puncture and using camera not balloon and had got very tiny wound under the heart. The operation was in the public university hospital. He took surgery later than I did and lived for two year and was dead. They said it was a new technology, just minimizing surgical wound and without pain. I told my friend that I survive because of an open-heart surgery; the doctor saw every blocked artery and completely joined them…"

5.4 Disparity of relationship between doctors and patients

Assets of the medical profession are knowledge gain from treatments. Heart surgery for the outpatient is the must, brings incomes and gratitude from patients and their relatives to save life. Most important thing is learning treatment techniques from real human being and each case has different attribute of disease. The heart surgery made to the patient is to increase their surgery skills. All information of treatments is in their hands along with experiment of the new medical technology for surgery because some have not been certified on their medical treatment efficiency.

5.4.1 Power and knowledge in fact construction

His Venerable Abbot Suwan narrated on the occasion that heart surgery had to be taken, "… The doctor puts in overview as bypass and non the horrible thing and be confident of getting cure with no anxiety…". Applying medical language as bypass rather than an open-heart surgery makes His Venerable Suwan as a lay person hard to clearly understand the operation. Before operation, His Venerable Suwan did not know to take Bypass surgery required an open-heart surgery and the operation was in a private hospital, which was costly. The words from the doctor were ambiguous and unclear operation technique because if the patient feared the open-heart surgery and would not choose it.

The doctor informed about heart operation to His Venerable Suwan by watching VDO, "the picture is blurred where there is operation without showing dangerous or terrifying spots. Then VDO shows how to take care of oneself after surgery. The operation takes around 20 minutes…" His Venerable Suwan got a pamphlet prepare for the heart operation which was the medical obligations for patient to conduct before the operation. Watching VDO with blurred picture of the heart operation on parts unwanted the patient to perceive dread and danger. Words heard were safety and operation techniques telling the patients were not totally facts. But in the part just for the patient to perceive was the benefit of heart operation to reduce angina pectoris, prevention of heart attack and prolonging life, which persuade the patient to decide for heart surgery.

After watching the VDO and receiving the pamphlet; His Venerable Swan was still fear about heart operation because ever seen of heart operation from TV and the doctor hanged the heart at the wall. His Venerable Suwan asked whether the doctor hanged the heart on the wall. The doctor declined of not doing so and that was a misunderstanding. Besides, the nurse told His Venerable Suwan would have been operated by the prominent surgeon of Thailand that convinced His Venerable Suwan about the operation. The professional nurse is supporting the medical professional and persuading the patient to accept treatment and the medical technology (Scheper-Hughes, 1990).

Finally, His Venerable Suwan believed in the doctor and narrated to me that, "… thinking that I left my time with pains and wasted my time. I am exhausted when walking and even talking…" Importantly, after operation, asthmas and allergies were also gone. The byproduct benefits from the medical technology in heart surgery. His Venerable Suwan mentioned at the end, "…If knowing having a heart disease and recommended by the doctor for heart surgery; please be confident and allow the doctor to follow his sound scientific principles…"

No risk at operating bed – Uncle Soros narrated what surgeons told, "…heart operation over 100 cases…"….The doctor asked him whether he heard any cases died during the heart operation. Uncle Soros responded that there were around 10% but the doctor told him that he had operated more than a hundred cases and just one was dead. The words convinced him on applying the medical technology for heart operation and what the doctor said, "…not dying because of operation but complications, the doctor said which in general it is 50-50…" In fact on the operating bed there is always risk because mistakes could occur in every procedure.

5.4.2 Gratitude of the Doctor on Saving Life

The narration of Auntie Ampha revealed that the medical technology depicted relationship between the doctors and the patients. It empowered them to use the medical technology over the patients' bodies. This reflected surrendering of the patients to the medical technology and an ambiguous state to the health of the patients. Questions about survival were raised, "…the doctor told how to do as angiography but

the doctor is not responsible for cure or death but after operation, one may be not normal or dead or paralysis and the doctor cannot guarantee at 100%. But if deciding operation, the doctor told that dead or alive even operated; would you take risk. Since I was born I was never met such pain, almost dead pain until I cannot even stand, lost sense, getting angina pectoris even cannot talk, unable to breath . So, come with operations may and cannot live because of being fully painful…"

An emergency heart operation of Auntie Ampha was happened in a public university hospital where doctors held both power of medical profession and the bureaucrat who are empowered of much command, less talk and the patients have to follow the treatment regulations of the hospital. Observing the medical technology controlling the patients' bodies, Auntie Ampha narrated, "…the doctor did not explain how the operation was but just operation or not operation and time was left just 20 minutes. If not decided, there would be no operation since it was beyond safety. The doctor role that I must not be happy that after operation I shall get cured or dead and may be paralyzed since I was under too serious condition…"

After Auntie Ampha recovered from operation, "… Countless doctors flocked to see my operated wound. The doctor told me that the day before I was already dead but the doctor revived me. I asked the doctors, was it true I was already dead. I came to see the doctors and how could the doctor make me dead…" Her narration in the heart operation context with the medical technology disclosed the physician dependency and the messages conveyed to the patient to feel gratitude to doctors who helped save her life with the heart operation.

5.4.3 Knowledge of the Doctors from Treating Patients

In the public university hospital where Auntie Ampha got her heart operation there was specialized resident training and resident practiced from real patients when patients did not know that they were studied, "….I think that doctors are kind and friendly and not discriminating a peasant like me. In particular, the doctor who knows that I have been admitted in the Sithandorn Hospital, and the province they have worked before, we have close talks. They asked me how did I arrive here and was my home far from the hospital. How did I become the patient of Doctor T? I told them whatever I felt sick that I went to meet Doctor T. It seems that I acquaint

with doctors. After his ward inspection, he visit and talk with me…"Inquiries about symptoms and medical treatment records of the specialized resident from the narration of the patient; it was the learning of doctors in another form.

Uncle Soros got her heart operation at the Sithandorn Hospital for the past 9 months. Before his heart operation there was an acute myocardial infarction during waiting for the operation appointment in 45 days. His heart was cardiac arrest and brought to ICU room in the hospital for over a month before his heart operation. During waiting he got twice temporal cardiac arrest. The medical chart records revealed that his left ventricular was dysfunction. Uncle Soros was the patient with severely cardiovascular disease and treating with complicated patient much knowledge to the doctors.

During his recuperation in the male surgery ward after operation, "…I feel that the cardiac surgeon are so kind even 1 o'clock in the morning he calls to check how much my urine was or I urinate and what should I pay attention to. At 6 o'clock in the morning, the doctor visits me without fail…" With medical knowledge, the water excreted from the body was the indicator of the heart function. Calling to inquire the heart operated patient by the surgeon made the patient felt that the doctor was so concerned the patient and with high responsibility. Inquiries are a technique of learning for doctor to improve their treatment in future and it was the knowledge gained from the living human body.

5.4.4 Medical personnel instruct patients as children

Leaving the operation room to the ICU, Uncle Soros was hallucinated from the anesthetic drug, "…At that moment, I would strongly blast at the nurses. When I was fully recovered I heard the nurse told me that I did not help myself, she sat there all the time and I talked what she did not know…" Even the patient was unconscious and cursing doctors and nurses that it should not be because they survived the patients. Significantly, patients must be patient and least talking and that was called good patient (Lupton, 2000). Whereas nurses did not listen to the feeling or sympathy the patients and instructed them as children, it was the illness experiences of patients being dehumanized when being in the hospital.

5.4.5 Doctors' power in the medical chart records

Uncle Piti narrated that in 2005, the doctor in the Sithandorn Hospital suggested him for PTCA (Percutaneous Transluminal Coronary Artery), the medical technology by balloon, in a public university hospital and the doctor went to treatment. However, in 2005, there was deluge flooded over the district where the company of shrimp purchasing was located. His older daughter was dead by flood and the deluge damaged the company's assets for more than many millions. His company purchasing shrimp for export was cheated and his wife was gone insane. His life lesson for this flood made him painful and frustrated. He refused to use medical technology of PTCA and the doctor records in his medical chart that, "….The patient refused treatment…" the doctor reasoned his sclerosis of coronary artery that, "… because of over drinking and over smoking…"

Different views between the doctor and Uncle Piti enlarged the relationship between the doctor and the patient to different corners of the world, such as the scientific world, the doctor who explained personal behavior and risk factors. Beside that the real world is full of pride, embitterment, suffering or pains. The both worlds evolved in parallel, which would never meet. It became the gap of power, authority and knowledge between the doctor and the patient.

The patient dreaded the medical chart records – at the late of 2009, doctors in the Sithandorn Hospital recommended Uncle Piti to use medical technology for PTCA again. The doctors told him that the Hospital could provide PTCA. He agreed. On February 8, 2010, Uncle Piti was admitted into the Hospital and a day for preparation. The on February 9, 2010, the doctor punctures his groins and provided CAG. It revealed that all arteries were obstructed and unable to provide PTCA. The doctor told him that he would be transferred the public university hospital for heart surgery and he agreed.

The cardiologist transferred him to cardiovascular thoracic surgeon in the Sithandorn Hospital who checked his medical chart records and treatments and the doctor said, "I shall operate you in the Sithandorn Hospital and there is no need to go to the public university hospital in Bangkok". Operation appointment fell on April 2010 because the Hospital was liable to operate 2 heart patients per week. The doctor

made an appointment to him and he stay in the hospital since April 20, 2012 for a 2-day for physical examination and other chronic disease such as diabetes, high blood pressure and respiratory system.

The operation could not solve an obstruction of one coronary artery but its obstruction was too tiny and operation would take long time. " The doctor stopped and stitched back the wound which made Uncle Piti was so suspicious, " … the doctor did not explain details, no operation introduction, no explanation of benefit and disadvantage of the heart operation, any success after operation, just told operation only…" Doctors in the public hospital with hold absolute power on both profession and bureaucrat. They spoke less, frigid treated patients and checked digits mainly from the medical technology.

Uncle Piti narrated about the doctor decided to have his heart surgery. The doctor never talked about the operation but as common check up, took the same time as common checking and just spoke that he could not take PTCA but operation only, "…If I agree, the doctor operate but I can refuse the doctor since I have refused once. That is I do not take PTCA at a public university hospital in Bangkok. I feel being offensive, so I decide to have operation…" Within the word of feeling being offensive of Uncle Piti, it means fearing the power of the doctor. Due to the previous time, he did not take PTCA as recommended and recorded it in his medical chart. That was the patient refuse to take treatment and if this time he did not have heart operation as the doctor recommended, what would happen to him was unpredictable.

Allergy Unrecorded in the Medical Chart– I noticed that below the knees of Uncle Piti, there were many round dark burns. I asked him which drug he got allergy. He said it was penicillin through tube of normal saline solution before operation. Nevertheless, when checking in the medical chart records, it was unrecorded.

5.4.6 Authority to Prescribe Foreign Drugs

Major reason, Uncle Piti decided to have operation as recommended and the failure of the operation because he took foreign drugs for controlling symptom of the cardiovascular disease, high blood pressure and diabetes. Doctors commented to

use the foreign drugs to control symptoms and he uses the welfare of civil servant without paying by himself.

The medical scientific knowledge and the state regulations empowered doctors to prescribe drugs and impose medical technology. They involved in research funds and medical training abroad sponsored by the transnational manufacturers of the medical technology. Uncle Mana narrated "…I don't pay the heart surgery expenditures since I am a civil servant. At that time, its total was free for 400, 000 Baht and no extra pay. The Heart Specialized Hospital make a withdrawal from the Comptroller General Department…," told Uncle Mana.

Uncle Mana said the drugs for treating cardiovascular disease after operation, "…The drug to treat my heart disease, I don't pay and the doctor prescribed foreign drugs (the original drugs). But those applying 30 Baht-card, the doctor declines…" Arriving for taking drugs, those applying the state welfare of civil servant and those applying the 30 Baht-card met the doctor in the same hospital but descriptions were different. All were doctor-dependency and created the discrimination of healthcare consumers.

5.4.7 Different treatment between public sector and private sector

The working in bureaucratic of physicians were absent with many times lower incentives than in the private sectors. It made doctors to be absence the enthusiasm and creativity. The narration of the 2nd expert, a professional nurse and senior of the OPD Surgery Unit, "…Some patients complain that doctors work very slow. Most do but when the doctors arrive, they stop and that is just complaint at the back for us to hear. Some say they have been waiting so long and without checking, no explanation but just prescription. There were only some doctors but some are good, some do not adapt. I believe that doctors can adapt because at the private clinic and the in the public hospital, they cannot do the same. There is different in the private hospital and in the private clinic while so different in the public hospital. A patient says he meets the same doctor with 3 times; the 2 times are good but 1 times when meeting in the Sithandorn Hospital, it is so bad: never asks, never greets, with reprimands, and never looks while talking. This is the comment from patients. Nevertheless, if the patients go to a private clinic or to a private hospital, the doctor

becomes a different person. No need to tell the doctor's name and the patients just recently point out…"

Practices of the same doctor in different places both in the public hospital, in his private clinic, and in the private hospital are counted skillful adjustment, enabling to survive in a different environment and retaining renown over other occupations including owning most resources of society. The professional representatives draw regulations with the state for the benefits of the medical professional. The disparity of the relationship between the doctors and the heart surgery patients is full of power, gratitude, money, and dominated knowledge over the patient. Doctors act as middleman to adopt medical technology into the human body and gain benefits through training abroad sponsored by the transnational medical technology cooperation as doctor-friendly.

CHAPTER VI
ILLNESS EXPERIENCES WITH MEDICAL TECHNOLOGY

The collective experiences of the patients with the medical technology for heart surgery pertaining emotion, sensation, thinking method and treatment have many mechanisms to address and self-care mechanism related to power of self and identity. In addition, the role of the alternative medicine is seen and clearly coupled with self-care process. It is the choice of the patients where it reveals power or self, which might be dissatisfied with treatments because some doctors frame their treatments within controlling disease, taking drug by prescription and checking by appointment.

These collective experiences are the lay knowledge necessary to understand the life of patients using medical technology for heart operation. It is a new direction of knowledge abridging problems and linking the physical and social environments with behavioral conditions related to common civilian culture, which increase capacity for the patient to be responsible for their healthcare.

6.1 Life Context Related to Heart Operation

The narrations of the 7 participants are rich with life contexts related to heart surgery beginning from sufferings, stresses of occupation, oppressions, loneliness, and exploitation, where life is not all so ferocious but optimally supporting participants to live on.

6.1.1 Changes in the family

Phenomenons in the patients' families bring difficulties for living and lead to discouraging and disheartening. Some occurrences cannot be explained by science and the patients exploit logics on fate to explain them, i.e. a sudden death of the daughter by flash food into the provincial city, the wife became insane and the son cheated all assets, broken home, and paternal abandonment since childhood. This

includes the positive happens in the family, i.e. life course choice with power of faith, pride of children's success, dependable daughter, well adjustment to new step-father, mutual understanding between life couple with the same illness, supporting the patient to live on, which are the context involved with cardiocentesis and the aftermath recuperation.

6.1.2 His Venerable Abbot Suwan

An elder bhikku of 79 years undergone cardiocentesis by appointment for the past 5 years in a private hospital in Bangkok, tall, double-colored hair, fair skin, wrinkle face by age but bright and cool, indifferent, high disciplinary because belonging in the temples though too many but in order and clean. Around the residence is quiet, peaceful and shady with big and small trees. Though the temple is located outside Muang District vicinity where the Sithandorn Hospital is located; but the climate around the temple are congested with shops selling Sangha materials. There are buckets of Lent Offerings, incense sticks and candles, leis, golden sheets to stick the Lord Buddha, potteries of elephants, horses, humans, including selling birds, fishes, pond snail, and turtles to be released for dismissing unlucky fates. Each day, the faithful will visit the temple and countless faithful from other provinces will assembly to contribute offerings.

His Venerable Abbot Suwan is well-known among the Hospital staff because of being the step-father of an orthopedicist working in this hospital. His Venerable Suwan visits the hospital once in two months for diabetes drug and drugs for cardiovascular disease in every 6 month. His Venerable Suwan has a very good economy but to fetch drugs in the Sithandorn Hospital, that is the public hospital, because His Venerable Suwan's stepson recommended it and the original drugs from foreign country which His Venerable Suwan has to pay are paid by the stepson.

Travel to this hospital is usually in Benz or Volkswagen Van or Toyota Van with a driver and a female caretaker who is the wife of the driver and being the niece-in-law. Before deciding to undertake the heart operation, His Venerable Suwan had undertaken PCI for two arteries with other systemic disease, such as diabetes and hepatitis. Last two months, it has been found that His Venerable Suwan got cerebral thrombosis. The stepson orders the foreign drugs, which cost 60,000 Baht to treat

cerebral thrombosis. Though His Venerable Suwan is weak, he never fails any religious functions.

Life course choice by fervent faith – His Venerable Suwan's family is wealthy and the family has donated lands to build this temple. His Venerable Suwan entered monkhood at 21 years old and never leave it as common people since dedicated to study Dharma and peaceful life disconnected with outside world. His Venerable Suwan has a monk friend called His Venerable Boonkerd a senior monk with missionary abroad. Every return from abroad, His Venerable Boonkerd will take abode with His Venerable Suwan every time. When His Venerable Suwan's young stepson was studying and during semesterial holidays, he would be sent to stay with His Venerable Boonkerd abroad. This allowed him to have good background in English and successful in his medical profession and a public honorable profession.

Conflict of the caretaker – in the 2nd interview at His Venerable Suwan's abode after breakfast; I, the step-son, male and female caretakers were taking breakfast; the driver's wife a caretaker being the niece-in-law fried a salted dish and stewed duck for His Venerable Suwan.

The son tasted the first spoon of the stewed duck and called the driver's wife to be reprimanded why she had prepared a salty dish, which was prohibited to serve His Venerable Suwan. The niece-in-law pouted and moved to sit at the other side of the abode to affirm that the son was not incriminating the niece-in-law; the stepson asked me to taste it. The first spoon made me felt like taking salt and with another spoon of the fried Chinese kale, it was so salty and I declined to take breakfast but I ate vegetable-steamed dumpling and fruits that I and the stepson bought for His Venerable Suwan.

After the interview ended, I ready to travel back with the stepson, the niece-in-law asked me on what purposes in recording the voice of His Venerable Suwan. The stepson responded that it was for a medical research not concerning the legacy. I observed the reaction of the niece-in-laws, which was disfavoring the stepson, and the persons who knew him.

During returning to the hospital residence, the stepson told that the niece-in-law prepared too salty dishes and coffee for His Venerable Suwan that His Venerable Suwan had to undertake heart operation. Then, it was found that His Venerable Suwan got cerebral thrombosis. She blocked others to meet His Venerable Suwan. When His Venerable Suwan paid for herbal medicine, she would buy her herbal cosmetic and marked up for His Venerable Suwan to pay.

The stepson furthered that the 1st time I had interviewed and recorded His Venerable Suwan, the nice-in-law was not there excepted the male caretaker and Buddhist rite leader (makkhanayakha) who did not obstruct and find fault for those who would meet His Venerable Suwan. The stepson was the nephew and His Venerable Suwan adopted him since infancy because his parents were dead. The driver's wife was His Venerable Suwan's niece-in-law. Both needed to be closed to His Venerable Suwan and feared benefits would be more weighed to the other side.

Pride with the son's success – I observed that His Venerable Suwan was so proud with success of the stepson. His Venerable Suwan talked about him often and some rumors from the hospital staff that His Venerable Suwan bought a new Benz series to the stepson for many millions. The stepson narrated that since young His Venerable Suwan asked him to pay good attention to studies. In addition, after classes, His Venerable Suwan would check his homework and instructing to read textbook every day. After reading, the stepson had to recollect to His Venerable Suwan what the essence was. The stepson furthered that he had good ground in English because His Venerable Suwan would send him to stay with His Venerable's close friend, His Venerable abroad Boonkerd who has high proficiency in English and His Venerable Boonkerd taught him English until he was proficient.

The stepson decided many scientific medications such as prescribing the original drug from abroad for treating cerebral thrombosis, heart surgery in a private hospital by the guru of the stepson. His Venerable Suwan took drugs to control cardiovascular disease in the Sithandorn Hospital because the stepson was working in this hospital, and treating the cerebral thrombosis in a private hospital where the stepson was part-time doctor.

His Venerable Suwan narrated that in 2008, the Sithandorn Hospital opened a cardiac center. The stepson finished a specialized discipline and worked here, "… My son asked me to take medicine from this hospital. Now drugs of cardiovascular disease are paid by the 30 Baht-card and my son pays foreign drugs for me…." However, His Venerable Suwan has been undergoing cerebral thrombosis in a private hospital in the province where the Sithandorn Hospital has been located, "… I use foreign drugs and my son work part-time here. He order foreign drug for me but how much I do not know; he pays…" It is counted that the stepson looks after manage all His Venerable Suwan's diseases including prescribing drugs and dining when he is free from works. His Venerable Suwan's participation in this research is through the stepson and with full willingness from both His Venerable Suwan and the stepson.

6.1.2.1 Auntie Ampha

An elderly lady of 64 years old, thin, short, tan, double-colored hair with bob style, round face and wrinkled, friendly and conversationist said she never realized she got cardiovascular disease and underwent emergency open-heart surgery in a public university hospital in Bangkok for 3 years because of angina pectoris. Her daughter brought her to a private clinic of doctor who worked in the Sithandorn Hospital. The doctor refers her to a public university hospital in Bangkok. After her heart operation, she stopped horticulture and shrimp farming since she was weak which included diabetes, cataract, and degenerative bone disease. She separated from her husband because her husband incriminated her of missraising their son. The doctor informed her daughter that it was prohibited for Auntie Ampha to be stressful. Both daughters separated her and her husband for each caretaking.

Pains of motherhood-a good for noting son: the medical discourse is that stress is the major cause of cardiovascular disease and relayed by Auntie Ampha, "…Before I got heart operation, I was so stressful about my son…" Disappointment was with her son on both his education and his occupation. "…I have 3 children, 2 are girl and the youngest one is a son. The eldest daughter completed her K.6 while second daughter complete K.9. The son did not finish secondary though supported him to learn in the city, rented a room and meals but failed and told me he could not learn. The son of the same subdistrict stayed in temple, taking the rest of

food taken by monk; at the moment, they are teachers but my son is good for nothing…"

The most stressful one to Auntie Ampha and her husband was their son deceived them and mortgage their home and land with a rich woman in Bangkok. "…He is mischievous that my husband (Uncle Chieb) and I would not have home to cover our heads. He deceived us by bringing us to a registration Office and at that time, my husband owned the land and the house. He took us to meet a rich woman and told us that he wanted an amount of money to fund a restaurant in Bangkok. We signed for the mortgage…" Later, Auntie Ampha learned that she was deceived when her eldest daughter read the agreement and found out that it was a redemption contract at 1,000,000 Baht. "…I realize my son deceives me…" Then she started crying.

Loneliness of a couple lives: After Auntie Ampha and Uncle Chieb had been deceived, Uncle Chieb was so stressful and blamed that auntie Ampha never instructed their son to be good but devastated parents. However, Auntie Ampha never subdued and said to her husband, "…You also indulge him because he is a son who is the family successor…" Auntie Ampha said they have married for 30 years and never quarreled. "…I cannot hold it any longer. When children are bad, the mother is blamed and never the father. The father has also part to degenerate the children. I decide that not to be any spittoon any longer…separate or divorce I don't care; Mr. Chieb…"

Quarrels among them on their son who disappointed them and their life could not find exits and lonely, "…At that time, Uncle Chieb bought a dozen of local whisky to drink and lay on floor holding bottle near the dragoon glazed water jar in front of the house. At the same time, I went digging in the garden from four in the morning until dusk everyday thinking to die with work and I can escape suffering. Villagers had rumors that Auntie Ampha and Uncle Chieb were insane already…"

Daughter: The refuge of parents: deceived by their son by redemption has been solved by the eldest daughter. "Ta Chieb cried out…I have no place to live…"said Auntie Ampha. The eldest daughter took the money from her

husband's parents to recline the land and home for the wealthy woman from Bangkok. Finally, Auntie Ampha inherited the land and home to her eldest daughter and asked her and her family to stay with her. "Me, Uncle Chieb and my daughters were stressful till death to overcome this issue…" said Auntie Ampha.

6.1.2.2 Uncle Soros

A man who had open-heart surgery in the last 9 months was 51 years old. However, the picture that I watched an infirmed man near retirement, high cheek, sunken cheek, dull skin, saddened face, lowered temper, wrinkle skin, floated sinews on hand-backs, thin, leaned body when walking or standing. During talking and when raising hand for explanation, he looked shaking all the time. Voicing needed shouting from his throat but shaky and had to shout all the time during narrating.

Birth is unchoosable but choosable to do: Uncle Soros narrated his early life from his memory, "…My mother was married twice; with my father and divorced. I have 3 children with the same father and another 3 children with the new father…" His mother raised him at early life while his father after separation never contacted back. Because his mother had many children and his father never supported which made Uncle Soros finished just K.4 only. He then pushed all his children to study higher. "…since I study less and other likely humiliate me…" said Uncle Soros.

Uncle Soros is a Chinese banquet organizer and fully booked because of his cooking genius and choosing material for quality food and not so expensive. He had little academic background but successful in his profession from life experiences with high responsibility and diligence.

A dutiful father: Uncle Soros married and has 3 children. The first two sons were graduated in master degree. The youngest one is studying bachelor degree in an Eastern University. The most critical paternal duty was on during the entrance exams for his youngest son in 2008. His son was successful but he skipped PCI recommended by the Sithandorn Hospital to a public university hospital in Bangkok. "…In 2008, the doctor told me to have PCI in a public hospital or a public

university hospital in Bangkok. I had to make my own choice. At that time, the Sithandorn Hospital could not and my youngest son was taking entrance. I decided not to because thinking that PCI made me also taking pills and I saw no problem. The doctor recorded that the patient refused treatment…"

Understanding life couple: Uncle Soros narrated that all siblings, "I got serious cardiovascular disease and being caretaking well from my wife and children and fearing to be this and that; so I decide to undergo open-heart surgery…" He was taken cared by people around as an endangering and deadly patient and living amidst people who are worried around the patient. It makes the patient conscious of the disease and is worried about his future.

Besides, his wife is suffering cardiovascular disease but not yet undertaking open-heart surgery but dosing and being careful about stress and insufficient rest. "…My wife fear operation…" narrated Uncle Soros because the heart is the critical organ meaningful to life but if the heart stops, all then end."

6.1.2.3 Uncle Piti

A 67 years old man, who is big, tan, clear and loud voice, serious, sharp, tolerant, vigor and high disciplinary. His residence was outside the district vicinity, married and stayed with his spouse. In 2000, doctors from the Sithandorn Hospital diagnosed him that he got cardiovascular disease and taking pills to control the symptom. In 2005, the doctors in Sithandorn Hospital persuaded him to use medical technology of PCI in a public university hospital in Bangkok and they would do it for him. . However, Uncle Piti told them that he was not ready and taking pills. Doctors recorded that he refused treatment.

In 2010, the doctors in Sithandorn Hospital agreed that he needed open-heart surgery by appointment. His surgery failed to solve one coronary artery. Uncle Piti had another chronic disease, i.e. diabetes. A year passes CABG surgery, at present he runs a company to purchase shrimps and his expenses for open-heart surgery and drugs of symptom control are paid by the state allowances.

Life lesson from water stream: during 2005, Uncle Piti did not decide to undergo PCI because the district where he established a company to purchase shrimps. There was a flash flood and his elder daughter was shocked of the flood over the company and hurried to bring a boat out with three employees to see the company. Nevertheless, the flood was so flashed she was attacked by the flood and drowned. "…The ancient says flood is to eat people and when it eats human or have someone died; the flood would subside. After my daughter died, the flood subsided…"

Uncle Piti felt discouraged and disheartened to fight on. "…Flood destroys many millions with my company and still takes my daughter's life. My wife gets severe depression…"mourned Uncle Piti. His wife was thin and short, fair skin, white head, wrinkle face and Chinese attributes with shirts and skirt attaching together her skirt rim was half leg with dark blue color, stern face, sitting still in the guest room. I paying her respect and started talking but she sat still and responded nothing, indifferent face as if not hearing my words.

Life lesson from water stream brings suffering to Uncle Piti. Being masculine that a son depicted by society and the Thai custom are demanded not to cry. I heard an ideology of his life transferred to a 2-year nephew. "….A son must not cry but patient, strong and dependable to his father and his mother…"

Living to caretaking the life couple: Uncle Piti asked his heart operated friend how would it be after open-heart surgery and rationalization. He decided to operate since his wife was severe depression and there had to be someone to attend her dosing. His son was already grown, working, and studying; his nephew was growing, and his son had to pay close attention. "…. The duty to attend my wife is mine. I remember the first day that I went to engage her with my father and mother-in-law. I promised to look after her until life either in the peak point and the lowest stand, if I still alive. I shall look after her forever…"

In the cremation of his eldest daughter, the jaw was not well burnt by the mortician. On that day, he was in the function but he did not place the asterisk flower since the old generation counted that parents must not cremate their children otherwise they had to cremate all their children. At that time, his wife got severe depression and declined to attend the cremation function. She thought her

daughter had left to study abroad. She returned home to wash clothes from two cabinets. The mortician met his son that his elder sister was not well cremated and whom she was worried. His son prayed with burnt incense stick and told her never to worry about her father and her mother; he would attend them by himself. When the mortician began to burn, the jaws were not burnt. Uncle Piti's sister prayed with burnt incense stick and told her that she would attend them and all relatives prayed the same, still the her jaws were not burnt. It was almost five in the evening and if it were too dark, it would be difficult to collect ashes. Uncle Piti prayed with burnt incense stick and told her spirit of his elder daughter not to worry about mother; if he were still alive, he would attend her until life. When Uncle Piti stabbed down the burnt incense stick, the mortician can burn her jaws. "… I believe that she is worried about her mother and I shall do my duty best…"

Life with deception: Uncle Piti had met deception since young and at present. He narrated that his father died with cardiovascular disease because his mother's relatives deceived his lands. It made his father and family stressful with cases in court. It led to loss of much amount of money and disharmony in the family between his father and his mother. "The Chinese counts if with the same last-name, they are relatives, love and trust each other…" It demonstrated harmony of his father's relatives and deception among his Thai mother's relatives.

Vigor in life: Nothing is easily gained in this world. Uncle Piti was industrious and diligent to stay in the temple during being a student. "…During my studying life, I stayed in the temple, took meal after monks and help them clean the monks' bowls, carrying food carrier during morning alms taking. I worked all things since I am poor and could not pay for room rent…" the white cloth for corpse were given to my elder brother and Uncle Piti to be tailored for our students' dresses.

He furthered that there was a drive for me to study because his elder sister had no opportunity to learn and faced difficult life while his second brother had studied and married with a daughter of a rich family but the daughter-in-law humiliated his parents. His 3rd elder brother and the 4th elder sister help each other to cultivate horticulture to support their younger brothers to study fearing that they would

face difficulties. Later, Uncle Piti had opportunities to support his younger sister to study tailoring and married with a commissioned soldier.

Life is not that all bad but always some good parts: loss from flooded shrimp company and deception shrimp business drove his youngest son studying master degree abroad to work in restaurant for his graduation. After returning to Thailand, he has past exams for civil servant and work in the province where Sithandorn Hospital was located. He married and had a 2-year son. Now, he is studying doctoral degree in an eastern public university sponsored by his current office.

6.1.2.4 Uncle Weera

The event leading him to use the medical technology for open-heart surgery was being deadly bumped by the electric auger. He was easily tired and heavy sweat. He went to see a doctor in a private hospital where the province of the Sithandorn Hospital was located. He was never been diagnosed that he got cardiovascular disease and he had cardiac arrest from the blocked of coronary artery and got thrice using defibrillator machine. His heart beat again on the third time after cardiac arrest for 3 minutes. Then the doctor referred him to the Sithandorn Hospital. Nevertheless, the hospital could not provide emergency open-heart surgery; his relatives were recommended to contact a private hospital in Bangkok to bring him for emergency operation. The open-heart surgery was already two years and he had his residence in the Muang district. At present, he quit to be the electrician. He paid all his operation and drugs for symptom control because he used the drugs outside the list of essential drugs.

I parked my car along his large home fence. The front gate has fixed the home name with the last name of the Uncle Weera. Before this, I had asked a nurse on duty in front of the OPD Surgery Office and learned that Uncle Weera was a son of elite in the province where the Sithandorn Hospital was located. He inherited so much and was wealthy. His son-in-laws was the owner of a lathe workshop in the Muang District and very wealthy. He never took medication in any public hospital but private hospitals. His wife had ever been a nurse assistant in a private hospital where

the province of the Sithandorn Hospital was located and his son was an engineer in a neighboring province.

Ringing his home, he came out with blue shorts and half-worn Scott shirt to the open the door. I pay respect with “wai” and he returned acceptance with “wai”. We walked into a 2-storey large home surrounded with heavy shady trees. He was 65 years, fair skin, double-colored hair half short, large and tall, and uneasily to trust anyone. When I told him that I came from the Sithandorn Hospital and pleaded interviews to compliment her research, he opened the small gate to let-in but not allowed my car to park inside his home compound like Uncle Patti.

Disharmony of people around him: Uncle Weera narrated that his father was an elite of the province and retired here. He built his home here. “…We are just two in our family and my brother works in Bangkok…” His father died when he was just married and his mother stayed with him. Due to his wife worked outside home and not a housewife, “… My mother complains that my home is not in order and my wife feels uneasy but I try to reconcile and harmonize them…” he said.

He furthered that he worked as the civil servant for a while but with low salary and 2 children were studying. “…I quit working aboard and my wife attended my mother until mom accepted her…” before his heart operation, all his children were married and his mother was still with him. It was like a cycle of karma. My wife got retirement and disputed with my daughter-in-law. “… My wife complains our daughter-in-law does not know how to keep the house tidy but only sleep and fat as a pig. The daughter-in-law was uneasy and talked with my son to move out to live in a neighbor province…” His youngest daughter asked to complete just K.12 because she fell in love with the son of a lathe workshop owner and they both will get married. I approved her. “…their lives –let them be. We are just a father and a mother and give them what is best. After my daughter was married, she moved out…”

6.1.2.5 Uncle Mana

He got his heart surgery by appointment for the past 4 year and resided in the Muang district area, married and stayed with his wife. He was diagnosed of having cardiovascular disease and comments were that it was unable to use medical technology for PCI. At his CAG (Coronary Artery Angiography), it was found that

there are 3 coronary artery scleroses but during operation, there were 4 coronary artery scleroses. The place of operation was in the Heart Specialized Public Hospital in Bangkok. All expenses of open-heart surgery and drugs for symptom control were subject to the state welfare.

Imperfect life but not a problem: with the concept of personality development, adult of 40-60 years old would face life problems without being faltered but optimistic and prudent when it was the age of understanding the world and spending life well. It was relayed through Uncle Mana a man of fifty, tall, thin, fair, and short grey hair. "… during my childhood, I was raised in a garden home here of this province. There were 6 siblings and my mother married twice. I was the son of the first husband and the youngest among the three. My father died when I was born and I cannot remember even his face. My mother cannot raise us so she remarried and our stepfather was good man and took good care of the family. He was a trader and my mother had new three children with him…" narrated Uncle Mana.

Non prejudice with the new step father: his father died since he was young and when his mother remarried he had no prejudice about his new step father and he was the person who Uncle Mana was very close and he had good monetary status which he could support Uncle Mana's education. "… My family fully supported our education. Our parents wanted us to study. Our young brothers got education but older brother and sister were unenthusiastic. I wanted to study and struggled. Later my younger brothers had good education in the private schools of the foreigners while I studied in the temple school because our situation at the time was not so good…" After his K.12, he passed the entrance for Air Technical Training School because he went for intensive tuition in Bangkok.

6.1.2.6 Uncle Siri

A man of 69 years old was white skin, white hair seated on wheelchair for a disable; lavished with smiles, conversationist, and he had many chronic diseases, such as cardiovascular disease, cerebral thrombosis, diabetes and gout. At present, he is not expediting but wheelchair dependency. He had a big bag always with him to keep his medicine for routine doses. He was humorous and

narrated, "… Others think I am rich carrying big bag and much of money. When one opens it, it is full of medicine because I have so many diseases. If a thief snatches it away, I would have died of drug absence…"

He got his open-heart surgery for 9 years back in a public university hospital in Bangkok and picked up drugs to control his cardiovascular disease in the Sithandorn Hospital under the policy of overall healthcare insurance. At present, he stopped horticulture and shrimp farming. He is a widow since his wife died and lives with his daughter in the Muang district area where the Sithandorn Hospital is located.

Burdens as a household head: "… during 1987, my wife was paralyzed and could not help herself. At daytime, I had to cultivate our horticulture and nighttime attended my wife without rest. Our children were also studying and I had to cook with attending all household works since my wife could not…" narrated Uncle Siri and he attended his wife for 12 years until she died.

Responsibility of the eldest son: he was the eldest son and had to take responsibility for his father, his mother and all the younger siblings. "…My youngest sister who is unmarried but gets heart disease still stays with me…" said Uncle Siri. While he was in the wheelchair and narrating, his youngest single sister stayed in bed a distance away with his daughter attending for her water and meals. "…My sister gets over coronary arteries and cannot work hard, easily exhausts and the doctor does not operate her. Because she is single and without children to attend after operation; she cannot work hard but stays at home to attend petty household works…" said Uncle Siri.

6.1.3 Life events in other sides

Suffering in working, the oppressive condition in working, and capitalist life, are all contents leading to the heart operation with medical technology.

6.1.3.1 Suffering in working

Cases and lawsuits: when His Venerable Suwan reflected back to situation of making infirmity and undertook heart operation, "… At that time, I was the abbot and had lawsuits to evacuate villagers who intruded and illegally own the

temple's lands, commercialized religious rites, dissatisfaction and moodiness. It brought inborn disease…" narrated His Venerable Suwan. Stress increased risk to eat more (Davidson, 1991) led to cardiovascular disease. Besides, His Venerable Suwan smoked to relief tension for 3-4 packs a day and the diagnosis pointed His Venerable Suwan got also emphysema. His Venerable Suwan then quit smoking.

The day that I traveled to interview His Venerable Suwan, the Buddhist rite leader (makkhanayakha) reported about function sin the temple on charges of cremation function where the relatives of the dead was organizing the death ceremony, "… Telling me on short of money and bargaining to reduce expenses from 5,000 Baht to 3,000 Baht but providing Mon Woodwind Band each night for 10,000 Baht…" said the makkhanayakha. His Elder Venerable commented nothing.

Business deceived and the company on flooded: Uncle Piti narrated about his work and important reasons why he did not undertook PCI as commented by doctors. It was because his shrimp-purchase company was deceived. He bought the shrimp to an exported company, "… when I buy shrimp I have to advance by my cash and after exported, the company does not transact the money excusing that their cash flow runs short because they cannot sell the shrimp. I was deceived for many millions…" said Uncle Piti. In addition, the district area where his company was located and parked his fridge trucks met flash flood. Three 10-wheeled fridge tucks were damaged and unable to repair and had to abandon them. Their cost was around 3,000,000 Baht. Using medical technology for PCI was interpreted as health loss and it was the signals of disability and had to stop working. It affected his business affairs and economic status. He avoided using technology.

6.1.3.2 Work conditions creating disease

Oppressive subordinate air force life: After Uncle Mana was graduated from the Air Technical Training School, he worked in the eastern area for 7-8 years and transferred to Bangkok because staff ran short. The Bangkok unit demanded a single staff without marriage, "… *an armforce cannot choose workplace, and when the boss commands, just shut the mouth and head to work*…" a legendary relaying message. During working in Bangkok, he was assigned to plain maintenance in upcountry periodically. He worked in Bangkok for so long and promoted from

deputy chief to the chief of the section. Later, he got married and had 2 children; a son and a daughter. Both of them now are studying in universities in Bangkok. About his job, "…I returned to the eastern area for 6 years, near my home and I am unwell. I travel everyday from home to office …," said Uncle Mana.

He said an arm force ate to work, "…what we have we eat, little salary, rented home, money transferred to my wife and children, almost no money left from the salary and accommodation is so bad…" Uncle Mana believed that having the cardiovascular disease because of, "…. poor food, bad nutrition, absence of nutrition knowledge, incomprehension about toxic food, and soldiers are worth cheap food such as bamboo shoots with streaky pork curry. To more taken, it accumulate cholesterol. I do not have money to buys such the chicken whole but just necks and wings and cannot afford above this because of not enough money…" Besides, there was thrice excursion to USA and taste foreign food. "…they are fatty and chickens and I should accommodate more fat…" said Uncle Mana. His job, "…an assignment must be complete on time, without overtime (OT) pay for soldiers. If incomplete, soldiers cannot stop…"in formed Uncle Mana.

6.1.3.3 Capitalistic life

His Venerable Suwan reflected to me of the PCI by medical technology before the open-heart surgery and the doctor reminded to have recurrent sclerosis. The doctor prohibited caffeine-mixed drink but His Venerable Suwan was addicted with coffee. After PCI, still His Venerable Suwan cannot quit coffee but after heart operation, His Venerable Suwan did. The cardiovascular disease came from toxic environment, "…the previous abode (rising from the sofa straight to the window and pointed at the old abode another side of the temple) during cremation, the wind takes dust from the crematory oven to our abode polluting air and brings allergies…" His Venerable Suwan believed. Medical researchers revealed that carbon monoxide in the cigarette smoke is still found in the industrial areas when there is imperfect combustion. Carbon monoxide speeded cholesterol formulation in the middle arteries (Karnel, 1990) and created cardiovascular disease.

Uncle Soros narrated working in the capitalistic system subject to time rivalry, "… My career is to organize Chinese banquet with 5 assistants. I have to supervise them and create satisfactory income for them. So we compete time. Some

days, we sleep just three hours and rely on coffee and M150 (energizer syrup)…" Taking soft drink as in the western culture was improper to the environment and the physiology of the Thai people. It brought chronic illness and uses of medical technology. He added that working under the capitalist system, "…Organizing Chinese banquet is likely stressful every day. Sometime, trifles cannot be ignored…"

Uncle Piti narrated that when he finished his K12 he passed the entrance for the Police Corporal Academy, "… a son of the countryfolks gains such an unforgettable fate…" After working in police life for over 20 years and planned the future of both children to be graduated. The salary was not much and his wife cultivated the durian and rambutan orchards, grocery, and durian paste. A senior student since in school persuaded to start the purchase shrimp business. Twenty years ago, the business was so profitable. He was almost forty and to be a commissioned officer, he had to continue his bachelor degree and sit-in for rank promotion exams. He decided to keep money for his children to continue their higher education. He decided to quit police life and turn to shrimp business. His decision hurt his wife badly since she wished him to be the commissioned officer. He dedicated himself to his business until he was successful. The turning point from the civil servant to a businessman afforded him to send his children to study master degree abroad. "…my job needs brain, thoughts, and order without physical exercises. During good profit, I unlikely have time to rest…"said Uncle Piti. Before diagnosis for heart operation, he was so exhausted when walking and hard to breath.

Uncle Siri narrated his career under capitalism that it changed him from horticulture to shrimp farming in 1998. "… Seeing others do and get rich, I want too. At that time, I spent a lot and my wife was weak and travelled to and from the hospital and my youngest son was studying in a university…." He reasoned. He had 2 children. The eldest one was the daughter and the younger one was a son. His career brought him debt and needed redemption of lands with the Bank of Agriculture and Corporative. He told with shivering voice, "I enter redemption of a piece of land owned by my younger sister, who is not married yet…" During raising the giant tiger prawn (*penaeus monodon*) and had to feed them 5 times a day. This made my night unrest and after 4-5 years, I got cardiovascular disease and heart operation.

6.1.4 Reviewing Predictors of the illness

The patients realized the signals of cardiovascular disease and narrated its birth, i.e. some irregularities in the body, acute myocardial infarction, the dead body and illness amidst relatives.

6.1.4.1 Some irregularities in the body

Sleepless coughs: His Venerable Suwan reflected the symptoms before operation, "…severely coughing until sleepless, fatigue, not full breathing, numb along the arms and chest, gasping, lot of phlegm and unable to breathe…" the doctor assumed that it was a recurrent of coronary artery sclerosis and prescribed revascularization pills. It did not recover. He was exhausted during climbing high stairs and needed administered sublingually drug and rest. His Venerable Suwan uneasiness before open-heart surgery was, "…prolonged pains, angina pectoris, numb at arms and legs especially just after meal, cannot breathe, suffocative, gasp for breath, sharp pain at left chest…." Before operation, His Venerable Suwan visited the hospital regularly. "…Gasping of breath, I have to be admitted in a private hospital for respiratory machine and also being allergic and cannot spray anti-asthma because of trachea contraction…"

Cholesterol rises to 600: Auntie Ampha narrated before her emergency heart surgery, "…I have medical check every year in a private hospital in the neighbor province and I have one irregularity: my cholesterol rises to 600 and the hospital is too far so I move to take tablet with the private clinical of doctor who working in the Sithandorn Hospital. I take the pills for many years; the more I take the higher rise I get…" Her eldest daughter recommended changes the clinic because her elder sister having heart disease and died after treated by this private clinic. Alternatively, She narrated about her elder sister, "…Finally, she knocked because of acute symptom. Though refer to a private hospital in the neighboring province she did not recover and died. My eldest daughter said if I did not move out from this clinic, I would die…" she moved to take pills from the Sithandorn Hospital and her cholesterol was subsided.

Auntie Ampha thought that accumulation of cholesterol brought cardiovascular disease. However, the cholesterol was subsided but high cholesterol accumulated and brought cardiovascular disease. She narrated, "…whatsoever, I got cardiovascular disease, my cholesterol rise for a year even normal but still I got it…" the medical discourse of having high cholesterol is an element leading to cardiovascular disease. It made the patient felt guilty and admitted it.

Ease to fatigue and unable to work: Uncle Mana narrated some irregularities in his body signaling cardiovascular disease. "… first is fatigue and disable to work, easing to tiredness and walking just a 100 meters I get exhaustion which is unfound in a common person. Nevertheless, I do not know I get cardiovascular disease very long and for many years. The left chest is painful and spread to my arm…" His workplace provided annual checkup and he was found high cholesterol. "…I do not think to seriously treat it and do not think it is endangering. I never think high cholesterol brings cardiovascular disease. I check every year and found just lowered and just higher. I take simple meal since I can go to work…" Uncle Mana, moreover, narrated that cardiovascular disease brought sudden knock out and died but on that time he did not know he got cardiovascular disease but he knew, it made many died.

Hearing water flows in the thorax: Uncle Siri narrated some of his irregularities in his body before knowing he had cardiovascular disease and needed operation. "…during sleeping, I feel like having water flows in my thoracic. When lying on left or right, I hear the flows all the time…." The patient narrated some irregularities and felt uneasy or remembered their physical irregularities. When the patient found their illness and then likely accepted the diagnosis peacefully.

6.1.4.2 The Dead Body

Cardiac arrest: the concept of the dead related to the state of unconsciousness, heart and artery failure (Lock, 2001). Uncle Weera narrated about the situation to emergency heart surgery, "…On that Friday, a neighbor fetched me to install water heater. I drilled with electric auger. Just after the drills, I felt sharp pain

on my chest. The auger increased the impact…" After installation, he returned home, "…Telling my wife, I did know why I got heart pain and dire sweat. I lay on floor frustrated on my back. Just sometime, I still sweated. Therefore, I rose to take bath because of too sweated. After bath, I return to lay on floor frustrated on my back as before…" the belief of the Thai society and Thai culture, the symptom of dire sweat is the symptom of nearly dead person. It was like a burn inside the body. Thai traditional medicine calls the break of the fire element. In our body, there are 4 elements: soil, water, wind and fire with equilibrium. The symptom of the fire element break is imbalanced because the quantity of fire is more than other elements in the body and finally leads to death.

He lay there for a while but his sweat did not stop. His wife told him to meet the doctor in the private hospital near their home. "…I walked from home to the private hospital. After my arrival, the nurse checked my blood pressure, and it rose to 200. The nurse shocked and asked how I could walk with that high blood pressure at 200. I said I knew nothing but walked here…" After a rest, the blood pressure showed 180. Therefore, he entered the room to meet the doctor. "…Sitting on a chair with backrest having a desk between me and the doctor, resting on my head; I felt I cannot breathe. The doctor asked me what I have done. I told him I drilled an auger and it swift to my heart and could not breathe. I told the doctor just that and got cardiac arrest and stationary sitting on the backrest…" The scientific medicine explanation was high blood pressure beyond normal state endanger life. When the blood pressure did not return to normalcy, it endangered the body. The case of Uncle Weera, it made cardiac arrest which was death and natural life end.

Unconscious state: Uncle Soros narrated around 2 years back; he felt he got cardiovascular disease, with chest pain. His friends, his wife and children tried to point out what happened why he breathed heavily, "…One day, in a toilet, I dipped water to clean the toilet but I fell and was unconscious. My children took me to the hospital. The doctor diagnosed I got acute myocardial infarction …" It was the cause from the cardiovascular disease which threatened life and sent the patient aware of cardiac arrest, cold body, lifeless body and led to heart surgery with medical technology. Uncle Soros narrated, "…After the acute myocardial infarction, I

got medication until 2010. The cardiologist told me it was a serious symptom and needed to change to the cardiovascular thoracic surgeon…"

6.1.4.3 Illness amidst relatives

The medical discourse on gene is a risk for cardiovascular disease. Auntie Ampha narrated, "…I have 7 siblings and all have heart disease…" This includes Uncle Soros who has siblings with heart disease, "…All my siblings have heart disease…"

Uncle Piti, moreover narrated, "….I have 7 siblings with cardiovascular disease. Four died and three are alive…" His father also died with heart disease. Uncle Siri narrated about his illness and his heart surgery among siblings, "… I have 7 siblings and all got heart disease. The second brother and the third sister got heart surgery. The forth sister was serious heart disease and the doctor commented for the heart surgery but she declined and died. The fifth sister got also heart disease but no so serious and no heart surgery. The sixth sister was over coronary arteries but the doctor did not allow heart surgery. She is single and after operations, she has no one for caretaking. My youngest brother went to feed the prawn at night, got shock and die."

6.2 Pluralistic Medical System

The collective illness experiences reflect the alternative medicine roles coupled clearly with self-care process. It is an option for the patients to display their power or self, which might be dissatisfied with the treatment because the biomedicine emphasizes disease control, taking doses by prescription and checkup by appointment. With the concept of biomedicine, the human body is formed by cells to become tissues and organs. Illness comes from any dysfunctional organ. Medication is then focused on only the problem of dysfunction, i.e. treatment or surgery without paying attention or connection to the sociocultural dimension of illness and medication.

On the other hand, relationship between doctors and patients in the western medical service system is attributed with dependency directly to doctors, because medical knowledge is beyond the capacity of lay persons and emphasizes expertise

and specific technique. Therefore, the patients lack involvement but uneasiness because of powerlessness to address something. On the other hand, recovery from illness through medical technology or drugs is part of treatments only. Another 80% are recovered through other means such as self-care, placebo or by attentive care. The illness experiences of patients undergoing CABG surgery in using the alternative medicine are as below.

6.2.1 The Wonder Ferment Water

During I am waiting for interviewing His Venerable Abbot Suwan, the Buddhist rite leader (makkhanayakha) was also waiting. He talked about the ferment water of Auntie Cheng with me. He narrated that he has experimented by the formula, drank it, and are cured. He thought to offer it to His Venerable Suwan but the stepson a doctor in Sithandorn Hospital did not allow His Venerable Suwan to drink it and claimed that Auntie Cheng was illegal doctor. The ferment water was dangerous and prohibited His Venerable Suwan to drink it. However, the Buddhist rite leader (makkhanayakha) believed that Auntie Cheng was better than doctor in the hospital because she adapted the local intellectual of our ancestors for medication.

The important event made the Buddhist rite leader (makkhanayakha) believed the alternative medicine was more efficient that the modern medicine because a monk aged 70 years in this Temple got end-stage renal failure and treated in the Sithandorn Hospital. The doctor declined and the patient would die within three months and the monk elder return to the temple. The caretaker took the monk elder back and asked the monk elder to drink herbal water and normal meal. After three months, the monk elder was still alive until today for 3 years already.

Until one day, the monk elder fell and broke the hipbones. The caretakers from the temple took him to the Sithandorn Hospital as before. After reading the monk elder's medical chart records the doctor was surprised and asked the monk elder in bed what had he took and still alive for three years. The response was drinking herbal water. Moreover, the monk elder just died of aging last month. The Buddhist rite leader (makkhanayakha) was still kidding that the monk elder was lazy to breathe that brought death. The Buddhist rite leader (makkhanayakha) introduced me to try the wonder ferment water of Auntie Cheng attached with a pamphlet with explanations

and instructions by Auntie Cheng's formula. He opened DVD in the abode of His Venerable Abbot to watch Auntie Cheng's TV Program in introducing the wonder ferment water. Besides, the members in His Venerable Abbot's Temple admiring the wonder ferment water of Auntie Cheng; the wife of Uncle Mana was also preparing it with 1 year for her husband to drink and gave me and my friends with three bottles for their healthy drinks.

6.2.2 Acupuncture and herbal intakes

In addition, His Venerable Suwan narrated experiences of adopting alternative medicine to treat his cerebral thrombosis. "….I don't want to operation. I am too aged…" Besides intaking the original prescribed by the stepson from abroad; acupuncture was taken twice a week in a private hospital and found that the symptom was better and enables to raise the hands. Moreover, His Elder Venerable took turmeric capsule manufactured by the hospital under supervision of Ministry of Public Health. "…After taking, it is very good, free from flatulence and easy digestion…" His Elder Venerable viewed that turmeric capsules are good after intakes and provides some for His Elder Venerable Boonkerd to take in abroad.

His Elder Venerable Suwan narrated that the limitations of the modern medicine in treating deformation since birth or by genes was not perfectly cured and it was the reason supporting His Elder Venerable to fetch medicine for controlling symptom of cardiovascular illness in the Sithandorn Hospital. Another reason was "…My cardiac surgeon operating my heart has died with cancer…" The physicians cannot cure every disease even the thoracic surgeon was dead but not from the cardiovascular disease. It was like a proverb, "*Who lives by the sword shall die by the sword."* but died by cancer. His Elder Venerable narrated, "…Cancer is by gene. The eldest son of my cardiac surgeon died because of cancer and his youngest son is suffering cancer…."

6.2.3 Lacing the neck with volcano stone

Uncle Piti had logics in not to believe in the modern science that his life experiences suffered him. His life lessons from flash flood were unpredictable by sciences and modernity. He took herbal called "lotus plumule" mixed with Ginkgo to

help revascularization replacing PCI. In addition, He also bought medal made from volcano stones to lace his neck to balance his body to normalcy.

6.2.4 Folk Healer

The collective illness experiences revealed exploration of health service. Uncle Mana narrated that upon realizing being cardiovascular disease, he met, "… a renowned Chinese doctor with expensive medicine and taking his medicine for year and nothing improved…" Bargaining to use medical technology for common people was by selecting alternative medicine. In the case of Uncle Mana, he exploited a traditional medicine.

6.3 Information Search for Open-heart Surgery

6.3.1 Inquiry from people who had surgery before

Before deciding to undergo open-heart surgery, Uncle Soros explored its information by inquiring from his senior who had its experience for 15 years. It was beyond the medical guarantee to pursue effects after 10 years of operation. He narrated, "…I asked him why he took CABG surgery. The response was because the doctor said and he did. His senior underwent CABG surgery when he was 45 years…" Inquiries of symptoms leading to CABG surgery and symptom of post CABG surgery from the experienced person helped decision-making and preparation before the operation and post-operation. He narrated, "…Those having similar heart symptom like me will say they won't. Why should they do since their ages are 50 to 60 years and it is a waste to die…?" Considering the experiences of those who have ever undergone CABG surgery, "…there is serious symptom, if not, I will not survive. After operation, I would survive. So, I decide to do…" The patient thought that the medical technology saves human life from death.

6.3.2 Inquiry from health care professional

Uncle Mana narrated, "…before the operation, I inquired from my friend's wife who was a nurse in the operation room of a Heart Specialized Public Hospital in Bangkok. The hospital provides operations for two cases; 1) an emergency case, which is deadly, and the cardiac surgeon have no time to prepare and the patient has no time for recovery already for the operation. It is deadly. Most patients are unconscious when arrive and the operation is risky to death. 2) The normal case: if undergoing, the patient is likely 100% survives, very secure since there are preparation. The case is under the cardiac surgeons' treatment and surgery by appointment. There is less risk…"

After failure with the folk healer, Uncle Mana moved to a private hospital. "…Taking medicine for almost a year, nothing is improved…" He moved to the Sithandorn Hospital in December 2006. "… in Sithandorn Hospital, the doctor prescribed medicine but the symptom was not better and the doctor decided that the only way was to undergo operation…"At that time, he thought if taking medicine was not effective, he would have operation in the Sithandorn Hospital.

In 2007, the Sithandorn Hospital was not yet established the Cardiac Center and Uncle Mana narrated, "…At that time the Sithandorn Hospital was not renowned on heart surgery. I stayed in the hospital for a month but not improved…" He furthered that at that time the Sithandorn Hospital had just only 2 thoracic surgeons. One was just graduated from abroad, "… The doctor asked me to stay to watch symptoms for months and dared not take risk for open-heart surgery. I discussed with my wife whether I could undergo operation in a Heart Specialized Public Hospital in Bangkok…"

Finally, Uncle Mana decided to undergo it. "… At that time, the doctor did not refer because they study the same discipline. It was the dignity. I told the doctor to undergo heart surgery in a Heart Specialized Public Hospital in Bangkok. The doctor permitted…" Uncle Mana reasoned to be moved to a Heart Specialized Public Hospital. "… The heart surgery, I subdued to a Heart Specialized Public Hospital. The doctors operate every day; how can it not be safe. The Sithandorn Hospital operates just two cases a week…" Reasoning of using the medical technology as routine of the

surgeon and the hospital became the rationale for the patient to select the hospital for their open-heart surgery.

6.4 Subjectivity of Patients undergoing CABG Surgery with Medical Technology

The medical technology is used in medication in every hospital beginning from ventilators until syringes (Kirk, 2010). Its meaning by lay perspective is full of thought, emotion and feeling. The medical technology is not as good as being promoted by medicine that it saves the life and brings quality of life in the open-heart surgery context.

6.4.1 Identity of the patient facing death

The persons undergoing heart surgery get shock, thinking of death, fearing unrecovered, fearing suffering, fearing disable, fearing aggravated and person-dependent. All these worries affect the mind and identity of the patient. Not only the patients are worried about the open-heart surgery but their relatives or the closed persons too who find information from various media; they are all from worries about their operations. Patients to undergo open-heart surgery are amidst life and death. Therefore, the patients' identity, which will be undergoing heart surgery perceived by common people become the persons who are facing death. They are weak both physically and mentally especially on the time hearing the diagnosis of open-heart surgery is needed.

6.4.1.1 A person amid life and death

On deadly line: with narration of Auntie Ampha when she arrived at a private clinic of doctor who working in the Sithandorn Hospital she was with angina pectoris. It was Saturday; patients were crowded in the clinic. She pleaded not to take the queue for checkup upon arrival, "…Sharp pain from the chest through the back as if heart disease…" Moreover, from the x-ray, she got coronary artery sclerosis. "... After checking the doctor demanded me to meet cardiac surgeon immediately, it was 50-50 and the doctor referred her to a public university hospital in

Bangkok. I must not wait. I returned home and cried thinking I will certainly not survive. At noon, I left home and arrived at the public university hospital around four in the evening…" Auntie Ampha narrated, "…When I realized to undergo heart surgery, I was almost dead wishing to prostrate in front of the doctor. Returning home, I met my elder brother, my husband, my children, and nieces and nephews. All of us embraced and cried. I asked the doctor whether after operation, I would be cured. The doctor could not guarantee and said I was on deadly line…" Upon arrive the public university hospital; she was carried down from her son-in-law's pickup. "…carried down the pickup, doctors flocked and asked where I have been on such a serious condition. I told them that I just knew and the doctor told me on 50-50…"

Trust life with fate: During Uncle Piti took herbal intakes for the cardiovascular disease; he also took tablets for the cardiovascular disease, diabetes and high blood pressure prescribed by the Sithandorn Hospital. He was persuaded to undergo PCI in the Sithandorn Hospital and needed not traveling that far to Bangkok. The doctor appointed me for CAG and it revealed that there were coronary artery sclerosis and the doctor could not provide PCI. The cardiologist referred him to the thoracic surgeons.

The most troublesome time was when being in a sickbed carried to the operation room on April 22, 2010 at 8.30 a.m. Uncle Piti realized he was unable to help himself, feared death and had to leave his family behind. "… During hospitalized waiting for operation in the hospital, I did not allow my son to watch me but to work and look after his mother well. I passed much the world. When the doctor said, I understood and I needed none to help but I can do it myself. I told the doctor not to give me special room, no special nurse but in the common ward with nearby patient friend so that I will not be lonely and I asked my son to take me on the discharge day from hospital…"

Facing the medical technology for heart surgery, he trusted his life with fate. In addition, upon general anesthesia, he dreamed of Angle of Death to welcome the dead but he did not welcome Uncle Piti because his life was not ended. This was using religious logic to explain thoughts, emotion and feeling about the medical technology on general anesthesia. Upon unconsciousness and walk to the

world after death where the unconscious people traveled. It was the state of weakness, loss of life control and needed confidence from the medical team. Before operation, the nurse advised that operation was not frightful but normal because the medical technologic was modern. He believed her because he has already decided to undergo open-heart surgery.

Option of survival: Uncle Mana narrated his thought, emotion and feeling before operation. "…Before operation, I was not afraid and wanted the doctor to finish it as soon as possible. The patient of cardiovascular disease never feared death…" When he met a friend who would have to undergo open-heart surgery together, he asked him and he responded that he also was not afraid. Without open-heart surgery, he would certainly died but survived if undergoing it. It was the choice between death, life, and allowed humans to accept the medical technology for open-heart surgery.

6.4.1.2 Resurgence

Cardiac arrest and return heart beating: the symptoms of Uncle Soros were more deadly when the appointment for surgery was 45 days. During those 45 days, there was cardiac arrest. His wife escorted him to the Sithandorn Hospital and the doctor used defibrillator to recover him. He narrated, "…The first night, I was admitted into ICU. I realized that I was temporally cardiac arrest twice and the nurses shake me twice. I was conscious and surprised why they wake me. I opened my eyes and found doctors and nurses flocked around my bed. They told me; there was nothing and left me to continue sleeping. It happened twice…" When the heart stopped and the doctor saved the life, the body as a corpse resurrected. The body was like a newborn machine with a mixture of human and engine (Lock, 2001).

The event when Uncle Soros was admitted in ICU with tube of respirator. Later, he was move to the Ward of Male Surgical Patient. "…All knew that any one mover here were in deadly condition…" The cardiac arrest condition threatened the life of the patient and as if the life was hanging on a thin threads readily to break. That was death. Admission in ICU is to use medical technology to a human body all the time, and moving to the surgical ward was just for the deadly patients

needed the medical technology to monitor the body and respirator and having nurses on duty to every spot all the time.

Later, a nurse worked to the ICU told Uncle Soros. "…she was unhappy thinking that I was dead. I later thought I was lucky, if the nurse did not sit near my bed and went to work somewhere else; would she be able to save my life?..." Uncle Soros explained his seconds to survive the cardiac arrest twice. Using perspective of astrology that good fate, human would use logics of culture to explain accidental phenomena that happened.

Condition of never return to consciousness: Uncle Weera narrated about the situation after cardiac arrest to me. He was like a dead, perceiving nothing. Moreover, the happenings, his wife convey to him later. "… When I was under cardiac arrest condition, the doctor called the nurses to carry me on bed. They attempted to give me the oxygen tube for respiration, x-ray and checked my electrocardiography. .."

The doctor stimulated his heart with defibrillator machine. When the doctor used the electromagnetic plate to pulse the heart and called clear; all had to stay away from the bed since the defibrillator created high voltage of magnetic fields. When placing the magnetic plate on the heart area, the patient would jerk all body. The doctor thrice made such a thing to him. Two doctors made the electric defibrillation. The first one stimulated once, the second one stimulated twice, and my heart began beating upon the third defibrillation amidst the cries of his wife and daughter in front of the ICU room of a private hospital. They never thought there would be an unexpected incident leading to death with the head of the family without preparing their minds and bodies.

After his heart returned to beating, the doctor used many types of the medical technology beginning from heart stimulant drug, adrenaline, reducing pressure drug but he did not recover. The doctor helped insert the tube for respiration and another tube to the stomach. Then the doctor from the private hospital referred to the Sithandorn Hospital.

Arriving at the Sithandorn Hospital, he was admitted to the ICU and severe vomiting because of food taken before the cardiac arrest condition. "…I took Thai noodle before the cardiac arrest condition and vomited in strips…" When he was admitted to the private hospital near his home and waiting for the doctor to checkup in the ICU room of the Sithandorn Hospital for 5 hours but the food was not digested. It showed that his inside organs were dysfunctional and just the heart only beating again. The medical technology did not make the cardiac arrest patient return to live again. When the doctor of the Sithandorn Hospital checked his symptoms, he advised to transfer him to a private hospital in Bangkok. His wife and his children called the private hospital to get an ambulance for him.

6.4.1.3 A person with karma

Karma: Uncle Soros recounted the situation started his cardiovascular disease and leading to the operation, which he was aware of the alarm thing within his body and began to take care of himself through the logics of karma. "… When I fell in the latrine, I began to look after myself. Before this, I never took exercises but when I fell, I started to walk and cycling. It was really my ill-fate that I fell sick and underwent heart surgery…"

Uncle Soros narrated a phenomenon after cardiac arrest condition and was hospitalized in the Ward of Male Surgical Patient and assumed that it came for drugs. He felt he was sleeping in a warehouses. During being hospitalized in the 5^{th} floor, but he felt like on the ground floor. "…I looked outside the room and found many children ran and annoyed me…" He knew what he saw was unreal because he slept on the 5^{th} floor. "…At that time, I saw cabinets and beds were all like boxes and when I stepped on the floor, I felt the floor was unlevel. It happened as such for many days and I returned normal. When I was conscious, I saw a nurse watched me. At that time I was hospitalized for almost a month…" The heart stimulant drug that a medical technology affected human thoughts, emotion and senses hallucinated by technology.

During the difficult time for the patient, there were worries about the family and death. His mental condition was very weak, perplex, discouraging melancholic, and loneliness suppressed in his mind and burst out during the unconscious situation. The medical technology brought suffering suppressed

within the human mind burst up again. During Uncle Soros narrated his hallucination affected by drug but another reality narrated by the nurse telling him after his recovery. "…During 20 day hospitalized in the Ward of Male Surgical Patient, I talked in my sleep about my father. Whether did my father love me? Why had my father abandoned me alone here? When will my father come to take me?" This was in the unconscious state. Uncle Soros pulled out the tube of normal saline solution until bleeding and soaked the patient's bed. The doctor had to inject vitamin K to stop the bleeding. After the condition was improved, he was moved to a special room where he was hospitalized waiting for open-heart surgery queue.

Not death fate but loss a large sum of money: Uncle Weera thought about the cause of heart surgery. "…it is not my death fate but to lose a large sum of money…" Because, in a day he arrived 3 hospitals and the doctors referred until he underwent heart surgery and survive. The critical reason, his wife and his children decided him for heart surgery because his mother was still alive and he would continue looking after her. He took care of her ever since and later she could not walk because of aged. "…My mother was dead when she was over 90 years after I underwent heart surgery. Previous, she slept in the Thai home in front of the house. Now, I donated to other people because when I saw it I felt regrettable and thought of her…" Looking after her food at her last year of life, he ground pork, vegetable, pumpkins and carrot for her.

Open-heart surgery fixed by fate: Uncle Mana narrated when December 2006, he began his medication in the Sithandorn Hospital and his wife constructed commercial building for rent in the marketplace. His wife went to see her horoscope. "…the prophet told her that construction must start on October 2006 and would finish and if 2 months late, it would not. It matched…" At that time, Uncle Mana had the tendency for heart surgery since beginning to medicate in the Sithandorn Hospital in December 2006. Life explanation to pass through heart surgery was fixed by fate and made the patient accepted the unexpected heart surgery with the peace of mind.

6.4.2 Meaning of Medical Technology for Heart Surgery

The patient needed heart surgery passed examination from many types of the medical technology beginning from x-ray, exercise stress test, ultrasound, cardiac catheterization and general anesthesia. After taking the drugs for control cardiovascular disease and it was not improved as expected, the doctor would make electrocardiography to diagnose whether the patient suffered from cardiovascular disease or not. If the patient had no serious symptom, the electrocardiogram would be normal. To confirm whether the patient got cardiovascular illness, the patient would be asked to take exercise stress test. If the patient could not and chest pain, could not breathe; it showed that the patient has coronary artery sclerosis.

6.4.2.1 Fractured body

Uncle Weera narrated the phenomena of unconscious and just only, his heart was beating by defibrillator. "… Doctors, nurses and male nurse travelled to the Sithandorn Hospital with an ambulance for a private hospital in Bangkok. They brought an Echo Cardiogram to check me in the ICU room of the Sithandorn Hospital to find irregularities in my heart. After checking, they told my wife that I must have CABG surgery and the doctor called to the private hospital in Bangkok to prepare for the operating room…" Then they move Uncle Weera to a private hospital in Bangkok. Applying the defibrillator to make the heart beating again was to save life but fractured the body from surgery of cut and join organs in the body.

Uncle Siri narrated about his Honoring His Majesty Rally before admission in the Sithandorn Hospital, "…I applied for every Rally but this time I could not run, too exhausted and pain of my left ventricle. After a short rest, it is better but after running I pain again, felt uneasy and gasp for breath. The staff saw me so exhausted and hurried me to the Sithandorn Hospital. I stayed in the common ward for 2 days but the third day my situation was serious and I was admitted in ICU…" His Rally is a lay knowledge of medical technology to confirm his cardiovascular disease as using medical technology of an exercise stress test for diagnosis.

6.4.2.2 A body controlled by electronic mechanism

Suffering of exercise stress test **-** His Venerable Abbot Suwan narrated about the exercise stress test before the heart surgery. "…testing of 4 minutes, I cannot walk and the doctor diagnosed that I got coronary artery sclerosis recurrence

about 80-90%. Exhaustion and gasp for breath by the exerciser stress test ordered by the doctor on time and speed in walking with engine for the patient was full of suffering on its walks. An exercise stress test engine as medical technology confirmed cardiovascular disease.

Uncle Soros later narrated that after he changed to be medicated with the thoracic surgeon, the doctor told him to have exercise stress test. Finally, the doctor concluded that he needed operation. He narrated the incident during his stress test. "…The doctor may know how beat was my heart. He stopped at the time when I had no strength left…" The important thing of the exercise stress test for diagnosis on cardiovascular disease was "…What the doctor asked just respond and not nodding face. The doctor will know who is tired or not…" Responding the doctor's inquiries during the exercise stress test and if the patient could not speak; it meant the patient got cardiovascular disease.

Periodically evaluating the body after heart surgery through the medical technology- During the post operation, the doctor asked His Venerable Abbot Suwan to x-ray coronary arteries. "…Seeing the arteries stitched as a protrudent…" The thought of the patient seeing the x-ray film on CABG surgery compared to cutting and joining a thread. It showed the human thinking to the body from using medical technology mixed with engine and humaneness.

After heart surgery for a year, "…Entering tunnel (MRI: Magnetic Resonance Imaging))…" a dialect for the medical technology; it is like a cave, dark and this shows the thought toward the medical technology as a mystery, which is difficult to guess. After the heart surgery for 5 years, His Venerable Abbot Suwan has entered the tunnel twice (MRI). "…The doctor might have commission for checking when the patient enters the tunnel (MRI)…" Representing the medical technology in the modern hospital linked with capitalism to trade transnational technology with the state regulation, which opens a legal gap to these companies turns the medical technology a mystery. The patient imposed with it cannot evaluate its efficiency and without choice because its information of benefit and disadvantage are in the hands of the specialist only. Therefore, its benefits are with its medical personnel, i.e. physicians and hospitals.

Every year, the doctor will ask His Venerable Abbot Suwan to have an exercise stress test for heart after operation. This is to check irregularities happened with heart through medical technology. His Venerable Suwan narrated that after heart surgery at first the thoracic surgeon asked to meet him every 15 days. When the symptom was stable, the appointment was prolonged to a month and finally to every 6 month appointment. Every time the medical checkups are drilling blood vessels, overall checkup, 12 hours fast, cholesterol level, blood sugar level, liver and kidney function. The body operated through medical technology still continues to use it and familiarizes human being with its uses. Then human being cannot distance itself from medical technology any longer after heart surgery.

In addition, Uncle Siri narrated, "…Just after heart surgery, the doctor asked me to enter the tunnel and paid 10,000 Baht…" The MRI machine displays heart, and body organs. He called it "tunnel" a dialect meaning staying in a narrow, feeling uneasy, immoveable; never know what touches, endless, beyond control, dark and no destiny. Using medical technology is to assess the body after an operation, which is naive to the patient to know its purposes, and costly expenses while its benefits go to the physicians and hospitals.

6.4.2.3 The body intervened by medical technology

Alienation to the medical technology We can see inside our human body through the function of medical technology with x-ray and ultrasound (Willis, 2001). It is the machine for diagnosis (Hill, 2001). Auntie Ampha narrated her experiences with an ultrasound a medical technology, "… Remembered that I got 4-5 injections and the doctor asked me whether I felt any pains. I admitted but the doctor injected me more pains and asked again. I told him I did not. I endure it…"

A syringe is the medical technology to intervene human body and it is, every time, painful of its puncture. Human beings try seriously to avoid injections. She continued about an ultrasound as a medical technology for primarily diagnosing heart irregularities, "…the doctor use a ball to press on my stomach, all were painful…" Calling a ball for an ultrasound showed a lay language to the medical technology of the patient to identify truth and subjectivity embodied with feeling of pains by being pressed.

After Auntie Ampha signing a consent agreement for emergency heart surgery, she expressed, "…I was almost unconscious. The doctor moved to what floor I never knew. My children followed me but none was found but beds and oxygen respirator machine to every bed. I felt frightened because of being alone. The doctor asked whether I fear, I said I did. I asked him where was I and he told me if he said I would be frightful. All coma patients were having oxygen here and some died here…" The hospital is the place clouded with the meaning of worries, threats, and losses of expectation, fears and punishment. Majority of the patients hospitalized felt unhappy (Lupton, 2000).

Auntie Ampha continued, "…The public university hospital all lightened on and time was unknown…" The hospital is a place to cross from night to daytime, and living with death in a public and private place (Lupton, 2000). The patient narrated about a technology for cardiac catheterization, "…A nurse cleaned my body and the doctor told me to undertake angiogram on my groin to find coronary artery sclerosis. The pictures are flashing and I closed my eyes not to see. I feared and the doctor told me that are three…" The thought of the patient to the medical technology used by a specialist is similar to a sacred power affecting the mind and the body of the patient.

The medical technology used for modern diagnoses works with computerized system (Clarke, Shim, Mamo, Fosket & Fishman, 2003) are CT scan, ultrasound, electrocardiogram (ECG) and so on. Organs inside the body are displayed in a computer screen. Medication is dependent on this analog and code from the body of the patient (Miller, Sanders & Lehoux, 2009). Modern diagnoses and medication are not on the human body any more but from the virtualization of multiple medical technologies (Good, 2007). It created imagination of the patient to the medical technology, which it creates pictures (Miller, Sanders & Lehoux, 2009) of both horror and flashes.

6.4.2.4 The body mistrusting medical technology

Fear of death: human thought, emotion and feeling to a medical technology, which is a machine for angiogram recollecting a fear of death and the doctor uses such a technique when the patient needed heart surgery. Uncle Mana narrated, "…when the doctor told me about operation he asked for angiogram since it

was deadly dangerous and undertaking it only to find sclerosis and which artery must be operated…" medical technology virtualized truth in human body. It is a set of truth. "…during undertaking angiogram, the doctor told me there were sclerosis in 3 coronary arteries but on operation, they found 4 coronary arteries and they complete all…" said Uncle Mana.

Before the heart surgery, the doctor asked His Venerable Abbot Suwan to undertake angiogram to find sclerosis and its area. "…there were 3 coronary artery scleroses displayed on the screen and it doctor said PCI was impossible but only CABG surgery and there was very small artery…" said His Venerable Suwan. There was a telling that angiogram, if miss-practiced, it was deadly. "… I fear angiogram but medical substance through tube of normal saline solution, I felt warm and before undertaking angiogram, the doctor gave acupuncture on my groin. When I really undertook it, there was no pain…" said His Venerable Suwan. Applying cardio-angiogram by puncture at the groin scrubbing and pushing a small string made the patient held his breath. Then photos were taken while moving around and taking photos many times. The medical technology through angiogram to check coronary artery of the patient was fully with danger, death, fear, body heated but without pain is subjectivity of human toward medical technology which is intervened into the human body.

His Venerable Suwan told that there was pain after recovery from heart surgery, "…I heard the clock ticked and at fit I was blurred with anesthesia effect…" After recovery and the body intervened by many types of medical technology, it was not fully conscious and perceiving surroundings in some parts. After heart surgery, "…the doctor told me that 5 coronary arteries had all been operated but during the angiogram there were just only three…" Limitations of the medical technology cannot provide the truth inside the body in every case.

Suffocation: after recovery from the operation, the doctor moved the new body of His Venerable Suwan to the ICU. The recollection was, "…it was as if a wind blew passing the body all the time during admission in ICU. The heart bumped with numbness around throughout the body. Doctors and nurses helped put on respirator and telling that breathing was not well flowing…"After putting on a respirator, it was a technology for better breathing.

His Venerable Suwan was moved to a special room after the situation improved. In the next morning, His Venerable Suwan was fainted and unconscious. "…Thinking that I was dead and many tubes were rigging …" the nurse called doctors after recovery, "…the doctor gave tablets and told me there won't be anything from then on…" The new body of His Venerable Suwan constructed of medical technology and was fainted to unconscious and made the patient think of death amidst medical technology rigged over the body. The doctor prescribed medicine to improve irregular symptoms with inspiriting that there will not be any unwanted events to the body.

The hospital is an institute similar most to a jail. The patient cannot control when to eat, when to sleep, what to dress, what a voice level or lighting level to be received. What is about excretion or urination? All the processes inside the body are controlled and provided by nurses (Lupton, 2000). Recovering in a special room, "…don't lock the restroom, never pressing excretion, it would split the wound and lying on one side…"narrated His Venerable Suwan. Tube of normal saline solution had been provide for His Elder Venerable for 5 days and stayed in the hospital for almost a month because of high blood pressure. Serious stress of the mind and body from the operation amidst the medical technology brought high blood pressure to His Venerable Suwan.

Recovery after operation in the hospital, the doctor asked His Venerable Suwan to walk, and exercises without swinging hands or spreading the chest but turning the body. In addition, the new body after operation needed practicing new way of breathing and given foot massage for relaxing stress. The scientific medicine uses alternative medicine to support medication after operation. The thought, emotion and feeling of His Venerable Suwan about the heart operated through medical technology were, "… breathing better, beating better, less fatigue until hearing the coronary arteries bumped…"

Happy body but grief at heart: after angiogram, Auntie Ampha got also anesthesia tablets. She narrated on her emotion about anesthesia, "…the nurse gave tablet as an anesthesia tablet and unconscious, peaceful mind, and void mind. Before sleep, I heard the doctor said whether I could bear since it was so

serious…" The human emotion and feeling to the anesthesia as a deserted mind and the angina pectoris faded away which reduce the suffering of the mind and the body. She slept amidst and death through the words of the doctor about her acute symptom and least opportunity to survive.

Non-reacted body to the medical technology: Uncle Soros narrated incidents before his open-heart surgery, "…I and my family asked the cardiac surgeon how long would it take for an operation. It took 3 hours, the doctor responded…" During waiting, his wife and his children waited for 8 hours until he was moved from the operating room. He continued to tell about the techniques and high medical technology but some did not reflect the truth. "…When I was moved into the operating room; I got anesthesia twice. At first, the doctor told me it would take 3 hours but in reality, it took around 8 hours…" Undertaking anesthesia twice was the defect of the medical technology to save the human life.

Arrhythmia: after the operation and staying in the Ward of Male Surgical Patient, a nurse told Uncle Soros that he should take some exercises and walk. "…Such as if anything was needed, instead of ringing, I should walk to the nurse. I did because I wanted to get better sooner and did as she guided. When I walked I did another round or twice…" he said. While I was walking to her, she rushed to me and said, "She told me to hurry to the ward and put on the respiratory machine, and inserted tube of normal saline solution because my heart got serious arrhythmia…" Such symptoms happened a week after the operation. "… I got perplexed what was so wrong with me. Normally, after operation for 7-8 days I could return home. After my arrhythmia, I had to stay in the hospital for another 2 weeks until the doctor permitted me to return home..." he said.

Medical technology suffers the body: Though Uncle Siri admired the medical technology used in heart surgery affecting the body as saving life but some of it created unhappiness. Uncle Siri narrated his unhappiness when putting on respiratory machine, "… when admitted in ICU in the Sithandorn Hospital, the

doctor put me mask for oxygen. I hated it so much and always put it out …" He felt happier and returned to be himself again when the mask was taken out from him.

6.4.2.5 The body enticed by medical technology

Sinking body: His Venerable Suwan narrated before undergoing anesthesia. The anesthetist recommended that not to pull tubes during having anesthesia. "… During unconsciousness, I knew nothing, not even dreamed. At first, I felt heavy and slept…" The subjectivity related to human emotion and feeling when having anesthesia, which was the medical technology and it made His Venerable Suwan felt sinking in to the depth of an ocean and unconscious.

Sleepy body: Uncle Mana narrated about his thought, emotion and feeling before having anesthesia for open-heart, "…got anesthesia, no dream as sheer sleep. Before given anesthesia, the anesthetist arrived at my bed and talked to me which made me lost, wiping my face and gave me a cotton to inhale. At that time, I did not know that it is an anesthesia. I did not know when I slept" sleep without dream after given anesthesia was a wave deep sleep of the patient under unconsciousness to enter the open-heart surgical process, which the body met with much pain.

A breathing corpse: When the body of Uncle Weera arrived at private hospital in Bangkok, he was moved to an angiography room. After that, the doctor informed his wife that he had 3 coronary artery scleroses and one was a main artery, which made him cardiac arrest. There was a computer indicating the position of the scleroses. Applying the medical technology was to survey and visualize inside the human body to understand the cause of diseases and the hope of the family members praying the patient to recover again. Before his heart surgery, the surgeons informed his wife and children that he needed a Bypass Surgery using the technical term and difficult to clearly understand for the relatives and introducing alternative that a medical technology by Bypass Surgery would recover him to normalcy again.

Body with the switch on and off: When Uncle Siri arrived at a cardiac unit of the public university hospital in Bangkok provided him an electrocardiogram check, ultrasound and angiogram. "On angiogram the doctor told

me I got 3 coronary artery scleroses and pointed where they were in the screen…" the doctor inform, "… I must have Bypass Surgery the obstructed the blood vessels to insufficiently feed the heart …" Using medical technology to decide treatment for the doctors and technical term calling a heart surgery as Bypass Surgery disclosed the westernized medical culture dominating the idea of the doctors and relayed to the patient by using the westernized language but the Thai dialect.

When the doctor inform Uncle Siri that the heart surgery would begin at four in the afternoon, "a nurse informed me that she would bring me to the operating room; I heard some scratching and unconscious. My body was like a switch off, and darkened…" He continued, "…No dreams…" His feeling in like an off-on switch and thinking of the human body was like a robot with an off-on switch for working while the anesthesia stopped the physical body switch.

6.4.3 Living with medical technology

The concept of biomedicine has limitations in medicating chronic diseases caused by social factors and capitalism-shifted culture. Biomedicine is absent on efficiency of medication for the chronic patients, ignorance to their feeling, expensive services and erroneous treatment. The rate of cardiovascular disease rises in the societies surrounded by technological advancement and multiple healthcares. Patients experienced the medical technology for heart surgery is just softening the symptoms or reducing severity of the disease but with opportunity for recurrence of cardiovascular disease. After operation, they continually have to take drugs, which are type of the medical technology. The patients are still having prolonged illness and must connect to the medical institute for continual medication.

6.4.3.1 More medical technology dependency

The chest pain was temporally subsided after CABG surgery because the nature of the disease has so much developed. The chest pain and forbearing to take exercises returned after 2-3 years after CABG surgery (Bates, 1990). Auntie Ampha narrated, "…After my heart surgery, at present it doesn't mean I am better. If I do not take drugs for two days, I will be colic. I have to regularly taken medicine. Sometime, I get sudden colic and during taken drugs from the public university hospital in Bangkok; the doctor prescribed administered sublingually drug.

But when I was transferred to the Sithandorn Hospital, the doctor never prescribe them to me…" At this moment Auntie Ampha gets a sudden colic; she balms her chest and lay still not to perceive anything. After operation, she still has colic. The human body still needs to use medical technology after operation. Reducing medical technology applying to a body returns to suffering as before heart surgery.

Auntie Ampha has diabetes after operation for 5 months. Her emergency heart surgery amidst medical technology that she has to encounter stress her mind and body. Later her adrenal cortex giving hormone leads to her hyperglycemia. The body with the emergency heart surgery with medical technology positively and negatively affects the human life, which is survival and increases another chronic disease. The human body experienced medical technology for open-heart surgery still use it more and more. It intervene their daily life while coercing a relationship between patients and the medical personnel and endlessly depends on physicians and technology. There is integration between human and medical technology, which intervene the human body, which contains both human and artifact.

Uncle Siri narrated his life after his operation, which was more peaceful and the agony from the disease has gone. "…Before operation, I was fatigue, and could not rise; but after operation, my heart eased more…" He continued that at first after his operation, there still remains anesthesia until he felt floating body and palpitation. It was a subjectivity of a human body to the medical technology remaining in the body. He added that after his heart surgery, he could drive but in 2006 his right side could not move he got cerebral thrombosis. "…I quit raising prawn and could not drive…" After heart surgery, human still depended upon medical technology more because of increasing chronic disease.

6.4.3.2 The relationship between human and machine

Scar and numbness: His Venerable Suwan continued that the heart surgery began on 10 o'clock in the morning and recovered from anesthesia at midnight. "…the doctor operated veins at my right leg and my right hand to replace at my heart…" At present, there are pale scars below the knee and below the elbow. "…there is numbness on the scars sometimes…" said His Venerable Suwan. Recollecting about the body after operation with scars and numbness where the veins had been taken is the subjectivity of human to the medical technology.

Medical technology disharmonizing the human body: The body intervened by medical technology after the operation got arrhythmia, which was opposed the persuasion of scientific medicine that it was good and saved the life of patient. Before the heart surgery, the doctor prescribed his angiogram and found there were 3 coronary arteries scleroses but after the operation, the doctor told him, "…I got 5 coronary artery scleroses and the doctor told me that whether they turned, and obstructed; they were all operated…" In reality, the medical technology happened to the patient was both positive and negative which perplexed and confused on whether it is good and appropriate for the human body or not.

Having new body through undergoing heart surgery amidst the perplexity of the patient who used it; it lead to the image of unstable body and staggering include the memory was not as before. "…Previously, I could drive. After the operation I could not because during driving I forgot I was driving…" A heart surgery through the medical technology not only made the body staggering but also affected memory of the patient.

After heart surgery for a month, Uncle Soros found his surgical wound got pus and it is the time of medical appointment. The doctor told he was infected. The nurse made an appointment for re-heart surgery. This time, general anesthesia was not used but local anesthesia. "…I got pus because the silk stitches did not match the human tissue where there was pus and it was a trace of silk dissolving stitches…" The doctor operated to take out the silk stitches and another 3 wires tied sternum because some tissues were growing. The doctor asked Uncle Soros whether he would like to take out all wires tied sternum. "I told him it did not make me pain and trouble; just kept them there…" said Uncle Soros. Previously, there were 5 wires tied sternums and 3 had been take out, so, there were 2 remaining inside his body.

The explanation of the surgical wound infected revealed that the sterilization system of the hospital did not cover 100%. Nevertheless Uncle Soros talked of disharmonizing between the silk dissolving stitches and human tissue; they were type of medical technology and they were counted an artifact of human innovation. It imbalanced the new body after operation and then there was pus in the surgical wound. However, the patient attempted to build self that harmonized the medical technology and the human body by recommending not taking out the rest of

wires tied sternum and reasoned to the doctor that the human body with the medical technology as some component, if they did not create any pain or endanger the body, they should be left there. It was a surrender to lead a life with an artifact and humanness.

Animalism or non-human: After open-heart surgery for 6 months, "…I completely had no pain in my heart, and without fatigue. From disable to clime the 2nd floor but after the operation, I could climb to the 4th floor for not more than 10 minutes and did it for another 3 times. Nothing happened but if I got tired it was because of my age…" said Uncle Soros. The body after heart surgery with medical technology raised the human capacity to climb many floors without cardiac arrest and fatigue.

In addition, Uncle Soros narrated that after his operation, he got pain around the surgical wound in the center of his chest for 6 months. After feeling pain around 2-3 months, he returned to ask the doctor, "Why was I feeling pain with chest muscular longer than other who had operation just for a month or so?" The doctor explained that his open-heart surgery for 8 hours made the area bruised. "…My chest was opened as a pig's chest for 8 hours…" The open-heart surgery technique was to cut the median sternum and separate both sides to see the heart within the myocardium. This affected thoughts, emotion and feeling of the patient to the medical technology for heart surgery, which pained myocardium for many months. The patients recalled separating the pig's chest on a cutting board in the fresh food market. The medical technology affecting the human body overlapped human and animalism or non-human.

Cyborg body: Uncle Weera narrated about arteries connecting each other, "… Surgeons in a private hospital chose arteries from inner side of the chest and arms, which were better than veins from the leg. One could rise and walk faster after operation…" However, the surgeons in the public hospital favored to use veins because they were larger, easier to take out and more convenient.

After leaving the operating room, the doctor bound Uncle Weera with bed not allowing squirming. At that time, he was unconscious with respiratory machine and tube of oxygen. The experiences of the patient after operation were bound to a bed as if a machine. After leaving the operating room, the patient was admitted into ICU for 3 days recovery until conscious. There was a monitor screen to check the blood pressure and heart beating all the time. It was an illness experience under control and command over the body legitimately using the medical technology. A new body after the operation, he continued, "…no chest pain, and the memory was as before…" It was the coexistence between human and medical technology.

Hybrid body between human and machine: upon admitted into the hospital, the patient entered the medical world where they had to follow the strict regulations and unfamiliar practices (Lupton, 2000). Before his heart surgery, the doctor asked Uncle Mana to stay in the hospital for 7 days preparing for his body conditions and the hospital provided him meals. He narrated, "…A day before the operation, no meal that when being operated there would be no excretion and urine. There would be problem during the operation. The day before operation, the doctor replaced food with normal saline solution…."

Uncle Mana narrated that "… 7 o'clock entered the operating room and 5 in the evening left the operating room. I was blurred but lightly remembering something. The full recovery was at 7 in the next morning. I was conscious over night …," He continued. He remembered that a nurse brought him meal and he almost finished the entire tray. The doctor asked the nurse to take the tray away from his bed saying that he ate too much. However, he responded, "…I wanted to recover faster, so I ate more …" The body through heart surgery with medical technology was reborn a hybrid between human and machine and needed meal for vigorously growing.

The 3rd day after operation, the doctor asked him to climb stairs not to stay still but exercise. "… Ah, at that time, the wound was not well and the doctor demanded to climb stairs and to do as such everyday…" On the 9th day after operation, he continued, the doctor discharged him from the hospital, and not to stay long because he would be infected. "…At that time, the bed near me was a teacher

from Ratchaburi Province and completed his open-heart surgery; the nurse had to bind him to his bed. He lost conscious, and tore his own chest. The joint arteries bumped bleeding and he got blood septicemia and needed to stay in the hospital for 3-4 months. Still he recovered since he stayed in the hospital for too long…" narrated Uncle Mana.

He continued, "…the heart after operation was better, and strange from before. After being conscious, it was relieved, comfort, no obstruction in breathing just pain with the operated wound but not feeling uneasy at the heart…" Now, he sometime got sharp pain at the wound. After his heart surgery, he stopped working not even month but returned to work. "…At first I could not, so, I sat and initialed on document. At that time, I did paper works to disburse materials, spare parts, order, recorded data of the plan, and opened tenders…" Just after his open-heart surgery, he hired transport car to work, "…It took me almost a month to drive. I bought a new car with automatic gear and power wheel…"

During his open-heart surgery was not yet undertaken, his chest was too painful and the doctor prescribed administered sublingually drug to enlarge the coronary arteries. Before his operation, he had to carry them all the time. When he felt uneasy, he did immediately. He narrated, "…later, I had spray. If I felt chest pain on emergency and almost faint I sprayed under my tongue and it felt better. The doctor would ask such symptoms; if I had I told him and he would prescribe them. Now, I don't have that symptom and no need to use it…" After operation, Uncle Mana reduced the medical technology of administered sublingually drug because he did not have immediate chest pain.

After heart surgery, he still used medical technology to control its symptoms and evaluated his body with drilling blood vessels for cholesterol checking, glucose level in the blood checking, liver and kidney function checking through narration. "…At first, the doctor made appointment once in 7 days. If no irregularities, he made appointment once in 15 days. Now it is once in 4 months. Nevertheless, the doctor said once in 6 months or a year is possible because I am normal. However, I declined and asked the doctor. I told the doctor that if too long time for checking, I would let go and eat without control, careless, forget the prohibitions. When drilling blood vessels, the doctor checks irregularities with the

blood test…" After the open-heart surgery, he got electrocardiographic checking twice and x-ray once. Occasionally, the doctor would have medical checkup with technology.

6.4.3.3 Self of the patient through heart surgery

Before and during the heart surgery, the patient cannot express self. After the operation, the patient feel subside and have more capacity to express self. Self defined as having disease under the medical discourse is the self of distrust, fear, worry, perplex, uncertainty and suspicion to the medical technology doing to the human heart. Heart surgery through medical technology enters and destroys the self, threatens the body and identity, intervenes daily routine affairs, works, family and freetime which the patient experienced the heart surgery are searching for and empowering self in handling pains.

6.4.3.3.1 Negotiate coexisting with the medical technology

Refusals and acceptances of the heart surgery through medical technology: His Venerable Abbot Suwan narrated that at first when the doctor told to undergo CABG surgery there was no confidence and did not want it. "…I disbelieved its safety…" So, postponement was requested. "…Let me get back to decide within 7 days…" His Venerable Abbot Suwan told the nurse. "…I need to be prepared since heart surgery is not an ulcer or pus surgery…" Thoughts, emotions and feelings to the medical technology in heart surgery of the patient were being unconfident, declining operation, unsafe, requesting many days for decision-making and postponing the operation. It was the resistance to the use of medical technology to the human body.

Finally, His Venerable Abbot Suwan decided to undergo the heart surgery. "…Before deciding to undergo an operation, it was the most painful. So I decided. Death, come what may…" His Venerable Abbot Suwan reasoned why to choose heart surgery in the private hospital in Bangkok. "…The chosen private hospital was the most advance hospital in those days accommodating a special heart center. It had got heart surgery show in TV…" Thoughts, emotions and feelings turning human beings to surrender to the use of medical technology were pains, sufferings, modernity of the capitalism classified specialized centers in the

hospital and TV promotion. This was to emphasize the public to be so much confident to the use of medical technology.

His Venerable Abbot Suwan narrated recommendation of doctors after the heart surgery. "…The doctor asked me to never fail taking medicine, to exercise, not to be worried, to not running short of medicine, to reduce salty things, fatty things and sugary things for the purpose of preventing high cholesterol level…" The most difficult thing in monkhood was selective meal because monks never cooked but alms from the charity-minded persons and had to take every food at alms. To demand the alms-givers to prepare specific dishes for the monks was a sin against religious practice as a proverb said that 'a monk preaches not for meals'.

His Venerable Abbot Suwan had other chronic diseases, i.e. diabetes, hepatitis and newly found of cerebral thrombosis. His Venerable Abbot Suwan needed to take drug to reduce glucose level in the blood, liver maintenance drug, drug for cerebral thrombosis whereas drugs for controlling cardiovascular disease were the lipid-lowering drug and anti-coagulant drug. A tablet of the oral anti-coagulant drug would be taken after breakfast, while a tablet of the lipid-lowering drug was after dinner. The different course of life of His Venerable Suwan from the common people is, "…in the evening monk never takes meal but juice and drugs…" Medical researches revealed that taking juice before drugs affected some types of some tablet imperfectly activated and a tablet of the oral anti-coagulant drug had to be taken after breakfast.

Self-dosing: Auntie Ampha showed her 3 types of drug containers classified by each disease for me to see, i.e. for heart disease, diabetes and osteoporosis. She narrated that she had to take a lot of tablets and from many hospitals such as from Doctor T. either for osteoporosis or from the Sithandorn Hospital for heart disease and diabetes. When she took many kinds of tablet, she was exhausted and she tried not to take some. "… Tablets for osteoporosis taking for morning, noon and evening; I took just at noon. Before than I took many tablets for my heart disease, and when I got diabetes, I had to take diabetes tablets. When I got osteoporosis I had to take osteoporosis pills again…" She took each meal for each disease but never take tablets of all diseases together.

She, moreover, narrates about spending life with each disease and the doctor recommended conducting herself differently until she was confused how to conduct herself. "…the cardiac surgeon asked me to exercise by walking. The orthopedic doctor asked not to walk. It contradicted. Sometime I walked for my exercise and after returned I could not rise. My children had to carry me to the orthopedic doctor. He told me not to walk and I told him that the cardiac surgeon asked me to. I thought would I survive another 5 years. Now I take many tablets and get colic. My body cannot bear it…" Dependence on many medical technologies of a human cannot prolong the human life because there are synthetic substances rather than from nature and suffer the human body.

After CABG surgery, human being has to rely on medical technology and hospitals more and it creates costs and consumes time. Auntie Ampha narrated that after her heart surgery in the first time, the doctors at a public university hospital told her to take foreign drugs to control the symptoms. A tablet cost 80-120 Baht and she had to spend more than 10,000 Baht per month. Traveling to fetch medicine in public university hospital in Bangkok demanded her to rise at 3 o'clock in the morning and left home at 4 o'clock in the morning and arrived Bangkok before sunrise. However, many patients were queuing. Later, she asked the doctor to fetch her medicine in the Sithandorn Hospital. The doctor made appointment for her medicine every 6 month. She attributed her drug received from the Sithandorn Hospital compared to the public university hospital. "…Tablets are different but look similar. In the Sithandorn Hospital, I have to use 30-Bath card and now, I pay addition cost of 300-400 Baht each time…"

Auntie Ampha narrated about the advice of the cardiac surgeon and before her operation she had high level of cholesterol. She never had advice from the doctor about physical exercises, selective eating and relaxing her tension. "… The doctor forbade too salty meal, too sugary food but I favor to take salty dishes. The doctor advised me to eat little and after the operation I felt uneasy about meals. However, after tolerating, I felt familiar. The doctor asked me to be careful about over thinking, avoiding heavy work, lifting not more than 3 kilogram thing." After her heart surgery, she stopped gardening. Now, she neat her home such as washing clothes by washing machines, preparing rice, and cooking, which she

called " minority jobs". The body experiencing heart surgery through medical technology reduced the physical capacity in working and important job.

Refusal of defibrillator but following the doctor's advices – Uncle Piti narrated that after his heart surgery, "… I had to take laxative until my intestines got familiar with it. It was the effect from my heart surgery and the doctor forbade pressing excretion, it would break my wound…" Before and after his heart surgery, he has to take drugs as before. They were drugs to control heart disease symptom, blood pressure, and diabetes though he rejected defibrillator because he believed in karma of both his present and previous life. Still, he strictly followed the doctor's advices. "…Before my heart surgery, I loved iced black coffee so much but after my operation and saw others drank, I wanted to drink and had to swallow my saliva. The doctor forbade me because there was caffeine and I would get coronary artery sclerosis. I had to break myself…"

Besides, he finds time to have his physical exercises everyday. He narrated, "…I have to be careful about my meals. What made ill-effects, I have to stop and broke myself. I helped myself this way…" Surprisingly, he quit smoking and drinking completely because the doctor told him that they were the causes of cardiovascular disease.

6.4.3.3.2 Submissive to medical technology

Strictly using medical technology – Uncle Soros got many chronic diseases and cardiovascular disease, high level of cholesterol, and high blood pressure, "…Taking 5-6 types of medicine, and taking anti-coagulant drug for nearly 10 years because I have taken it since before my heart surgery…" In addition, he has also spinal nerve compression. When counting, "…I have to take 22 tablets per day…" He expressed his feeling in taking tablets to control symptoms of his chronic diseases and it seemed to replace his meals.

The heart surgery with medical technology is defined as health loss and the signal of unable to work hard because of wound pains, new food needs and working limitation. Uncle Soros, "…The doctor forbade lifting thing heavier than 3 kilograms but I did every time. If it was a bit heavier, I mostly did it myself. If it was too much, I asked someone to do…" In addition, the doctor forbade

him to take fatty and salty food; it contained much cholesterol and brought high blood pressure. "…The doctor advised to take physical exercises, not running but walking and focusing on speed walking…"

Strictly taking food by the doctor's advice - Uncle Mana attended his heart disease major with 1) food, 2) physical exercises. "…Without exercise, I shall not survive. I do all jobs but if getting fatigue, I stop and not stubborn…" What he emphasized was, "…The doctor allow lifting things not more than 15 kilograms until life…" After his heart surgery, the doctor advised him on food and it made him selective more. "… When I got operation, I knew what should I take and what I should not. In the old days, I never thought and ate all what may. The doctor forbade taking chicken entrails but only chicken. Never take chicken skin, wings because fat is there at the skin and wings. Take only red pork. Be careful about fish, if it is freeze with formalin. It was necessary to be selective for eating. The canned food should be avoided because they had preservatives. Never take fatty things. Never take salty thing. Never take too sugary thing they have high level of glucose…" the power of the medical discourse directed individual to submissive to any treatments designated by the doctors.

Strictly follow the doctor's advices – After his heart surgery, Uncle Siri fetched his medicine to control his symptoms from the public university hospital. "…The doctor prescribed foreign drugs, which is outside the list of essential drugs and it is very expensive…" Later, the Sithandorn Hospital organized a home-visit team and advised him to take the medicine in the Sithandorn Hospital since it has established the cardiac center ready with potential medicine. "After, being treated in the Sithandorn Hospital, the doctor did not prescribe foreign drugs, it was free of charge…" After his heart surgery, he strictly followed the doctor's advice. "Less working and if fatigue, I stopped. Never take fatty and salty food, and never fail to take medicine continually." Now, He quit his job because of many chronic diseases and not expedite because of his cerebral thrombosis.

6.4.3.3.3 Resistance to medical technology

Independent of doctor and hospital: Uncle Weera narrated "…After my early heart surgery; the doctor in private hospital checked my electrocardiography and expensive medicine. My treatment was costly. Therefore, I pleaded to refer to the Sithandorn Hospital and used the 30Baht card. Treated in the Sithandorn Hospital, I request to use drugs in the list of essential drugs for controlling the disease symptoms and it was free of charge. However, I got drug allergies and did not stop coughing. The doctor told me that was serious, and I had to return to the foreign drugs…"

Now, he buys his own medicine at drug store using examples from the Sithandorn Hospital. Nevertheless, he informs the doctor first, "…I cannot meet the doctor, could I buy drugs myself. The doctor said I must never fail take medicine reducing high blood pressure, cholesterol and anti-coagulant drugs until life. The doctor asked me whether I could do it. I took the sample to buy the 3 types of drug. The expenses are as in the hospital, and I need not travel. Here, I decided drilling blood vessel in a private hospital near my home to check my cholesterol…" Buying drug by oneself and blood test to find the level of cholesterol without the assistance of the doctor showed the self-efficacy for self-treatment and free from the doctor's power or the medical institutes. It was a form of resistance against the medical knowledge.

He reasoned for his self-drug purchase, "…Arriving the hospital at 6 o'clock in the morning; I received the queue card at 8 o'clock in the morning. Then, I shall have drilling blood vessel, blood test, diabetes check, triglyceride check, and cholesterol check and sit waiting for x-ray, electrocardiography, and exercise stress test, which is almost noon and wait for receiving medicine in the afternoon…" Visiting the Sithandorn Hospital for receiving medicine would take the entire day.

Besides, he stopped his dependency with the hospital, he was not strict to the doctor's advice because he preferred sugary food but he got diabetes. In addition, he favored fatty food such as sinew mixed meatball since fatty food was delicious and attractive to eat. In addition, he loved spicy food, which

was the provincial culture in cooking; it made him high blood pressure. After this heart surgery at first, he could avoid such prohibited foods.

Now, he doesn't fears the death since his aged mother had died and he has none to worry about. He returns to take coffee what the doctor prohibits him. He likes it in the morning when his stomach is free. It presses his heart. Because it is the nature of the aged, he goes to bed early and rises at three or four in the morning. His wife takes good care of his food, absorbs fat from his food, uses olive oil for cooking, reminds him not to take the prohibited food, which is soaked fat and sugar.

6.4.4 Cultural context of medical technology in heart surgery

The patients undergoing CABG surgery are the human being who spends life with medical technology amidst the cultural context and it affects their thought, emotion and feeling on medical technology and creating self and handling illness.

6.4.4.1 Belief of Buddhism and astrology

Good fate and theist protection – Auntie Ampha narrated after her recovery from heart surgery, "…I prayed to the Lord to protect me after operation it took me one day and one night to lay still. I thought I would not survive…" She could not move herself after operation as a corpse. The logics of the patient would like to explain her body through using medical technology and returned to move again, what the patient cannot control. Nevertheless, it is relying on the holy blessing with the Buddhist conviction of the patient. After her operation and stay for 6 days in the hospital, the doctor checked and told her that heart was normal.

The success of using the medical technology in an emergency heart surgery shades life and death. "…the doctor told me that yesterday there was a serious case like me and agreed to have heart surgery but dead. He thought I would not survive. However, he unintentionally pacified me not to be worry and admired me that I had good fate…" Either referring to theist protection and fate as the key determinant to use medical technology for heart surgery in success or in failure showed logical strength differentiated from the scientific logics. Its world view affects life, death, illness and suffering are the phenomenon beyond human controls.

In addition, Auntie Ampha narrated about the success of her emergency heart surgery using the medical technology. "…A patient arrived a day after me having 3 coronary artery sclerosis. He got unconsciousness. He was more serious than I had. Her children decided his heart surgery and survived. If not, one could not blame the doctor; the doctor said…" The medical technology was mysterious where human beings never questioned about its efficiency in treating illness because the cardiac center of hospital investing modern technologies disseminated only its positive side to help human lives. Technology was the last answer for medication. Connecting with the global capitalism in trading with the transnational technology turned doctors to be the middlemen to bring medical technology into the human being. Doctors were persons who recieved benefits from the use of the technology with kindness to save the life of the patient. If technology failed to repair the human heart, the doctors and its production process could not be blamed. It was relying on fate and protections from the holies to help the human body to agree with used medical technology.

Fate defining the life - using medical technology for heart surgery with Uncle Piti cannot solve the sclerosis of 1 coronary artery from 3 arteries. He narrated the reasons the doctor explained about the failures of using the medical technology to treat disease, "…The unsuccessful operation to a sclerosis artery was because it was too small and if it we was cut it would break and deadly to life…" The option was between a remaining sclerosis of coronary artery and death which he thought, sensed and felt about the medical technology, "…It was like doing business; I lost. If the operation was successful, I gained. But my friend remained me that it was 50-50 because it was either death during heart disease or paralysis…"

Uncle Piti believed, "…Having sclerosis of coronary artery was defined by the fate as if the cripple that would coexist with the imperfect organ until death even having artificial legs or hands. But they are artificial with limitations in real work and they are not born with us…" Human thoughts, emotion and feeling of the medical technology cannot solve the congenital anomalies, and human accept the defective or imperfect body and to further coexist with it.

Merit and karma – The life lessons from water stream of Uncle Piti with wild flood overflew his company purchasing prawn, his daughter was death, his wife went insane and his exported business of purchasing prawn has been cheated brought him sufferings and pains with unexpected situation. It made him disbelieve in the scientific modernity and reasoned the unexpected mishaps of the merit and karma defined it. This included he refuse to have PCI and the doctor recorded in his medical chart record of "Treatment Refusal".

He gave his last words to his son if he was unconscious and cardiac arrest; they needed not stimulate his heart with defibrillator machine because he believed that his life was scribed just that. To stimulate his heart was to resist his fate. He also believed that doctors could not medicated every disease and with every patient. It depended on whether the patient has made merit with doctor who treated him the previous life. If the patient has made merits with the doctor from the previous life, the doctor could them. "… If my heart was cardiac arrest, just told the doctor not to stimulate my heart; I have learn my life on this world for enough, knowing what the best happiness in life was, what the worst suffering in life was. I knew and understood my life enough (tears brimmed). My recent life, I always tried to do my duty well …."

He thought that the disease called infection in the bloodstream, the patients were fainted unconsciously and the doctor could not find the cause of disease, "…The doctor is not an angel who knows everything in this world…" He believed that the possibility of human being in this world has been directed with its course but good or bad, it depends on the power of merit and the power of karma each one has done in this life and life in the past.

He reasoned on consequences of merit in estimating the results of medical technology, which could be paralysis or death. He narrated that he has made merits routinely by his monetary conditions such as buying land for the temple, and offering fabric 3 garments of Buddhist monk, "…I believed I have done only good deeds and never committed immorality. When I have my heart surgery, I believed I would not be paralyzed for my children to look after me. I would bind my karma with my son any longer. If I die, beg, let me die…"

The Lord protects life and destines to meet a kind doctor – Uncle Siri narrated about his stay in the Sithandorn Hospital, "…I was in ICU for 15 days and no sign of recovery. I did not know what disease I got and the doctor never told me about it…" He bet the Lord to meet the good, kind, and can-cured doctor with His Lord protecting my life; and I shall enter monkhood…" After his heart surgery, he could not enter monkhood since he had to meet the doctor every month and his wound was not well healing and need to take drugs every meal. Therefore, he hired a person to enter monkhood for him.

He narrated the event after his recovery. "…I was admitted in the 6th Floor surrounded by 18 beds for heart surgery and the nurse room was in the center…" A hospital is a place to help and medicate the patient but it imprints deep sense of illness, degenerative and death (Lupton, 2000). He continued, "…I saw a patient given heart surgery with hemorrhage from the wound and dirtied the bed-sheet with unconscious that shocked me with fear. In that room, I was the only one who could sit and all the rest were unconscious…"

CHAPTER VII
CONCLUSIONS, DISCUSSIONS AND RECOMMENDATIONS

The study of Medical Technology and Illness Experience of Patients Undergoing Coronary Artery Bypass Grafting Surgery in Contemporary Thai Society is a qualitative research. The objectives are to investigate the illness experience of patients towards the medical technology in CABG surgery, containing subjectivity leading to differently creating self and managing illness in each patient, its relationship between the medical personnel, health service system and the health policy amidst the economic, political, social and cultural structures at the local and the national levels.

The specific objectives are **(**1) to study the illness experiences of the patients on the medical technology in CABG surgery consisting of resistance and negotiate affecting thoughts, emotion, subjectivity and practices leading to self and managing illness of each patient. And (2) to analyze illness experience of patients towards the medical technology in CABG surgery connected to power-related between the medical personnel and the patient, capitalist medical service system, and the health policy under the conditions of current economy, politics, social and culture.

The sample groups are patients with medical history in CABG surgery and receiving drugs for controlling cardiovascular disease in the Sithandorn Hospital, which is the central hospital of the eastern region in Thailand. A purposive sampling is applied with the following attributes 1) the patients undergoing CABG surgery from the Sithandorn Hospital, or other hospitals with different charges either state welfare of civil servant or 30-Baht card, single or married, cohabited with spouse or separated/widow, and patients with specific living such as priest, and after CABG surgery quitting their occupation and did not quit their jobs. The selected patients lived in the Muang district area and other district where the Sithandorn Hospital located. The selected patients had different social and cultural background. 2) Being the patients undergoing CABG surgery from more than 6 months and less than 10 years because patients with less than 6 months were the patients on recovery and those

having CABG surgery more than 10 years might forget all incident or emotional with operation. 3) The patient were able to perceive with perfect consciousness and communication skills with ability to narrate, and 4) willing to cooperate in the study.

Sampling the patients undergoing CABG surgery was based on theoretical sampling and needed to evaluate both benefit and disadvantage of medical technology; the focused cases were - 1) the patients undergoing CABG surgery with appointment, emergency, cardiac arrest and the doctor stimulated the heart with cardiac defibrillator which operated from the Sithandorn Hospital, other public hospitals or private hospitals. Rationally, the Sithandorn Hospital was not potential to provide emergency CABG surgery. The contexts of the patients undergoing emergency surgery and appointment surgery those were different. 2) Patients experiencing complete CABG surgery were the benefits of using medical technology, the patients experiencing incomplete CABG (disable to solve of coronary artery obstruction) and case of wound infection, which were the disadvantages of using medical technology. 3) The patients undergoing CABG surgery had ever experienced PTCA before having CABG surgery, 4) the patients undergoing CABG surgery had refuse PTCA before CABG surgery; and 5) the patients undergoing CABG surgery associated with other chronic illness, e.g. diabetes, cerebrovascular thrombosis, gout etc. and which were in taking many kinds of drugs with supportive potent or refuting potent in each drug. Drugs were also type of medical technology.

Triangulation was applied with 1) investigating illness experience of the patients undergoing CABG surgery (with open-heart surgery) applying a narrative interview with participant observation; 2) analyzing documents related to hospital developing the cardiac center; and 3) conducting in-depth interview with specialists applying policy, regulations and practices of medical technology of CABG surgery in the hospital and participant observation.

7.1 Principal Findings

7.1.1 The macro-social level

7.1.1.1 The westernized ideology colony

Domestic political economy has been affected from the international factors, which were global capitalism, and the westernized ideology colony of the Third World. They affected the macro-social context of the country as follows. There was the increasing of health expenses from using medical technology imitating in the West Country. The economic uncertainty of the global capitalism pushed the increase of poor in population. It was the adoption of taking soft drink as the western culture, which was inappropriate to the surrounding and the body of the people in the Third world. It brought chronic diseases and brings about to the using medical technology. Being the medical supplies of markets for the western industrialized countries, the macro-social context affected the using of medical technology at the intermediate levels, micro-level and the individual level.

7.1.2 The intermediate social Level

7.1.2.1 The state policy created inequity of medical service

Though the state policy provided state welfare of medical service covered all the Thai people, the policy of health insurance system created 2 types of services, i.e. pay for itself and free service but poor quality. It created inequality of each class in health service. A lot of budget pays for health by the state reduced the public expenses in providing public health services and increased imbalance in societies among groups in the country.

Adopting the westernized ideology of medical technology to treat diseases could not solve all chronic diseases. The CABG surgery by medical technology could recurrent of coronary artery sclerosis. The state had to undertake more expenditure. The nature of the chronic diseases relied on behavior of the patient. It was necessary to need people for self-care with medication. It was to provide opportunity for the patients to critically comment in self-care. Applying the public health policy with negligence of the patients' social context weakened the efficiencies

of the national public health services. It became the structural barrier of the national development, which needed the public cooperation in the country.

7.1.2.2 Separated medical services

The large-size central hospitals faced loss because of using expensive medical technology with failures and disadvantage of providing the CABG surgery to some cases. Separated services in a hospital such as OPD Surgery Section, Heart Clinic, Diabetes clinic and High Blood Pressure Clinic, etc. The chronic illnesses provide no different lifestyle, holding a life of patient and disease development.

Establishing the cardiac center in the tertiary hospital required a large amount of budgets to purchase technology and employed medical specialists. Purchasing the medical technology in a hospital was strategizing with charity donation. The limitation of the CABG surgery was impossibility to operate all the time because of ICU vacancy since it was co-shared with other operations, which were a lot of surgical patients in provinces. In addition, there was in adequate with anesthetists, nurses, surgical assistants and post-surgical care team. The provincial hospitals except the public university hospitals allocated not more than 2 cardiovascular thoracic surgeons.

Medical treatment approaches in the medical and public health system at present disregard behavior of self-care among people. It is opposite to their self-care, which is their real basic life. Policy making should encourage lay knowledge and ability of the self-care to harmonize the growth of material, knowledge and current technology. Patient can use information to adopt and adapt knowledge and approaches to justify their life course with low cost and convenient in the local community. It is as in the narrative medical technology based on the lay knowledge of Uncle Siri, who has used the Royal Running Rally to replace the exercise stress test to diagnose his cardiovascular disease. The public health administrative system should admit and see the public capacity and support, spread and simplify medical treatment for lay people and in the range that they can take care themselves. It must ease treatments and is not further victimized patients in the service system under medical commerce.

7.1.3 The micro-social level

7.1.3.1 Relationship between doctors and patients undergoing CABG surgery – there are gaps of power, authority and knowledge between the doctor and the patient with the inform consent, communicating with the patient for gratitude of life saving, medical economic benefits, and knowledge gained from treating living human body. Applying medical technology for CABG surgery under the concept of scientific medicine neglects the social context surrounding the patients with medical technology and the public health model considered etiology of disease rather than quality of care brings nihilism of public health service.

The patients must face medical technology which doctors never realize suffering in practices to accept it. The Thai social context and cultures are hierarchically constructed. Patients are in the lower class than the doctors especially those working in the public hospital and have also honorable government officials that were higher class than lay people. The CABG surgery saves the lives of patients. They and their relatives remind the surgeons' gratitude in saving their lives.

Blaming, condemning or lawsuit should not be taken against the doctors even the patient is dead during the operation. It is counted *force majeure*. Surgeons have no intention to make the patient die. Working in the public hospitals is the altruism of the surgeons because they receive lower salary than from private hospitals many times. The patient must be the most patient, least talk and follow the instructions of the doctors and nurses and will be called good patients.

Doctors see diseases and prescribe drugs with severity of disease. Some doses of drug might be inappropriate to the patient. The patient unable to adapt to the dose and affected physical symptoms will learn how to adapt dosing to accord their physical condition to reduce suffering from the medical treatment.

The important problem arisen from the treatment process using medical technology is the matter of perception and defining illness and medical technology. It is the problem continued from the way of thinking. Differently understanding illness between the doctors and the patients with their families under the way of thinking with each party leads to the different frame of explanation and different practices. The expectations of treatment, the self-care of the doctors and the patient are also then different.

7.1.4 The individual level

7.1.4.1 Life context of the patients undergoing CABG surgery

Illness experiences of patients undergoing CABG surgery collected the meaning of suffering, distress, stress, death fear, surgical expectation, social reaction, and reaction from surrounding people against CABG surgery and illness. The life contexts of the patients undergoing CABG surgery are:-

Changes in the family: they are a sudden death of a daughter from wild flood flew into the provincial, being cheated of property by the son, broken couple life, paternal abandonment since young creating negative effects, life difficulties, frustration and discouragement, either trusting fate or oneself. There are also positive effects, i.e. pride of the son's success, dependable children, accepting the mother's new marriage, understanding the spouse of the same disease, and supporting the patient to live on. These are the contexts connected to CABG surgery and recovery

Events in other life dimensions: they are 1) suffering in working, i.e. lawsuits, business was cheated and wild flood drown the company; 2) Working conditions creating diseases, i.e. low rank solider under oppression; 3) Capitalist life course, which positively and negatively affecting life of the patient. All are the contexts related to CABG surgery.

7.1.4.2 Reviewing predictors of the illness

All patients review the predictors of cardiovascular disease, containing 1) some irregularities in their bodies, i.e. sleepless coughs, cholesterol rises to 600, easily exhaustion, cannot work and hearing water flow in the chest. 2) The dead body is from the cardiac arrest, and unconsciousness and 3) illness among relatives.

All the 7 patients selected to participate have accompanied with chronic disease, i.e. diabetes, osteoporosis, spine compress with nerve, gouts, cerebrovascular thrombosis. The chronic disease affected from the change to capitalist industrialized societies affecting work stress, rush life, over consumption and absence of physical exercises.

7.1.4.3 Pluralistic medical system

Illness experience reflect the roles of the alternative medicine coupling with self-care process, which are drinking the wonder ferment water, acupuncture, taking herbs, lacing volcanic stone and folk healer.

7.1.4.4 Information search for CABG surgery

It is to ask for information from people who had surgery before and medical personnel with knowledge of medical technology to respond the spiritual dimension and the patient's emotion.

7.1.4.5 Subjectivity of the patients undergoing CABG surgery with medical technology

The patients undergoing CABG surgery are subject to the Thai social structure attached to the state policy on allocating public health welfare. The health service units of public and private sectors including the relationship between doctors and patients, their experience of medical technology for CABG surgery and biomedical model provided have been explained through religious logics connected to culture. They are misfortune, merit, karma, fate, and fortune. The thinking system of the patient has been accumulated from long experience of illness and narration until it has been developed into one's own thinking which how the lay people define the medical technology.

Illness experiences of the patients undergoing CABG surgery are different to each one under the current conditions of social, economic and politics. There are both benefits and suffering from it. The illness experiences of medical technology contain thoughts, emotion, subjectivity, self-care, safety evaluation for health and survival. Treatment will be by herb or alternative medicine for their self-care and are unlikely accepted by biomedicine. The patient conceal with treatment of alternative medicine from the medical personnel.

Viewpoints of the patient on the medical technology for CABG surgery revealed their understanding about it but different from what are found in the medical records. In the case of Uncle Manna and Uncle Piti, this records of the rejection of treatment for PTCA. Because the thought of the drugs will be taken even undergoing PTCA. The medical technology specifies cardiovascular disease and leads to CABG surgery.

The patients view the medical technology both positively and negatively. The patients undergoing CABG surgery are fragile, struggling with death, and with uncertainty future. Defining it positively is unlikely. All of them define it as a device to save the life and might bring death and disability. It is compared to a double-edged sword. However, the CABG surgery offers option for the cardiac arrest to recover again during emergency surgery but some express distrust about it.

The medical technology intervenes into their privacy and invades their bodies. Uncle Piti narrated, "…when the doctor told to undertake CABG surgery, I felt weakened after I left the diagnosis room. Thinking inside my heart, old man like me has to undergo open-heart surgery?" It makes the patient unable to control oneself. Though some patients admire it involves in CABG surgery as life saving but some say it hurts and brings uncomfortable. For example, Uncle Siri has told about uncomfortable when he has to put on respiratory machine. When all of the devices of the respiratory machine have been taken out, he returns to himself again.

The medical technology is an equipment to more pacify the body but the body has been experiencing it for CABG surgery has been interfered and being a limitation in daily life. Uncle Piti said, "…I could not climb the stairs after heart surgery. I have to make new bedroom in the ground floor. I could not press during excretion. I have to take laxative until my intestines get familiar. Currently, if I do not take laxative, I cannot excrete…" The building of a new bedroom at ground floor and installing air-condition to make the room cool and to avoid stress draws more expenses and is not officially estimated in applying the medical technology.

All patients perceive that using medical technology both taking drugs and CABG surgery cannot completely cure the cardiovascular disease but possible for recurrent. They practice the treatment as choosing the hospital for CABG surgery, using herb or alternative medicine, and receiving drugs for symptom controls coupling with diet, non-stress adjustment and physical exercises. The patient explore satisfactory hospital, heart specialization, no waiting long for diagnosis and likely be the provincial hospital where they reside and try to avoid the hospital of fierce doctor, long queue and distant travel.

The medical technology specifies clinical practice guideline, which the patient must follow without questions on what they are going to practice. Handling illness by coexisting with the medical technology and creating social identity, it becomes part of the human body. It leads to endless dependence of medical technology, doctors, medical personnel and the hospitals which are medical institutes. In addition, the patients learn to adjust themselves to self-care to ease their body comfortable, to terminate dependence on doctors and hospitals, and to reduce unfriendly confrontation of the service providers. It makes some cases lack of good opportunity to access proper medical treatment and still inhabit in societies, which further become the chronic burden for the health service system.

7.2 Limitations of the Study

Only the patients undergoing CABG surgery, patients receiving drugs to control the symptom of cardiovascular disease in the Sithandorn Hospital and patients residing in the province where the hospital is located have been selected. It limits the data collection, which should be more spread for this study. Moreover, selecting only informants who are willing to participate in the research gains details from only a specific group undergone CABG surgery wishing to express themselves.

The methodological limitation applying a narrative interview, which the informants have to furnish data for the researcher, provides comments and arguments found in societies. Narrations are not sometimes responded to the question raised for the answer. In some interviews, I had to interview for more than 100 minutes to get the answer even though time is restricted for only 90 minutes. In addition, I am also a dentist representing the scientific medical concepts and during the first interview, I had attempted to avoid non-scientific phenomenon. Nevertheless, when I created familiarizing with some cases on buying an illegal lottery within the hospital compound; there was the coffee shop owner as the slip agent. Buying illegal lottery needed praying for a hot number from the holies such as the Bhodhi tree in the hospital, the statute of Phra Chao Taksin Maharaj and so on. The informants believed

that I had no conviction in only in the sciences but the belief of astrology and fortune. The informants then narrated what were non- scientific phenomenons, too.

Though there are limitations in narration of the informants and me, but with diverse data collection approaches; there are tests of content validity and reliability, which furnish the research to find the new lay knowledge of the patients toward the medical technology. It displays the benefits and disadvantages of the medical technology for CABG surgery. The narration becomes the inter-subjectivity between the narrators and the audience.

The social condition is the context to understand how the medical technology is improvised and the illness narrative is a useful tool to understand thoughts, emotion and subjectivity of the patient toward the medical technology for CABG surgery. It includes opening the areas of the patient in the health service system. Their thoughts, emotion and subjectivity toward the medical technology for CABG surgery non-comply with the definition of the biomedical term that it saves the life of human beings.

7.3 Discussions

7.3.1 More medical technology dependency

The concept of Cyborg Anthropology mentioned the production of human through machine or technology. It affects and monitors the social relationship, body and subjectivity (Das, 2000). The medical technology is a vehicle to prolong human life and save its life to the targeted destiny. They are taking care of parents, the spouse, the responsibility for children, the responsibility for relatives, and the career success where the life course of human being is associated with medical technology in both distress and happiness.

The thoughts, emotion and subjectivity of the patient toward the medical technology for CABG surgery have to coexist with the more medical technology dependency. Life without it sometime suffered the patient. For example, the case of Auntie Ampha who has not received the administered sublingually drugs after her

CABG surgery and when she gets angina pectoris, she has to lie still and not to worry about her life incident along with blaming her chest. The body exposed to surgery with the medical technology needs to continue using it. It makes human being to stay close and familiarize with it and human being cannot stay away from it after CABG surgery any longer.

7.3.2 Subjectivity between human being and medical technology

The human identity is basically emphasized on self-reliance and freedom in the denial of coexistence with medical technology. If all is stable, new technology can replace its traditional life regardless so great the human artifact is; it cannot be paralleled with what has been bestowed by nature. It is a sustainable development in the view of the local resistance with the domination of global ideology with managing disease by medical technology.(Scherper-Hughes, 2000) The evident witnessed with the case of Uncle Piti when the CABG surgery by the medical technology and it fail to solve his disease.

Alienating with medical technology makes human being stressful, fright, and hesitating. The medical technology intervening into the body confuses the patient on their hearts as if a foreign body. The body fails its routine functions. A machine cannot turn the body to naturally work. The illness experience of the patients to a body intervened by a medical technology disables the patient to control their bodies.

The CABG surgery blurs the border between a human being and a machine in many stages. It leads to ambiguity and uncertainty of the change of self. The beginning from applying medical technology monitors the body; the operation joins the coronary artery with the body and the machine. After the CABG surgery still needs taking medicine for symptom control until life. The medical technology controls the patient to be passive. The fragile condition of the patient undergoing CABG surgery is induced with the medical technology to enter for the state of unconsciousness.

The CABG surgery with medical technology is the human situation between life and death, disability, loss of freedom, disabling to do favorite activities, stop working, loss of family income, connecting with the global capitalism, cooperation between the business and government sectors, and the health

policymaking. Giving values to the medical technology of the patient is the common sense logics, religion and discourse with doctors or the surrounding people to understand the medical technology and the CABG surgery.

The feeling of the patient with the medical technology intervene the body, dread to death and recalling death risk. The patient avoided to CABG surgery because of unfamiliar the medical technology and disbelieve in its safety. The success of the medical technology for CABG surgery relying on fate, protection from gods, fortune, merit, and karma, which human being cannot resist because of the consequences of its uses are under the hands of the surgeons. The patients have to surrender their lives in the hands of doctors while the doctors evaluate CABG surgery with medical technology as a way to create confidence in survival and health.

Creating self is another way the patients interpret and join with technology in the context of health recovery. Mobility between the machine and the body affects the change of self. The narration of the patients undergoing CABG surgery reflects that before and during the operation and the ICU experience of critical disease that the patients do not respond the physical function and cannot express self. The post of CABG surgery eases the symptom and provides more potential to express self.

In the post of CABG surgery, the patient feel comfortable and trust doctors but they still fear the application of the medical technology. In the long period of the post CABG surgery, the patient begins creating self again. Their cultural belief on the medical technology became their background of personality for those who do not only believe in scientific medicine regarding how to explain the sense of risk over the danger of the CABG surgery and mention about fate, protection from gods, fortune, merit, and karma. Rationally, the non-western society particularly Thai society had traditional health care; it had subsequently adopted biomedical culture.

The medical technology is the new power performing with human beings in the current society. The human body involves feeling. Medical technology imposed on the body of the patient undergoing CABG surgery then involves in many steps of emotion beginning from the inspiration of the sacred, communicating for sympathy divine, the dream of a trip to the world after death, illusion and seeing something that common people cannot be seen. There are the linkages between the human world and the spiritual world. It illustrates the link of human being and the cosmos where

natures, social, individuals, and super nature are coalesced into the same system. The patients undergoing CABG surgery have the obscure border between nature and culture, physical body and machine, human and inhuman or animal, self and others, local and world

Margaret Lock, a cultural anthropologist, studied a case of brain-death patient comparing between the North-American society and the Japanese society. It was a health and illness phenomenon related to medical technology, social context, laws, politics, ethics and subjectivity. The brain-death patients are the living dead body, breathing through a respiratory machine but with unconsciousness. They are patients who can donate their organs to other patients. It is a contribution of the medical technology to revive for donating organs to other life until the organ transplanted.

Lock interviewed brain surgeons, anesthetists, and nurses who involve in the decision-making to stop treatment in the brain-death patients and the donation of the organs. The stop treatment in the brain-death patients relates to medical technology, medical ethic and culture. Surgeons in North America and Japan told that the patients' relative were different. Whereas the surgeons in North America would inform the patients' relative that the patients were dead and gave them break. They then asked about the donation of organs. On the contrary, surgeons in Japan would inform the patients' relatives that patient were almost dead and seemed to be hopeless for treatment. There was no proposal to donate organs until relatives proposed it themselves.

In the North America, donations of organ is a thing one should do because it is a gift of life and organ transplantation is a matter of the medical technology which the North American society gives importance under laws and supports from the Catholic Church on the donation of organs. At the meantime, the Japanese society had experienced about medical corruption and there are no laws enacted about the brain-death patient, while the religious institution had no comment about donation of organs. The individual thought or subjectivity is different which define medical technology and decision on the brain-death patients and donation of organ in these 2 societies are different. Though the brain-death condition is a medical scientific phenomenon, the

decision to stop treatment and donation of organs involving the medical technology are related to culture (Lock, 2000).

The historical development of scientific medicine is founded on anatomy and surgery, which is differed from the traditional medicine philosophy in the east society. The seductive metaphor on the gift of life in the east society didn't work. The Japanese society had already the existing of the culture for health and healing with traditional medicine, it adopts the culture of scientific medicine later. Donating organs of brain-death patients works well in the western cultures but losing meaning in the eastern cultures because people in the eastern society had no tradition to offer any valuables to strangers (Lock, 2001) but to person of the same blood (Whyte, Geest & Hardon, 2002). It is counted the donation with the heart embodied and the soul of owner, who donates and goodwill for the human who is the recipients. It is witnessed with donations of kidney among parents and children or relatives in Thai people and it is the belief of Thai culture.

Illness experiences of patients undergoing CABG surgery with medical technology are full of fear, alienation, risk and uncertainty. Medical technology is a myth and it cannot be guessed for the consequences of CABG surgery. The thoughts, emotion and subjectivity of patient undergoing CABG surgery referred to fate, protection from gods, fortune, merit and karma, which the patients have reasoned the key determinants of the success and failure of medical technology in CABG surgery. They are connected with cultures, Buddhist belief mixed with astrology, life phenomenon, death, illness and suffering which human has to encounter. Rationalizing of the patients is the cultural logics contrasting to scientific logics.

The concept of Cyborg Anthropology explained the coexistence between technology and human amidst the cultural context. Technology affects and monitors the relationship of social, body and subjectivity (Haraway, 2008). The cultures of Buddhist beliefs on fate, protection from gods, fortune, merit and karma among the patients involve fear, and risk to death in CABG surgery amidst medical technology creating loss of self-confidence by referring success or failure in using medical technology for CABG surgery with power over the world. The coexistence between human and medical technology is with these cultural meaning as mediator between human and technology.

7.3.3 Medical service system responding capitalism and medical technology

The perspective of Critical Medical Anthropology (CMA) is conscious of the relationship between the medical service system and global capitalism. Transnational corporate manufacturing medical technology influences to design treatments since medical schools. Treatment methods in the medical journals are flowing with the influence of the pharmaceutical industry. It reveals a global and national political economy relationship affecting health and healthcare (Singer, 1990). It boosts the medical technology becomes the last thing in solving the problems of cardiovascular disease.

With capitalism intertwining in every corner of the world, the advancement of the medical technology, drugs and treatment process create satisfaction and new expectation for humans with purchasing power. The coexistence with technology of patients having doctors as the middlemen to introduce medical technology into the human bodies; doctors do not invest in the uses of technology but gain most benefits of its uses not only in specialization training abroad but also research funding on the medical technology used in treatments.

Medical technology is used for the benefits of medical professional more than for the benefits of the patient. Doctors play the leading role in the diagnosis and treatments of cardiovascular disease and are authorized to control many dimensions of health services such as endorsing patients to apply for the state welfare of civil servant to attain foreign drugs without payment. The surgeons with CABG surgery have to definitely decide on life and death deploys the knowledge of the specialists. Their decision is subject to patient’s incapacitated conditions or unconsciousness and needed emergency rescue, no time to talk or to time to make choices for comparison.

The relationship between doctors and patients in the past had ever been the full of recognition, respect and honoring each other. However, at present, treatments are attributed similarly to a commercial business. The capitalist system offers opportunity for doctors and hospitals to treat patient with monetary incentives. Therefore, it rises the medical ethics conceptualizing the doctors are the selling service or providers. Treating patients as clients reveal the transition of social values.

Upon social changes, the treatments and public service provisions are characterized as business. The exchange of goodwill becomes the exchange of money, respect, gratitude, less cooperation and brings distresses to both doctors and the patient. That means scarcity of doctors in the hospitals, many patients, the doctors and nurses have no time, fatigue, exhaustion, and stress. Goodwill is just sorrow when failure happens, lag of confidence and wants of resignation. Being charged with lawsuit, they want to study laws to defend themselves. Doctors want to decline their responsibilities and wish the Medical Council and the Ministry of Public Health to protect them. On the other hand, patients want to find the mistakes, to reveal, to claim for justice, to organize a group to encounter doctors and to have a protective insurance system upon damages happen.

The health service system under the health policy of National Health Insurance is modern and prevailing but decreases trust between the doctors and patients, and creating conflict. Health services become goods. The service system becomes an industrial system, and expectations from technology. Burdens are growing by the health welfare policy, scarcity of communication, poor quality, the requesting claims of rights, the growth of the middle class and the inefficient bureaucracy.

In the organ transplantation, the surgeons cut an organ from one human and to give another human but it is compared to an executioner speeds a person to enter death. So, the medical ethics questions are raised about the thief of organ and exploitation of others' life, body Mafia and lay person, supercitizen and subcitizen, specialized and lay, consent and coercion. The concept of humanism views on a bodily integrity as a whole, honesty, and honor human, which is subjectivity. The organ transplantation deconstructed the essence of human with mind and body by using high cost medical technology and creating inequality among the rich and the poor (Scheper-Hughes, 2000)

The modern scientific medicine is attributed as scientific rationality, objectively measurable, mind-body dualism, biological reductionism and diseases as entities. Technology is instrumental for the human being. The holistic healthcare is necessary to prioritize the medical personnel and patients as a human. Health is a part of the social morality. Pain, distress, birth, aging, illness and death are the part of

humanity and meaning of life. To create equality in society has the property to liberate people in society.

7.4 Recommendations to practice

7.4.1 Networking of patients with chronic disease

Assimilating experiences of patients to the medical technology for CABG surgery in organizing health projects responded to their necessity is by enlarging the space for people to involve in organizing the services to hear the voice of lay person with the lay communication and to ease its implementations. Networking of the patients undergoing CABG surgery is to allow those needed the open-heart surgery to gain its information and to involve them for decision-making in the surgery with willingness and those with post-operation involve with solving problems with their group members. The family members being parts of recovery after the CABG surgery should share to drive, support, to offer spiritual support and continually have activities for solving problems.

Promotion and providing opportunity for patients with chronic disease establish the self-help group. The patients undergoing CABG surgery are the part of membership of self-help group regarding the promotion of consumption behavior, to adjustment of the mind and more appropriate physical exercises or to broaden the as largest space as possible of public relation for health care and health promotion for people.

The finding of this research transfers to Office of Health Promotion and self-help group of the Sithandorn Hospital. I suggested the variety of interested private units to exchange caretaking for the patients with chronic disease. It is necessary to organize Knowledge Management on the application of the medical technology for the chronic patients and to enlarge as many networks as possible for the patients undergoing CABG surgery.

It needs to prioritize the health promotion for patients using medical technology by integrating their experiences on CABG surgery with medical technology to design the physical exercise project in order to appropriate patients who are using it. This includes designing the course covering the food consumption to appropriate the medical conditions and possibility in real life.

7.4.2 Development of cardiac center focus on preventing disease

Reflecting the experiences of the patients undergoing CABG surgery for using the medical technology among the medical personnel groups is a solution of disease, which is not from the perspective of the doctors and nurses any longer. It is corresponded with the concept of neo-liberalism where people participate in their own healthcare. Rationally, providing health welfare for people should include individual diversity in order to design action plans and budget to run the public health policy. Treatment on the basis of culture is not just what people desire but the treatment information also help design the health policy which will respond to the situation of illness specifically for different people groups.

Developing the cardiac center is not just considering setting buildings, allocating specialized personnel and modern technologies but the importance is the personnel who provide significantly positive and negative information for patients to decide treatments. This includes advice of healthcare for patients who have predictors and risk factors of the cardiovascular disease and leads to apply the expensive medical technology such as symptoms of high blood pressure. Viewing the patients equipped with knowledge and capacity to handle their own health problems is the sustainable solution for illness, reducing the problem of power relation between the doctors and nurses with patients, which will lead to systematizing the new model of the health service-friendly that safe patients in receiving it from the medical personnel. It, in turn, builds trust and success in the treatments.

7.4.3 Cooperation between public and private in cardiac center

Health resources are different types of medical personnel such as general practitioners, variety of medical specialist, nurses, and physical therapists etc. including medical technologies for treatments. It is to solve the problems of the

dispersal on medical personnel and medical technologies through cooperation between the public hospitals and the private hospitals. The latter has the advantages of less number for the health service recipients and the rotate of the medical personnel is faster than the public sector without waiting for the order of appointment as in the official regulations. The state should take into consideration and to proceed with the enactment of laws, rules and regulations for truly constructive enforcement.

In addition, the public hospitals have to improve the work system and mechanism for to allow people to conveniently access information, systematically or with examining process and efficient evaluation. It shows the participation of the public sectors, the private sectors and the civil sectors in the worthwhile using health resources. Considering medical technology with CABG surgery benefit and disadvantage from both specialists and the patients, all aspects of problems would be seen associated with budget and profit-loss of an organization.

7.5 Recommendations for Further Studies

The interested future researches are:-

7.5.1. It is necessary to study opinion of specialist groups who using medical technology in CABG surgery. It is to represent the accessibility on the medical services of people, distribution of medical technology, and cost of health care from the medical technology in CABG surgery, benefit and disadvantage of medical technology in CABG surgery designing the national public health policy.

7.5.2 To study and analyze experience of caretakers with patients undergoing CABG surgery. It is to represent the method and condition of take care patients undergoing CABG surgery, which develop guideline of take care patients undergoing CABG surgery in appropriately.

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APPENDIX

Guidelines for Narrative Interviews
Medical Technology and Illness Experience of Patients Undergoing Coronary Artery Bypass Grafting Surgery in Contemporary Thai Society

1. Essential Personal Data

1.1. Kindly tell your family background during your childhood, youth and adulthood, occupation, current family status, close friends and free time.

2. Experience of using medical technology for the open-heart surgery

2.1. Kindly tell your heart irregularity before your heart surgery.

2.2. On point of heart surgery needed, what did you think and feel about your heart and the medical technology for an operation. What did you do? Mind, if you could give details.

2.3. On point of heart surgery needed, whom did you seek the information of heart surgery using the medical technology at that time? What is information collected?

2.4. How did you prepare yourself for your heart surgery amidst many medical technologies and why was it so?

2.5. Beginning from admission in to the hospital until entering the operating room to encounter the medical technology on the condition of unconsciousness, what did you think and feel?

2.6. After being moved from the operating room to the ward, were there any changes with your heart under operation by the medical technology? What did you think and feel about the changes happened with your heart?

2.7. How did you address the changes with your heart after being operated by the medical technology?

2.8. Is your routine daily life changed from before after being operated by the medical technology? What are they and how are they changed?

2.9. How do you take care of yourself after your heart surgery at home? What do you take drugs for each disease in each day? Which hospital or clinics, are you taken from? Moreover, what assistance do you need and from whom?

3. Model of relationship between the patient and the medical personnel

3.1. When being told of heart surgery needed how did the doctor inquire about your illness and explain about operation using medical technology? What did you think and feel about the explanation of the operation with medical technology?

3.2. During being admitted in the hospital for your heart surgery with the medical technology, how did the doctors and the nurses treat you? What did you think and feel? Mind, if you could give details.

3.3. After your heart surgery with the medical technology, what did the doctors and the nurses advise on your practices? What did you think and feel? Moreover, what did you do?

4. The hospital of heart surgery

4.1. Mind, if you give general view of the hospital where you have undergone heart surgery. What were its service attributes such as long queue or expedite? How was its medical technology for heart surgery, obsolete or modern? Were the doctors and the nurses professional expertise in heart surgery, and how?

4.2. What was the kind of your heart surgery expenses paid by either health insurance (30-Baht Card), or state allowance of civil servant, or self-pay? What was the service among the 3 pay-forms to pay the drugs for controlling cardiovascular disease after the heart surgery? Is the hospital for heart surgery and for taking drugs controlling cardiovascular disease medicine the same or not, and how is it so? Mind, if you could give details.

5. Are there anything you want to tell or to add?

Participatory Observation Form

1. Site of observation: hospital and patient's residence

2. Experience of the sick

Hospital: The medical personnel playing roles of health advice for the patient

Patient's residence: Relationship betweenthepatient, family members and the caretakers

Self-care behavior

Behavioral of taking drugs, types of drug, number of Hospitals or clinic for taking drugs

Working behavior, i.e. period of working time, period of leisure time and activities during leisure time

3. Model of relationship between the patient and the medical personnel

Hospital

3.1. Is the communication between the patient and the doctors or the nurses same direction, and how?

3.2. How is the liberty of the patient to ask the doctors and the nurses about health and illness?

3.3. Are the decision-making and information in treatment in the hands of the doctors and the nurses only and how?

3.4. Medical discourse of CABG surgery in the hospital

3.4.1. How are the production and the reproduction of CABG operations to solve the cardiovascular disease found in various practices within the hospital such as teaming –up a self-help group to pursue the patient of open-heart surgery, labeling campaign, and pamphlets of treating cardiovascular disease?

3.4.2. How do the doctors relate to the cardiovascular patients prioritizing CABG surgery, which solve the cardiovascular disease? How are symptoms explained and how are treatments explained?

4. The hospital for receiving drugs for controlling symptoms of cardiovascular disease

Hospital: Are there any different in the model of the hospital treatment, i.e. the state allowance of civil servant, and the policy of health insurance (30-Baht card), in terms of the medical technology, type of drugs received, service expedition and long queuing and how?

Guidelines for Documentary Research

What are the trends of the hospital development on the cardiac center and how are the budget, workforce, action plan, and prioritization of the policy in developing the hospital's cardiac center? Is it appropriate to the social context of high competitiveness in health service and strategies, which are the distinction of the hospital and the local cultures and how?

Guidelines for In-depth Interviewing Key Informants

1. General backgrounds

1.1. Position, age, educational level, domicile, marital status and salary rate

1.2. Work experiences

1.3. What is the work climate in the hospital?

2. After establishing the heart disease center, what are your views and thoughts?

2.1. Are number of doctors and nurses adequate to treatments and how?

2.2. Do doctors and nurses improve in treatment than before and how?

2.3. Are the patient more holistically treated and updated to the illness situation, and how?

2.4. What is the refer-system for the patient needed the CABG surgery?

2.5. What is the widespread of the medical technology for CABG surgery in the Eastern Region where you are working in both the public and

the private hospitals? Are they adequate and how? What is the cost to maintain the technology, personnel for repair or supervising the technology?

2.6. What is the attitude or the belief of people in societies about CABG surgery? Is it relevant to the knowledge of the medical science widespread in media?

2.7. Do people need to use medical technology for CABG surgery more and how?

3. Mind if you could provide additional comments or recommendation about the medical technology for CABG surgery.

BIOGRAPHY

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