

**CAUSAL PATHS OF COMMUNICATIVE ACTIONS AND  
STRATEGIC ACTIONS IN PHYSICIANS' COMMUNICATION  
REGARDING PASSIVE EUTHANASIA**

**WACHARIN SINDHVANANDA**

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Thesis  
entitled

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REGARDING PASSIVE EUTHANASIA**

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**CAUSAL PATHS OF COMMUNICATIVE ACTIONS AND STRATEGIC ACTIONS  
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MUTTIKO, Ph.D., PORNLERT CHATKAEW, M.D.****ABSTRACT**

Recently, there have been conflicts regarding passive euthanasia among patients, relatives and physicians. Based on Habermas theories, these kinds of conflicts can potentially be solved by understanding the roots of individual communication patterns. Habermas mentions the root of strategic action which is a common pattern in modern lives influenced by technocratic ideologies and transformed to a specific type of rationality. However, Habermas proposed that individuals should be used another pattern of action, communicative actions, instead of the strategic actions so that euthanasia conflicts can be resolved. Therefore, the roots of these actions can be clearly revealed. This study was designed as a quantitative approach and approved by the Ethical committee of Mahidol University. The main objective was to investigate multiple causal relationships of theory-based constructs inducing strategic and communicative actions. In total, eight theory-based constructs (medical ideology, system ideology, morality ideology, criticizability value, cognitive-instrumental rationality, moral-practical rationality, strategic action, and communicative action) were explored by interviewing 173 physicians who were studying in their first year (academic year 2009) at King Chulalongkorn Memorial Hospital. The study tool was a self-administered questionnaire composed of eight psychometric scales that had been verified for content validity and Cronbach reliability with resulting satisfactory values. Multiple causal relationships among the constructs were analyzed by path analysis.

The important finding was that the root of strategic speech acts was proven to be valid according to the stated theories. This is to say that it was indirectly influenced by scientific domination in terms of medical ideology (standardized solution = 0.10,  $p < 0.05$ ) and systematization in terms of system ideology (standardized solution = 0.09,  $p < 0.05$ ). The direct effect was from the cognitive-instrumental rationality (standardized solution = 0.19,  $p < 0.05$ ). Most of the results imply the existence of the 'colonization of life world'. The influence of systems seems to invade not only on a rational level as the theories have stated but also on an ideological level. On the rational level, moral-practical rationality might be transformed by systems affecting physicians' strategic speech acts. Physicians' intentional communicative speech acts are still questionable since they were found to score the lowest on the 'sincerity' claim. It can be seen that strategic speech acts predominate over intentional speech acts of physicians. Some detailed results show the possibility of applying Buddhist principles in addition to a de-systemization of moral education for the purpose of decolonization.

**KEY WORDS: COMMUNICATIVE ACTION/STRATEGIC ACTION/  
EUTHANASIA/RATIONALITY/COLONIZATION****210 pages**

เส้นทางการเกิดการสื่อสารแบบเท่าเทียมหรือการสื่อสารแบบใช้กลยุทธ์ในการสื่อสารของแพทย์เกี่ยวกับการพักการรักษาที่อาจไม่จำเป็นในระบอบสุดท้ายของชีวิต

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#### บทคัดย่อ

สถานการณ์ที่น่าสนใจเกิดขึ้นในสังคมไทยในระยะเวลาหลายปีที่ผ่านมาคือการเกิดความไม่เข้าใจกันระหว่างแพทย์ ผู้ป่วยและญาติ เกี่ยวกับการพักการรักษาที่อาจไม่จำเป็นในระบอบสุดท้ายของชีวิตของผู้ป่วย หากนำทฤษฎีทางสังคมวิทยาของฮาบมาสมาประยุกต์ จะทำให้ตระหนักว่าส่วนใหญ่เกิดจากปัญหาการสื่อสาร ซึ่งต้องมีความเข้าใจถึงต้นตอของรูปแบบการสื่อสารอย่างแท้จริง ฮาบมาสกกล่าวถึงรูปแบบการสื่อสารหนึ่งที่พบบ่อยในสังคมปัจจุบันคือรูปแบบการสื่อสารแบบกลยุทธ์ที่ได้รับอิทธิพลจากอุดมคติทางวิทยาศาสตร์ จนนำไปสู่การเกิดความเป็นเหตุเป็นผลแบบพิเศษชนิดหนึ่ง อย่างไรก็ตามฮาบมาสเสนอว่าควรมีการสร้างรูปแบบการสื่อสารแบบเท่าเทียมขึ้นเพื่อทำให้การสื่อสารแบบกลยุทธ์ลดลง ในที่สุดปัญหาสังคมที่เกิดจากความไม่เข้าใจซึ่งกันและกันอาจคลี่คลายลงได้ ดังนั้นการสืบค้นต้นตอของรูปแบบการสื่อสารทั้งสองแบบนี้จะมีประโยชน์ซึ่งเป็นส่วนหนึ่งของวัตถุประสงค์ในการศึกษานี้ การศึกษานี้ใช้รูปแบบการวิจัยเชิงปริมาณเพื่อสืบค้นความสัมพันธ์ระหว่างปัจจัยทางทฤษฎีที่เกี่ยวข้องกับรูปแบบการสื่อสารทั้งสอง ซึ่งมีทั้งสิ้นแปด ปัจจัย (อุดมคติทางการแพทย์ อุดมคติทางระบบ อุดมคติทางศีลธรรม คุณค่าการวิจารณ์ ความเป็นเหตุผลทางความคิดเชิงกลยุทธ์ ความเป็นเหตุเป็นผลแบบศีลธรรมเชิงปฏิบัติ การสื่อสารแบบกลยุทธ์ และการสื่อสารแบบเท่าเทียม)โดยสำรวจความคิดเห็นจากแพทย์ทั่วไปที่กำลังศึกษาต่อในชั้นปีที่ 1 ปีการศึกษา 2552 ที่โรงพยาบาลจุฬาลงกรณ์ รวมทั้งสิ้น 173 คน เครื่องมือวิจัยได้แก่ แบบสอบถามแบบเขียนตอบด้วยตนเอง โดยแบบสอบถามที่สร้างขึ้นเฉพาะนี้ประกอบด้วยแปดมาตราวัด ได้ผ่านกระบวนการพิสูจน์คุณภาพด้านความเที่ยงตามเนื้อหา และความเชื่อมั่นของคอนบราล ใช้การวิเคราะห์เส้นทางในการหาความสัมพันธ์เชิงเหตุผลพร้อมกันระหว่างแปดปัจจัย

ผลการศึกษาที่สำคัญ คือพบว่าเส้นทางการเกิดการสื่อสารแบบกลยุทธ์ เป็นไปตามทฤษฎีกล่าวอ้าง โดยปัจจัยที่ส่งผลโดยตรงได้แก่ ความเป็นเหตุผลทางความคิดเชิงกลยุทธ์ ส่วนปัจจัยที่ส่งผลทางอ้อมได้แก่ อุดมคติทางการแพทย์ อุดมคติทางระบบ นอกจากนี้ผลการศึกษายังบ่งเป็นนัยว่ามีภาวะ ‘ชีวิตถูกครอบงำโดยระบบ’ จริง ซึ่งระบบไม่ได้ ส่งอิทธิพลแค่ระดับการใช้เหตุผลดังที่กล่าวในทฤษฎีเท่านั้น แต่ ส่งอิทธิพลในระดับความคิดอุดมคติด้วย ในระดับการใช้เหตุผล ระบบอาจทำให้ความเป็นเหตุเป็นผลแบบศีลธรรมเชิงปฏิบัติเปลี่ยนรูปไป จนกลายเป็นมีอิทธิพลต่อการสื่อสารแบบกลยุทธ์ ส่วนของการสื่อสารแบบเท่าเทียมที่พบในการศึกษานี้ยังเป็นประเด็นที่น่าสนใจว่าอาจไม่ใช่การสื่อสารแบบเท่าเทียมจริง เพราะคะแนนส่วน ‘ความจริงใจในการสื่อสาร’ ต่ำที่สุด จึงมีความเป็นไปได้ที่รูปแบบการสื่อสารที่แพทย์ใช้ค่อนข้างมากคือการสื่อสารแบบกลยุทธ์ นอกจากนี้รายละเอียดของผลการศึกษายังบ่งว่าอาจประยุกต์คำสอนทางพุทธศาสนา รวมทั้ง อาจจัดการเรียนการสอนจริยธรรมสำหรับแพทย์ใหม่โดยปรับเป็นรูปแบบที่เน้นความเข้าใจศีลธรรมผ่านประสบการณ์จริง แทนการเรียนการสอนแบบบอกกล่าวและจดจำ จะนำไปสู่การหลุดพ้นจากการครอบงำโดยระบบได้

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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Rationale of the study problem**

For many decades, the advents of medical knowledge and technologies have obviously succeeded in bringing about preferable health status of the people and satisfactory sanitation. Consequently, they have produced changing in nature of illness from acute infected diseases that present sudden onsets and high mortalities, to chronic illnesses. Eventually, a longer life span of people has been individually problematic (Freund, 1995). Once people have a longer life span, they probably confront with suffering longer from incurable malignancy or unpreventable degenerative organ failure. Due to ‘controllability’ medical ideology, chronic illnesses are overcome with advance medical supports, such as mechanical ventilators, dialysis machines, and cardiac-stimulant drugs. Finally, most of end-of-life people are trapped in intensive care units under high medical technological devices (Wah, 2007).

Later on, medical technologies have been reviewed as if they were ineffective regarding high expenses comparing to low survival benefits (Schapira, 1993). Medical ideologies in regard with the hope of economical concerns, such as arranging scarce resources and choosing more beneficial choices, lead to renew medical practices, especially in intensive cares (American Thoracic Society Board, 1997). The feasible medical managements, that are nutrition withholding, do-not-resuscitate (DNR); and withdrawing life-sustaining treatments, such as stopping dialysis machine, have been attempted to become standard medical practices for end-of-life cares (Conroy, 2006). In sum, progression of medical knowledge partly leads to social construction of mercy killing or euthanasia.

Euthanasia is a Greek word and anciently means good dying and death. From 19<sup>th</sup> century, euthanasia has been socially recognized in the sense of ending

patients' lives by doctors (Santivasa, 2006). The term 'euthanasia' includes ending-life techniques regarding two techniques that are passive and active euthanasia. Active euthanasia corresponds to the deliberate administration of lethal substance with the intention to provoke death. On the contrary, passive euthanasia is related to withdrawal or withholding some or all vital treatments (Chouchinov, 2006). Currently, there have been fighting of reasons between those supporting and opposing practices of euthanasia; therefore, euthanasia becomes a social conflict (May, 2003).

Practically, euthanasia conflicts are disagreement of decisions to limit or withdraw end-of-life cares between family and physicians, and the conflicts are variable approximately 16-48 % (Abbott, 2001). The source of conflicts often results from breakdowns in communication, such as inadequate information, lack of consistency of information, interruption communication by physicians (Beckman, 1984; Borgsteede, 2007). Importantly, enhancement of communication is claimed to be an important tool to solve physician-patient conflicts, including euthanasia conflicts. Some studies report the beneficial outcomes of good communication in aspect of medical care perspectives, for instance, increasing proportion of DNR, improving in comprehension of treatments, and decreasing length of hospital in intensive care unit (ICU) stays (Ahrens, 2003). Also in medical education perspectives, improvement in physicians' communication skills, such as polite behavior and verbal, listening, providing two-way communication, using more open-end questions, and psychosocial consideration have been forced into physicians' practices (Hawken, 2005). However, a well-known sociologist views that individuals have some thoughts grounding before they try to perform communication or interaction to others by using 'speech acts' (Baxter, 2002). Therefore, improvement only of physicians' communication skills is the correction of communicative performance or just solving problems at the tips of iceberg. In other words, physicians' thoughts, which are sources of 'speech act', have not yet been corrected.

Habermas, a German sociologist from the Frankfurt school, proposed a significant critical theory named 'Theory of Communicative action'. Like other sociologists, Habermas has been interested in interactive relationships between social

systems and individuals which he calls 'life worlds'. Interestingly, he has explained these relationships in the psychological level or individual thoughts. Habermas has claimed that a person can interact to the external world in the beginning at his ideas or thoughts. After that, a person will produce some speeches in order to interact with others (Roderick, 1985). Besides, Habermas stated an action that can potentially solve social conflicts should have characteristics of individual reflexive thoughts, interpersonal agreement under validity claims, cooperative actions, and so on, which he calls 'communicative action' (Habermas, 1984). Therefore according to Habermas, solutions by improving physicians' communication skills seem to be far away from Habermas' recommendation-communicative action, which might not lead to be successful.

According to Habermas, social conflicts in modernity are complexes of societal-personal interactions. To resolve these conflicts, 'communicative action' should be widely used by social members. Initially, he has analyzed that the nature of modern livings is predominately dominated by transcending technocratic ideologies through social systems (Agger, 1976). These technocratic ideologies actually can cause individuals no freedom (Lee, 2007). Habermas means lacks of freedom in aspects of automatically applying 'strategic action' or strategies during interpersonal communication under influences of embedded technocratic-ideology values. The strategic actions can lead to some distortion in communications. However, an important point is that individuals tend not to learn experiences or values from others so they lose to gain mutual understanding (Scambler, 2001). As a result, no compromise can be reached then resulting in social conflicts. Therefore, Habermas points that technocratic ideologies have been the origin of communication breakdowns in societies also inevitably at the medical encounters (Scambler, 2001).

Moreover, Habermas believes that a human being is a rational agent. All the socialization processes crystallize the ideologies into patterns of thought or rationalities (Ritzer, 1996). Habermas has noted that cultural knowledge in the form of ideologies can be divided into material and non-material ideologies (Baxter, 2002). The material ideologies are involved in a sphere of thought called 'cognitive sphere',

which are filled with knowledge of science and social systems, for example controlling the nature, and admiration of technology (Habermas, 1970). The material ideologies are finally crystallized into a pattern of thought called ‘cognitive-instrumental rationality’. This type of rationality has characters like ability to control everything, reaching the purposed goals as being success, calculating means for goal achievement as being effective (Ritzer, 1996). For non-material knowledge, Habermas refers to traditional or religious beliefs, morals, laws and other values that do not respect scientific rules. These non-material ideologies normally gain from interpersonal interactions, which involve in another sphere of thought called ‘normative sphere’ (Habermas, 1984). Unlike the material knowledge, the non-material knowledge is crystallized into another pattern of thought called ‘moral-practical rationality’ (Habermas, 1984).

Habermas has focused that the more individual use ‘cognitive-instrumental rationality’ in the modern lives and that predominant ‘cognitive-instrumental rationality’ will bring about strategic actions (Scambler, 2001). Some evidences support this assumption, for instance, in the medical settings, physicians tend to spend their interests in high cost of dying (Scitovsky, 2005); then the medical studies tend to be seeking for solutions under effective ways like promotion of palliative cares, and setting hospices or nursing homes (Sander, 2001; Falls, 2008). These situations represent that physicians predominantly have the cognitive-instrumental rationality in aspect of ability to control the medical expenses of dying, calculating some possible solutions, and aiming effectiveness. Therefore, it can be concluded that social ideologies are linked to rationalities and actions.

Based on Habermas, actions mean not only overt behaviors but also speech act in social contexts. Therefore, the communicative actions that proposed by Habermas as the solution for social (euthanasia) conflicts is a rather contextual complexity. In briefs, ‘communicative action’ is composed of three components: providing a long argumentation, considering all modes of rationalities (validity claims), and reaching mutual agreement. For these three components, providing the long argumentation has the prior attention due to its supporting the occurrence of

validity claims. Under the long argumentation, considering all rationalities, and claiming validity are processing, an agreement should occur. However, Habermas noted that some values such as ‘criticizability value’ and moral consciousness should be embedded in individuals in order to promote mutual agreements (Roderick, 1985, Habermas, 1995).

Applying Habermas’s concepts to solving euthanasia conflicts, it has to realize roots (modes of rationality and ideologies) of physicians’ speech acts. For instance, physicians’ strategic actions (strategic speech acts) are predominately rooted by the cognitive-instrumental rationality which can deteriorate physicians’ using other modes of rationalities. Besides, it needs to enhance physicians’ criticizability values in order to promote their communicative actions (communicative speech acts). However, this theoretical knowledge should be investigated for its validity in real medical practices regarding euthanasia and end-of-life care in Thai settings. As a result, theoretical assumptions regarding relationships among the theoretical constructs to be investigated in this study as follows:

*Theoretical assumption 1: social ideologies are related to rationalities*

Based on Habermas, “cultural knowledge both material and non-material knowledge become cultural values that reproduce in the life worlds” (Baxter, 2002; p. 525) Habermas views that science, such a material knowledge, has dominantly influenced upon ‘life worlds’ in the modern societies. According to the critical theories, the explanation of social forces affecting to individuals is socialization of social ideologies. Regarding the medical field, the main modern ideologies that have been mentioned are ‘reduction’ view and ‘technological controllability’ (Agger, 1976). As such, physicians most likely recognize meanings of health only in biochemical health in which it is possibly due to domination by reduction and controllability views (Waitzkin, 1989).

Generally, ideologies refer to ideas, attitudes, values, belief systems or interpretative and conceptual frameworks held by members of a particular social group (Agger, 1976). Rising of science since the sixteen century, scientific ideologies

through their values have gradually been accepted and influenced upon individual thoughts and actions (Agger, 1976). Science has influenced establishing universal laws (reduction the universe into laws); then it has involved embedding those universal laws into individual ideas in aspects of materialistic values. For instance, an individual needs to know future situations for accuracy management so there are attempts to find some good method for predictions (Baxter, 2002). The precise prediction method can bring about consistent outcomes. As a result, values of controllability have been induced.

Habermas, like Weber and most of social sociologists, believes that humans are rational beings. Therefore, he has suggested that all individual actions can come from their rationalities (Habermas, 1984). Based on Mead's mind interactions and Weber's rationalities, Habermas noted social values as the outer world have interacted with personal thoughts as the inner world becoming reasons for actions (Ritzer, 1996). Besides, it is noticed that some reasons for actions can be concluded as a pattern of reasoning because they produced the same manner of thoughts and actions. The patterns of reasoning can be called rationalities, which can be intermediate mediators between the social ideologies and individual actions (Habermas, 1984). For instance, ideas like ability to control every existence can produce some actions regarding accuracy and efficiency, which are a pattern of reasoning called 'formal rationality' (Ritzer, 1996).

As being a critical theorist, Habermas views the 'formal rationality' occur from the rising of science in individual concerns. Moreover, these concerns of science that are in the form of values of science conducted societies (the social level) in addition to the individual level to absorb scientific values in aspects of systemization (Weber/Roth (trans), 1978), for example, the growth of an economical system called capitalism, the advent of administration knowledge, and the institutionalization like political system, educational system, and medical system. However, these arrange systems become instruments that arranged all individuals in societies. Habermas calls 'colonization of life world' for these circumstances (Habermas, 1984).

In details, Habermas views that those ideologies influenced by science and systems can be a unified term, ‘technocratic ideology’, a terminology for these scientific and scientific-related ideologies (Agger, 1976). The technocratic ideology can produce a pattern of reasoning, which is quite similar to ‘formal rationality’, but this pattern of reasoning stresses more in application of technology (science induced) than in objectivity point-of-view (system induced). Habermas calls this pattern of reasoning ‘cognitive-instrumental rationality’ (Habermas, 1984). Therefore, Habermas’ concepts of rationality should be more appropriate in approaching in the medical fields.

For applying Habermas’ concepts in medical problems, it should identify scientific ideologies and their consequences. Regarding some studies of Waitzkin, medical ideologies as the scientific ideologies shape physicians’ practices into the same directions of social perspectives (Waitzkin, 1989). For instance, according to ‘reduction’ ideology, physicians have predominantly focused on a treatment duty instead of including a rehabilitation, care, and prevention duties. For controllability ideology, physicians have reliance on high medical technology because they believe that it can overcome all illnesses (Waitzkin, 1989). Therefore, it can conclude that the scientific ideologies might be related to the medical ideologies and some patterns of thoughts. According to Habermas, these patterns of physicians’ thoughts are linked to material knowledge, and in turn lead to ‘cognitive-instrumental rationality’ (Habermas, 1984).

On the contrary, Habermas has respected the other knowledge that is non-material knowledge. Habermas views the non-material knowledge as “it is associated with cultural traditions and coherence of knowledge sufficient for daily practice, in which secures social integration and solidarity” (Baxter, 2002, p. 516). As a result, Habermas means norms, traditions, and morals as non-material knowledge. Unlike the technocratic ideologies, values regarding non-material knowledge, which are transferred to society members, should be values of stabilizing and identifying group. Inevitably, these values are grounded with morality. Thus, these values might be called morality ideologies (Habermas, 1995). For instance, a person agrees not to

break social restrictions by a reason that if everyone decides to do the same actions then a society will be in a mess. Habermas called this pattern of thought ‘moral-practical rationality’ (Habermas, 1984). Therefore, it can be concluded that values or ideologies of non-material knowledge might be related to the ‘moral-practical rationality’.

In summary, individuals are inevitably embedded by social ideologies. These ideologies can be involved with individual actions which are driven by some specific patterns of thought or rationalities. For physicians, the social ideologies are mainly in the form of medical ideologies, and system ideologies, which Habermas called technocratic ideologies. Besides, non-material cultural ideologies should also be embedded in physicians’ conception in the form of norms and morality. Based on Habermas, technocratic ideologies should be related to ‘cognitive-instrumental rationality’; on the other hand, morality ideologies should be related to ‘moral-practical rationality’.

*Theoretical assumption 2: Cognitive-instrumental rationality is directly and mainly related to strategic actions.*

Habermas has mentioned patterns of thought or rationalities that are associated with spheres of thoughts. Thinking in different spheres can bring about different modes of reasoning. He assumed that individuals’ thoughts are separate due to social phenomenon of pluralism (Baxter, 2002). According to Habermas, the material knowledge should have an interaction place in a sphere of thought called ‘cognitive sphere’ since this knowledge needs memories or cognitive functions. For the non-material knowledge, it should involve another sphere of thought because this knowledge is associated with interpersonal relationships and interactions, which Habermas calls ‘normative sphere’ (Habermas, 1984). Besides, Habermas has realized that human beings do not include only these two types of thought, which are developed by the outer worlds. He insists that there should be another sphere of thought that is purely associated with an inner world, for example, art, and emancipation, which Habermas calls ‘aesthetic sphere (Habermas, 1984).

As previously mentioned, Habermas strongly agrees that individuals who have influenced by scientific domination will have desirable values of control and self-success (Baxter, 2002). These values can create a specific pattern of thought, in other words, a specific decision-making to form specific patterns of action as well. This specific pattern of thought is associated with science knowledge, so it should be associated with the cognitive sphere. Therefore, Habermas calls ‘cognitive-instrumental rationality’ (Baxter, 2002). For the following specific actions, Habermas views that these actions should be from the purposes of self-success; therefore, actions are to some degree driven with calculated plans. These calculated plans that bring about precise or repeated consequences might be interpreted as strategies. As a result, these actions that come from applying ‘cognitive-instrumental rationality’ are called ‘strategic actions’ (Habermas, 1984).

Remarkably, Habermas focuses human actions on actions of communication. Thus, strategic actions that should be in concerns are communications with strategies. Based on studies of Waitzkin, physicians have been shaped by medical ideologies in many aspects. An important one is medical works as social control. Moreover, physicians have been shaped by system ideologies, which are overt in the form of restrictedly following medical practice guideline like medical forms of interviews. Therefore, it is noted that most methods of physicians’ communications are formal and rigid, such as patterns of history and symptom taking and patterns of illness-course explanation (Scambler, 2001). Together with values of control, physicians’ communications have been founded in the form of suggestion, inflexibility, and non-negotiation. Mishler called these characteristics of communication ‘the voice of medicine’ (Mishler, 1984). In other words, the voice of medicine refers to “medical language encouraging the saying of something and the leaving unsaid of others” (Waitzkin, 1989, p. 232).

In brief, it is possible to state that ‘cognitive-instrumental rationality’ mainly and directly causes ‘strategic actions’.

*Theoretical assumption 3: criticizability value and moral-practical rationality are mainly and directly related to 'communicative actions' and cognitive-instrumental rationality is indirectly related to 'communicative action'.*

As previously stated, 'communicative action' is a complex of providing the long argumentation, considering all modes of rationalities and reaching mutual agreement (Habermas, 1984). Habermas also mentioned presuppositions for existence of the long argumentation. One of the presuppositions is 'ideal speech situations' in which participants should be open-minded to let otherness oppose themselves; participants must use no power or coercion; participants should be willing to participate by proposing their reasons; participants have to contribute and defend how appropriate of their reasons, and participants should concern for a better argument and understanding (White, 1984). However, Habermas claimed these circumstances might be depending on moral consciousness (White, 1984). In other words, moral reasoning should be a necessity for long argumentation.

Moreover based on Kant, Habermas has abstracted that these presuppositions need 'criticism ideas' and 'participation ideas' (Rivera, 2000). Criticism ideas, the so called self-reflection, refer to critical examination of their own assumptions and their alteration in the face of superior argument (Nagata, 2004). Practically, it means individuals can think in the opposing views of their own views (Rivera, 2000). For participation idea, it refers to the willing to start and continue free argumentation until reaching mutual understanding (Mitrovic, 1999). Habermas sometimes has mentioned 'criticism' and 'participation' ideas are values of 'criticizability' (Baxter, 2002).

The next presupposition-considering all modes of rationality, it is well known as 'validity claims' (Habermas, 1984). Validity claims or claiming for validity can take individuals out of their reality of truth into reality of deconstructed truth and also take out of their subjective interpretations into social interpretations. In other words, the validity claims means giving reasons in multiple and necessary dimensions of speaking, such as claiming truth in the objective world, claiming appropriateness in the subjective world and claiming sincerity for the interpersonal world (Habermas,

1976). As a result, this meaning indicates that an individual should apply both ‘cognitive-instrumental rationality’ and ‘moral-practical rationality’ in the process of validity claims.

For mutual understanding, it can be consequences of applying all the mentioned involvements before further driving participants to cooperative circumstances. Therefore, occurrence of ‘communicative action’ needs altogether multiple components; for example, criticizability values, modes of rationality, and morality. As a result, it is possible to state that the criticizability values and morality mainly and directly induce the communicative action. On the contrary, the cognitive-instrumental rationality that is self-interest reasoning should interfere considering other modes of rationality. However, the cognitive-instrumental rationality should highly be related to truth claims. Thus, it can possibly be assumed that cognitive-instrumental rationality indirectly induces ‘communicative actions’.

From these three hypotheses, the final results of this study expect to reveal the existence of relationships between social ideologies and physicians’ rationalities, together with the existence of relationships among physicians’ ideologies, rationalities and either strategic or communicative actions. Importantly, this study will explore whether physicians are dominantly influenced by medical ideologies, and whether physicians use strategic or communicative actions in communication regarding euthanasia. These findings would be useful for understanding pathways of physicians’ choosing strategic or communicative actions. Hopefully, these research results will reveal what can be done, if it needs to improve Thai physicians’ communicative actions regarding end-of-life patients.

## **1.2 Research objectives**

This research is aimed at exploring theoretical causal roots of Thai physicians’ communications about euthanasia. In brief of Habermas’s theories, the roots of communications are rationalities and social ideologies. However, there are differences in modes of rationality that have been influenced by different social

ideologies. Besides, Habermas frequently mentioned an inner value called ‘criticizability value’ in encouraging communicative action. Therefore, the criticizability value might be the direct cause of communicative action. Thus, the objectives of this study are as follows:

1. To examine the relationships between technocratic ideologies (medical ideology together with system ideology) and cognitive-instrumental rationality regarding euthanasia in Thai physicians
2. To examine the relationships between morality ideology and moral-practical rationality regarding euthanasia in Thai physicians’ perspectives
3. To examine the relationships between cognitive-instrumental rationality and strategic actions regarding euthanasia in Thai physicians’ perspectives
4. To examine the relationships among the criticizability value, cognitive-instrumental rationality, moral-practical rationality, and communicative actions regarding euthanasia in Thai physicians’ perspectives
5. To examine the causal relationship pathways of Thai physicians’ ideologies, rationalities, strategic or communicative actions regarding euthanasia.

### **1.3 The scope of the study**

As previously mentioned, the primary aim of this study is to reveal theoretical causal roots of communication regarding euthanasia in Thai physicians’ thoughts. Samples are therefore purposed to be general physicians in order to minimize undesirable effects of medical-specialty knowledge/values. Normally in Thai medical system, most of general physicians will become medical specialists by further trainings for 3-5 years. Thus, general physicians who enroll to further study in specialty trainings at university hospitals are supposed to meet the purposes of this study.

Regarding euthanasia, it covers a wide range of scope such as types of euthanasia in practices--active or passive euthanasia. Differences in practices of euthanasia might lead to difference in patterns of communication. Therefore, this study has to solely scope the passive euthanasia practices of withholding life-

sustaining devices, such as do-not-resuscitate and no further treatments which are common practices in Thai medical settings. Moreover in real practices, physician-patient-relatives communications about patients' conditions and illness progression have been carried on for a while before the point of decision making of euthanasia is reached. Therefore, the scope of euthanasia communication in this study is the communications during end-of-life situations regarding cares and (passive) ending lives.

For communication, ideally, it should be observations of interpersonal communication in the real situations. That means it should collect conversations between (among) physicians and patients (and relatives). However, euthanasia communication is a sensitive issue with ethical concerns; thus, the study design as mentioned might affect their interactions. Besides, it cannot control some confounding factors in patients or relatives, such as field of education, communication competence, and stakeholder or surrogate persons. Therefore, the target group in this study will be limited to physicians, not patients their relatives or friends. The most important reason for collecting data only from physicians is the primary aim of this study that is to explore theoretical causal relationships among ideologies, rationalities, and actions (speech acts) in physicians. Thus, communications of patients and relatives are not directly relevant to the point. It should be noted that physicians' communications can be carried out only on the basis of intentional communication. In other words, physicians' intentional speech acts will not be possible without interpersonal interactions. This point is another limitation of this study.

## **1.4 The operational definitions**

### **1.4.1 Social ideologies**

Social ideologies refer to be body of thoughts reflecting the social means and aspirations of individuals, a particular social group, and cultures, which in this study concern a physician group in Thai context. Practically, the social ideologies in this study are categorized into two main bodies: scientific-related ideologies including

medical ideology and system ideology, and interaction-related ideology in aspect of moral ideology

#### **1.4.2 Technocratic ideology**

Technocratic ideology refers to physicians' transcended technocratic consciousnesses, applications of scientific and technological knowledge for controlling nature and social beings. In this study, the nature refers to concepts of applying medical knowledge for controlling illnesses; social beings refer to social orders or institutions by concept of organization or system ideology, in which physicians are socialized as their perspectives. In sum, technocratic ideology includes medical ideology together with system ideology.

#### **1.4.3 Medical ideology**

Medical ideology refers to doctrines that represent physicians' relationships to the real conditions of their existence resulting in physicians' perceptions and interpretations of their experiences in medical fields. Based on Habermas theories, physicians' perceptions and interpretations are criticized as usually based on reduction and controllability views. Therefore, the medical ideology is composed of reduction view and controllability view.

For reduction view, it refers to medical perspectives in diminishing or making something less complicated, such as illnesses as physical diseases, and medical practices as medical treatment, or considering that some parts can substitute a whole.

For Controllability view, it refers to medical perspectives in appreciation on and enhancement capabilities of science and technology in illness control, such as organ transplantation, and perhaps social interventions, such as birth control.

#### **1.4.4 System ideology**

System ideology refers to social organization concepts influenced by systemization, for example, bureaucracy and capitalism. The social organization concepts are embedded in physicians in the form of reasoning for arrangement of their works and interests. The systemized values that influence physicians are respecting or

making formality, making productivity and seeking or aiming at efficiency. In sum, system ideology in physicians' thoughts composes these three system-induced values

For 'Making formality', it refers to making or respecting the rules, laws or standards in order to control over everyone in formality.

For 'Productivity', it refers to tasks or activities that cause more products under reasonable processes of working, such as divisions of labor, and function assignment.

For 'Aiming at efficiency', it refers to realization of cost-efficiency, scarce resources and utility.

#### **1.4.5 Morality ideology**

Morality ideology refers to collective beliefs, thoughts, and motivations, which underpin practices of social well-beings such as social integration, and humanity. These beliefs, thoughts, and motivations are usually in the form of social values, social norms, and religious instructions.

#### **1.4.6 Criticizability values**

Criticizability refers to 'openness to critical judgment and so to the possibility of correction' (Cheal, 1992, p. 368). Therefore, criticizability value operationally refers to physicians' sets of idea that provides openness to critical judgment by others and having critical judgment for self-reflection and criticizing for others. According to the definitions, two components are self-reflections or critical ideas and participation ideas.

For self-reflection/critical ideas, these refer to physicians' emerged thoughts in terms of de-centering and deconstructing views under the processes of realizing their own constructed ideas, proposing the opposing of their previous ideas, contesting their own assumptions to others or the superior ones, adopting and proceeding dialectical debates for the new perspectives and accepting for the best consensus.

For participation ideas, these refer to physicians' wills to cooperate with others in starting and continuing argumentation with patients/families under major considerations of equality and mutual understanding, until reaching the common interests.

#### **1.4.7 Cognitive-instrumental rationality**

Cognitive-instrumental rationality refers to physicians' reasons or decisions for an issue of passive euthanasia in aspect of setting or following their purposes or goals that based on values regarding empirical truth, standard, and effectiveness without considering other persons' values (or simply called self-interest decisions regarding self-values of success and effectiveness). It also includes decisions of selecting or manipulating means regarding science, technology, systematic arrangement, and calculation plan of actions in order to reach these materialistic-value goals.

#### **1.4.8 Moral-practical rationality**

Moral-practical rationality refers to physicians' reasons or decisions for an issue of passive euthanasia in aspect of following their purposes or goals based on values regarding interpersonal relationships such as morals and norms. Thus, the main characteristics of moral-practical rationality are beyond self-interested values to interpersonal-interested values and needs considering particular conditions at each decision.

Based on Kohlberg' moral reasoning, moral stages will be developed from self-interest reasoning, to social-interest reasoning, then to context-free interested reasoning. Therefore, it seems that social-interest reasoning and context-free-interested reasoning involve the moral-practical rationality. In details, Kohlberg's moral development is classified into six basic stages as follows (Kohlberg, 1984). Firstly-pre-conventional type of reasoning, the first stage is characterized by blind obedience to rules and authority and a fear of punishment. Next, the second stage is characterized by seeking to pursue one's concrete interests, recognizing that others need to do the same, and a calculating instrumental approach to decision-making. The second stage sounds to have the meaning like 'cognitive-instrumental rationality'. For-conventional type of reasoning, the third stage is characterized by trying to live up to

the expectations of others for good behavior, by having good motives, and by fostering close relationships. Then, the fourth stage is characterized by a concern for maintaining the social system in order to promote social order and welfare. For post-conventional type of reasoning, the fifth stage is characterized by judging the moral worth of societal rules and values insofar as they are consistent with fundamental values, such as liberty, the general welfare or utility, human rights, and contractual obligations. The sixth stage is characterized by universal principles of justice and respect for human autonomy.

In sum, the theoretical definition of moral-practical rationality should be as described in the first paragraph. But in operation, the definition should be more classified in details as Kohlberg' moral reasoning, which includes from stage 3 to stage 6.

#### **1.4.9 Communicative action**

Communicative action operationally refers to intentional patterns of physicians' speech acts regarding passive euthanasia, in which it is purposive to provide other participants for free and long communication, criticizing, and having mutual understandings (or simply called communicative speech act). Therefore in practice, the main characteristics of communicative action are at least composed of comprehensive speech acts, truth speech acts, speech acts for tuning appropriateness, and sincerity showed in speech acts (Koeber, 2008).

For identifying comprehensibility, it should be that a physician, when communicating with patients/families, has to select a comprehensible expression in order that they (a physician and patients/families) can understand one another.

For identifying truth, it should be that a physician applies his/her knowledge in terms of truth in a similar manner to the contexts of patients believed reality and in order that patients can share the knowledge.

For identifying tuning appropriateness, it should be that physicians share presupposition (medical perspectives) in truth; physicians express their intentions

which they sincerely think as if they were stakeholders; physicians and patients/families share presuppositions or argumentation so that declination of their own interpretations and cooperation for the appropriate solutions occur.

#### **1.4.10 Strategic action**

Strategic action refers to intentional patterns of physicians' speech acts regarding passive euthanasia under their medical perspective motivations such as empirical truth, success, control and effectiveness, and tendencies to motivate patients/families to agree with physicians' intentions. For identifying strategic action, it should be speech acts that are based on empirical truth but without understandable words/sentences, truth in patients' worlds or partial truth, tuning appropriateness, and sincerity.

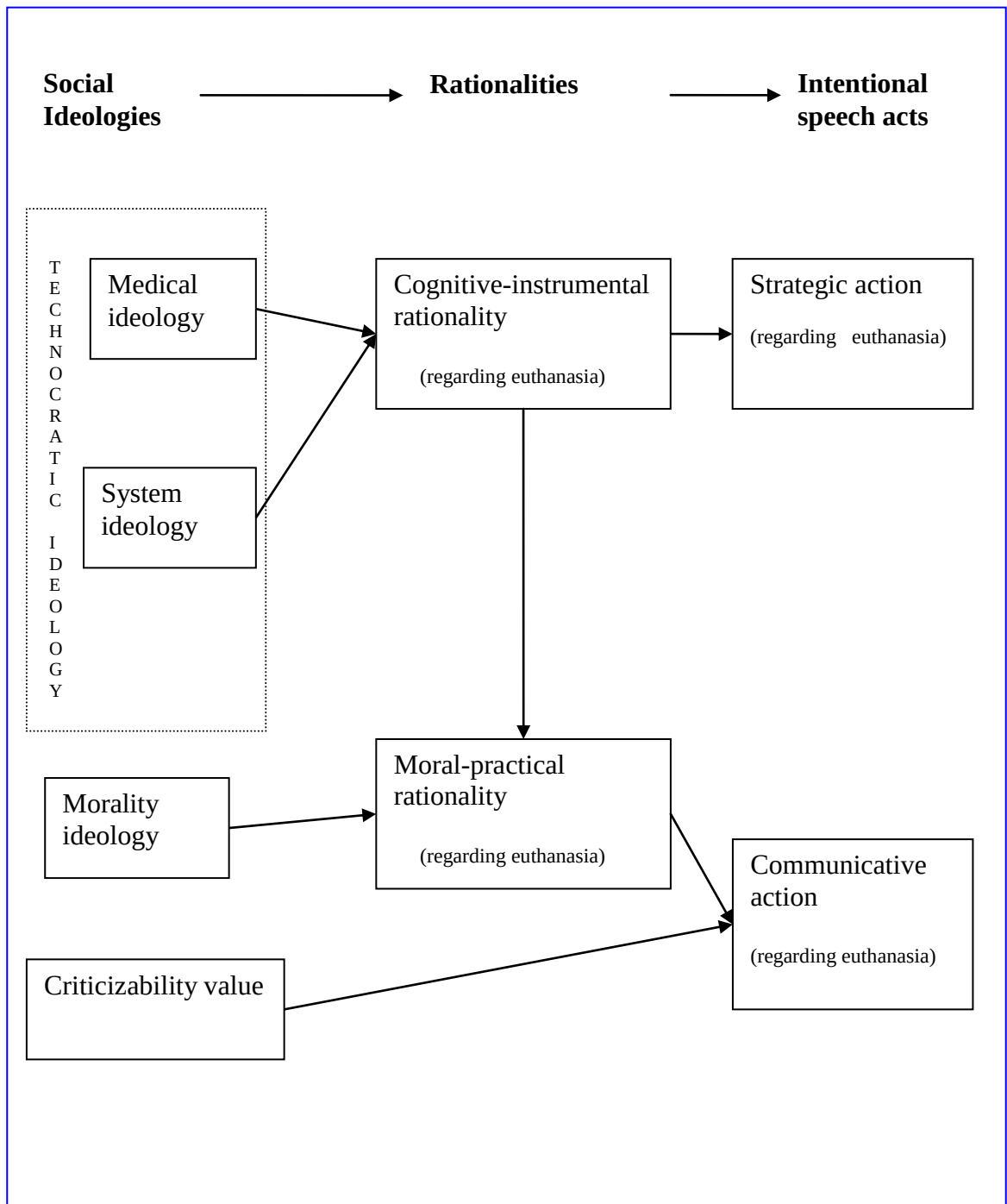
#### **1.4.11 Passive euthanasia**

Passive euthanasia operationally refers to circumstances of deteriorating life (simply called end-of life patient) due to terminal illness, in which these circumstances are driven to end with letting go by withholding of life-sustaining treatments, for example, do not CPR, and do not provide other prolonged-dying treatments. Also, these circumstances are confronted by physicians, patients and relatives, in which they need some information for analyzing and decision making. Therefore, patient/relative-physician interactions such as communication and cares for a period of time before at the point of making a decision of ending life should be included together with just communication for ending life.

#### **1.4.12 Physicians**

Physicians operationally refer to Thai general practice physicians who graduated from medical school and got a medical-practice license from Thai Medical Council. Besides, these physicians are studying in the first year (academic year 2009) of training courses for specialist physicians at King Chulalongkorn Memorial Hospital. The in-training physicians are sometime called 'resident'.

## 1.5 Conceptual framework of the study



## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2.1 Euthanasia**

##### **2.1.1 Euthanasia in historical perspectives**

In a history of euthanasia, it can be traced that euthanasia began in ancient Greek. Euthanasia comes from two Greek words which are “eu” meaning good or well and “thanthanos” meaning death, in sum, it was called ‘good death’. For ancient Greek, euthanasia was generally adopted as bringing of a good death. However, it was condemned by the Hippocratic School of thought. As stated in Hippocratic Oath- “I will not give a fatal drug to anyone I am asked, nor I will suggest any such thing” (Dowbiggin, 2005, p.11). Remarkably, the euthanasia concept has led to a dilemma since the ancient Greek period.

Later on, some religions such as Judaism, Buddhism have been emerged and they obviously show disagreements of euthanasia. For example, the Buddhist teaches that euthanasia is just a material view of ending life; it cannot end the karma in the dead person. Moreover, one of the fundamental ethics is refraining from destroying lives (Lecso, 1986). In the same opinion direction, Muslims believe against euthanasia. Muslims are taught that “Do not take life, which Allah made sacred, other than in the course of justice” (Aramesh, 2007; p. 36).

Influenced by Catholic during Medieval period, people were taught, like others religious beliefs, those suicides are a sin. As St. Thomas Aquinas, the influent monk, stated (Admunson, 1989):

“It is altogether unlawful to kill oneself, for three reasons. First, because everything naturally loves itself, the result being that everything naturally keeps itself in being, and resists corruptions so far as it can. Wherefore suicide is contrary to the inclination of nature, and to charity whereby every man should love himself. Hence suicide is always a mortal sin, as being contrary to the natural law and to charity. Secondly, because every part, as such, belongs to the whole. Now every man is part

of the community, and so, as such, he belongs to the community. Hence by killing himself he injures the community, as the Philosopher declares. Thirdly, because life is God's gift to man,...” (p. 100).

In sum, killing one's life is objection influencing by whatever religious beliefs during the medieval period. Later on, the western world had been challenged by scientific discovery and knowledge. Therefore, believes in Christian moral were shaken. There was a beginning of objection to prohibition against suicide at the Age of enlightenment (c.14-17).

By the end of the eighteen century, rationalists who believed in intellectuality prominently protested against conventional morality. They agreed that suicide or euthanasia endorsed an affirmation of individual autonomy (Pollard, 1998). For instance, Sir Thomas More advocated the mercy killing in the ideal world of Utopia in 1516 (Nyman, 1996). Sir Francis Bacon supported the practice as “a fair and easy passage” (Bacon, 1626).

From 19<sup>th</sup> century, medicine started its roles on euthanasia. In 1846, anesthesia was introduced to medicine and societies by John Warren (Nyman, 1996). Eventually, morphine injection and chloroform were used by physicians to alleviate pain during the deaths under the US Civil War (Bullar, 1866). In 1870, Samuel Williams first proposed using anesthetics and morphine to intentionally end a patient's life (Emanuel, 1994). After the first patient's death by euthanasia, there were vigorously debates on euthanasia among physicians. Though Albert Bach, a lawyer from New York initially endorsed euthanasia on the grounds that patients should have the right to end their lives in 1895, but most of physicians still rejected (Nyman, 1996).

A short period later on, euthanasia debates were expanded to social scientists, lawyers and lay persons. They socially presented against physicians' views. In 1899, Simon Baldwin, the president of the American Social Science Association, blamed physicians who were against euthanasia. He stated “pride of many in the medical profession to prolong such lives at any cost of discomfort or pain to the

sufferer” (Emanuel, 1994, p. 796). Corresponding with social movement in 1900s, Anna Hill whose mother was suffering from cancer campaigned for the legalization of euthanasia in Ohio. Later on, Ohio State Representative Hunt introduced a bill-“An Act Concerning Administration of Drugs to Mortally Injured and Diseased Persons”. However, the bill was rejected (Nyman, 1996).

During 1930s, not only euthanasia debates occurred in USA, but also occurred in other western countries. In UK, newspapers and magazines competed with each other printed patients’ requests for euthanasia and denunciation of the stories by medical organizations. A bill to legalize euthanasia was firstly debated in the House of Lords in England in 1935. However, it was rejected (Emanuel, 1994).

During the World War II, Hitler secretly ordered widespread “mercy killing” program of the sick and disabled performing by doctors and midwives. His perspective view was adopted from Social Darwinist perspectives. He thought “while nature only allow the few most healthy and resistant out of a large number of living organisms to survive and struggle for life, people restrict the number of births and then try to keep alive what has been born....., thereby in truth the most cruel destroyer of human existence” (Dowbiggin, 2005, p. 93). Nazi mercy killing program was consequently brought about a claim for those who prefer euthanasia.

The turning point started from 1950. Discoveries of antibiotics, antiseptics, anesthesia and surgical techniques prevented deaths from infections. The age of chronic illnesses such as malignancy has begun. Cancer has become the first rank cause of death in many countries (Patterson, 1987). Prominently, people learned that cancer deaths tended to be prolonged and painful. Additionally, the advents of medical technologies such as cardio-version, chest-cardiac compression and mechanical ventilators consequently brought about a sharp change in medical cares. Some unconscious patients had been prolonged death due to these medical technologies (Dowbiggin, 2005). Eventually, a definition of human death had been changed from cessation of heart functions into cessation of brain function (Ad Hoc Committee of the Harvard Medical school, 1968). Therefore, euthanasia was back to public interests.

During 1970s, Karen Ann Quinlan who lived in New Jersey had been in an irreversible vegetative state after an accident for years. Her parents decided to disconnect her from the ventilator that had been keeping her alive. Finally, New Jersey Supreme Court ruled in the Karen Ann case that favored on withdrawing ventilator under the reason of a right to privacy against intrusion by doctors (Dowbiggin, 2005, p. 122). This led to debate on the subjects of withdrawing and withholding life-sustaining treatments. As a result, it brought about a distinguished description of 'active' and 'passive' euthanasia (Nyman, 1996).

Either active or passive euthanasia is an intention to kill someone (Pollard, 1998). But, active euthanasia means taking specific steps to cause patients' death, for examples, high-dose pain killer drug injection, lethal drug injections, punctation to baby brain with a needle, and mass killing by inhaled toxic substance (Emanuel, 1994). Active euthanasia is usually condemned whether victims desire or not.

For passive euthanasia, it is defined as an indirect killing by withdrawing or withholding life-sustaining treatment. For instance, if a patient requires kidney dialysis to survive, and the doctors disconnect the dialysis machine, the patient will presumably die fairly soon. Furthermore, stopping respiratory support, withholding nutritional support, do not resuscitate order are some kinds of passive euthanasia (Gerrad, 2005). Passive euthanasia is proposed as 'letting die' that seems to be make sense and possibly performed by medical professionals. Then, passive euthanasia has been socially acceptable since 1980s (Nyman, 1996).

Since 1980s, there have been changes of considerations from theoretical debates to much more practical debates on euthanasia and obvious practices of euthanasia in medical settings. For example, the Dutch Medical Association published guidelines for physicians' participation in active euthanasia in 1984 (Nyman, 1996). Hence, there have been actually 5000 to 8000 deaths by euthanasia per year since 1984 (Pence, 1988). Moreover, there have been many arguments in favor and against the practices of euthanasia; whether active or passive euthanasia is ethically better. There were widely published. Moreover, these debates illustrated in detail of practical

euthanasia problem, such as euthanasia for patients losing their decision-making capacity. These brought about public awareness of euthanasia in western societies.

During 1990s, public attitudes were investigated in many countries such as USA, the Netherlands, and Australia. Blendon surveyed national attitudes toward legalizing euthanasia in 1992 (Blendon, 1992). He concluded that “public support for legislation that would allow euthanasia and patient self-determination to be growing over time” (Blendon, 1992: p. 2659). Moreover, 54% of respondents supported physician aid in dying. Similarly in Europe countries, Cohen examined the acceptance of euthanasia that was held in 1981, 1990 and 1999 in 12 Western Europe countries. He found an increasing of euthanasia acceptance among the general public taking place over the last two decades (Cohen, 2006). Eventually, there were a beginning of some people’ voices requesting for physicians’ role in euthanasia.

Simultaneously, Dr. Jack Kevorkian invented a suicide machine that helped more than 100 patients ending their lives in spite of no legal support. Dr. Kevorkian described his purpose and the machine in his letter to the Michigan Department of Licensing and Regulation (Fulton, 1995). He wrote:

I have begun a unique medical practice: to assist the rational suicide of patients who are suffering from eminently terminal illness, severely crippling or painful disease or deformity or trauma and who, on their own, have decided that the quality of life for them has generated to intolerable levels. Candidates for the service must be alert and mentally competent. The service entails more than one consultation with the patient, their close family members, and their personal physicians. ...The suicide is accomplished in a painless, fast, and dignified way by means of a device I invented last year. At the time and place of his or her choosing the patient activates the device by touching a switch which cuts off a slow intravenous drip of saline solution and starts infusion of thiopental sodium solution. A minute later the device will infuse a solution of potassium chloride to stop the heart. The procedure will be monitored with a running electrocardiograph to document clinical death. (p. 190)

Finally, Dr. Kevorkian was charged as being assisted suicide and finally imprisoned. Dr. Kevorkian’s procedure was a kind of active euthanasia and later on sparked an idea of legalized physician assisted suicide.

As a result, active euthanasia competed with passive euthanasia regarding which one is the better. Active euthanasia, especially physical assisted suicide, seems to be accepted for more providing respects in patients' autonomy and dignity than passive euthanasia. As a physician assisting in active euthanasia is inevitably voluntary euthanasia, which is an important criterion for euthanasia (Gerrad, 2005). Clearly, physician assisting suicide devices help patients to end their lives by their own decisions and actions. On the contrary, passive euthanasia normally occurs in the situations that patients might not have competency for making their own decisions (Gerrad, 2005). Thus, passive euthanasia seems not to meet an important criterion that is the end-of-life person's voluntary.

Despite a critique of passive euthanasia for possibly involuntary euthanasia, passive euthanasia seems to be more acceptable. Because passive euthanasia itself does not cause death, it just hastens death. Moreover, some argue that there is no distinction between requesting to end life-sustaining treatments or to end lives (Nyman, 1996). Eventually, passive euthanasia seems to be religious and legal acceptances. In Thailand, there has been a legal support for passive euthanasia in a National Health Act 2007; section 10. It states (Santivasa, 2006):

“A person has the right to make a written advance directive expressing his refusal to health care service that aims only to prolong his death (sic) at the end of his life or to terminate the suffering from the disease. Medical professionals have the duty to act according to advance directive referred to in the first paragraph; and the execution in compliance to the advance directive shall not be considered illegal and shall be exempt from any liability” (p. 13).

### **2.1.2 Euthanasia and conflicts**

Reviewing history of euthanasia, there have been the two main conflicts of idea regarding euthanasia, whether performing euthanasia should or should not. Individuals' ideas of euthanasia adoption are influenced by accumulated social values regarding ethical egoism, utilitarianism and Rights theory (LeBaron, 1999).

Ethical egoism, first pronounced by Thomas Hobbes, refers to one act in own self-interest is ethical (Rosen, 1990, p. 37-44). Ethical egoism is based on individual autonomy which can be replaced by the others meanings such as dignity and self-determination (Chineweze, 2005). Egoism leads an individual want to die due

to self-interest for his/her personal benefits because an individual may be experiencing a great deal of pain and loss of bodily functions during the undesirable period. Additionally, egoism might support the families and physicians to choose to allow an individual to die due to respects for his/her intentions.

Secondly, utilitarianism was articulated by John Stuart Mill. It refers to any action should increase overall good (Rosen, 1990, p. 45-52). Until now, there have been various derivatives of utilitarianism, but the most common understanding is 'Act utilitarianism'. Practically, "it is associated with the performance-, efficiency-, and money-driven thinking which prevails in today's modern societies and which evaluates actions in term of efficiency and outcomes with reliance on mean-end calculation" (Gandjour, 2003, p.233 ). 'Act utilitarianism' is not an individualistic ethical but a social ethic concerns. A utilitarian perspective may lead a person to choose death due to financial burdening to family. For the families and physicians, they might allow an individual's intention to die due to social financial burdens of medical expenses.

Thirdly, Rights theory has been grounded by Kant, Locke and Jefferson ideas of rights. Locke gave the concept of 'natural rights' that means human rights can not be taken away, violated, or transferred from one person to another. Locke's concept influenced to USA declaration of independence. Then, human rights have been deeply embedded in USA culture. Eventually, rights have been established in the constitution and assigned to the judiciary for individuals' protections (Rosen, 1990, p. 62-64). Due to globalization, an individual right for dying is increasingly claimed in modern societies.

On the contrary, individuals' ideas of euthanasia rejection are influenced by moral point of views. Medical ethics as traditional-moral values embeds in and conforms into physicians' moral point of views. Medical ethics are influenced by Hippocratic Oath and social values (Lertsithichai, 2004). One of the medical ethics is 'beneficence' or 'do no harm' that are actions when the prospect of benefit is highest

and the risk is lowest for a patient. This medical ethical value seems to lead ideas against euthanasia.

Religious beliefs are also embedded into moral values. All religions resist every forms of homicide (Dowbiggin, 2005). In Buddhist principles, the five basic precepts and dharma are basis of livings. Importantly, the first precept about omission to kill one's life is subject to be against euthanasia. Moreover, the fundamental philosophy of Buddhism is the natural circle of life. Individual should realize that a natural thing has to be existence or being birth, deterioration or being elder, destroying or being illness, and disappearance or death (Keown, 2005). Therefore, one should consciously dare to confront this natural circle, especially dying. Unnatural ending lives suppose to be a bad death and it cannot end 'karma'. Moreover, shortening life interferes with the working out of karma, and alters the karmic balance resulting from the shortened life (Keown, 2005). Hence, almost of Thai physicians are Buddhists might be uncomfortable, due to forces by respecting patient autonomy, to perform euthanasia.

Two opposing ideas regarding euthanasia cause conflicts. Individual rights regarding medical ethics is socialized by a social value of patients' autonomy (Lertsithichai, 2004). Physicians might be requested for euthanasia and might claim patient's autonomy performing euthanasia in suffering patients (Mak, 2001). Besides, families who concern the sake of the severe sick might also support euthanasia (Leichtentritt, 2002). However due to religious beliefs, physicians might feel uncomfortable to perform euthanasia (Farber, 2006).

Conflicts are expanded to the public level. There are many debates regarding opposing euthanasia. For instance, an individual's autonomy should not concern only one's right but need respecting other rights since no one has the right to kill another. According to Pollard (Pollard, 1998):

Autonomy is the right of every person to decide freely the course of his/her own life, within the limits set by the competing genuine rights of others, and it will oblige compliance only when it respects those other rights. That is, autonomy involves both the privilege of choice and the duty to restrain one's choice, when

that is required. Autonomy is misunderstood or misrepresented when it is assumed to apply to whatever an individual may happen to want sincerely, or when it is assumed that the significance of the consensual killing of voluntary euthanasia is a private matter, with no harmful consequences for others. Both assumptions are wrong.

In Thai traditional context, physician-patient relationships most likely are paternalism. However, there are increasing attitudes of mutual relationships, especially in euthanasia aspects. Based on a Thai thesis regarding attitudes toward euthanasia, “The majority of people believe that medical and nursing organizations should be responsible for euthanasia, that a doctor is competent to judge whether a patient’s case is hopeless or not, that the patient and the doctor should have joint decision in permitting euthanasia” (Santivasa, 2006, p. 13). However, Thai physicians tend to have lesser opinions to support euthanasia than laypersons have (Sookbumrung, 2001). Moreover, Thai physicians tend to continue ventilator support in hopeless patients (withdrawing life-sustaining support) (Stonington, 2001); perform cardiopulmonary resuscitation in terminal-ill patients (withholding life-sustaining support) (Sittisombat, 2001). As a result, there exist some extents of euthanasia conflicts in Thai medical practices.

In sum, euthanasia can be simply categorized into active and passive euthanasia. There are various values underlying agreement or disagreement thoughts of euthanasia. Ideas of individual right or autonomy, utilitarianism, and religious-related morality are underpinning the thoughts regarding euthanasia in some extents. In Thai medical context, most of physicians are Buddhists, therefore, they prefer passive to active euthanasia. Practically, ‘do not resuscitation’, one of the withholding life-sustaining treatments, is subjected to be acceptable for Thai physicians. Based on Thai studies, physicians tend to less support for euthanasia. On the contrary, the public tends to need physicians more involvements in euthanasia. Consequently, euthanasia conflicts have been in existence to a certain extents in Thai medical encounters for years. Then, it can be expected that degree of conflicts will be increasing in the future.

### **2.1.3 Euthanasia conflicts and resolutions**

Based on medical studies, euthanasia conflicts are normally in intensive cares (Way, 2002). Because intensive care units are places for critical patients that

need high medical technology supports. Together with changing in nature of illness, people that have longer life span might confront chronic illness (Freund, 1995). High medical technologies provided in intensive cares such as ventilators, dialysis machine, and cardiac stimulants might lead people to extend their dying (Wah, 2007). As a consequence, application in euthanasia such as the withdrawal high-technological life-sustaining treatments usually emerges in intensive care units.

Euthanasia conflicts are disagreement in decision makings regarding withholding or withdrawing life-sustaining treatments among physicians, families and nurses (American Thoracic Society, 1991). Based on medical researches, a cause of disagreement regarding euthanasia is ineffective communication, in which physicians are poor at discussing at end-of-life issues; therefore family members have not understood basic features of diagnosis, treatment, and prognosis (Way, 2002). A study regarding resuscitation status claimed that physicians spend 75% of time talking and miss opportunities to reveal personal values (Tulsky, 1995). Some studies stated there usually are breakdowns in communication, such as inadequate information, lack of consistency of information, interruption communication by physicians (Beckman, 1984; Borgsteede, 2007). Therefore, the main cause of euthanasia conflicts is due to those problematic communications.

Then, communication highly concerned by medical personnel should be a resolution euthanasia conflicts (Way, 2002). There have been many researches developed in order to improve good communications regarding end-of-life cares between physicians and family members. The main aspects of these improvements are increasing physicians' competency in communication and setting up family-physician conferences (Lily, 2000; Curtis, 2002). For increasing physicians' communication competency, increasing communication skills such as polite behavior and verbal, listening, providing two-way communication, using more open-end questions and psychosocial consideration are included in a topic of medical education (Hawken, 2005). However, increases in physicians' communication skills and opportunities to meet family members are not sufficient to solve the conflicts (Back, 2005).

Some opinions showed that it needs a concern for multi-dimensional aspects of communication. According to Back, the better solution to solve end-of-life conflicts is mainly composed of internal reflection, being insight of others, negotiation among physicians, patients and family members, and satisfactory agreement (Back, 2005). This research implies that resolution of conflicts needs concern in other aspects such as a group of person involvement, personal insights, communication skills, and cooperative decision making. In other words, improvements of communication skills need social concerns.

Habermas, a sociologist, provides theoretical explanations of social conflicts and resolution. Based on the explanation of social phenomenon by Habermas, there are fragmentation of ideas and reasons in individuals' thoughts in which they have been induced by the rising of science and technology (Habermas, 1984). Moreover, some separated patterns of reasoning are dominated by the scientific-induced reasoning. The substance of scientific-induced reasoning is control and success (Ritzer, 1996). Therefore, individual thoughts are reduced and adapted to be successful practices in everyday lives. Interestingly, Habermas has been interested in these everyday practices only in aspects of actions of communication (speech acts). As a result of scientific domination, the everyday communications produced by individuals is only aimed at success. Consequently, social conflicts, such as euthanasia conflicts, are usually caused by everyday communications toward successes.

Therefore, a resolution of social conflicts should be diminishing a type of communication toward only successes. Habermas proposed a form of communication, called 'communicative action' as a method of resolution (Habermas, 1984). However, it needs deep-seated correction from the individuals' thoughts or roots of rationales (Habermas, 1984). Besides, Habermas states all the individuals thoughts are grounded with the structural ideologies in form of secular belief-system (Delanty, 1997). Consequently, learning in communication skills is not sufficient for changing individual communication. On the contrary, it should make changes in individual belief system as well as rationality.

## **2.2 Theory of communicative action by Habermas**

### **2.2.1 Ground of Habermas' theories**

Jurgen Habermas is a German well known sociologist. His interests and methodology are classified in a group of critical theory. The essence of critical theory is criticism on science, positivist, and social structuring by social orders. In addition to this essence, Habermas' theories concern a human as a rational agency. Moreover, the scope of Habermas theories is not limited to theoretical explanation in idealistic circumstances but is extended to be valid in real or practical circumstances. Therefore, Habermas theories concerns human actions in aspects of communication and focusing more on normal individual practices like speech acts.

### **2.2.2 Modern rationalization and social problems**

Habermas explains that the modernity is naturally influenced, instead of religious beliefs, by science and technology. Individuals have learned how to think or act from rationalization processes. As such, science that has been embedded in aspects of values leads to new ways of thoughts in individual modern lives. This issue was mainly criticized by those theorists of the Frankfurt school. The following is an example of this criticized issue that was according to Maley,

Modern science destroys the traditional presuppositions of all previous experiences and conceptions both religious and philosophical of history and time, community, place, person, and self. By offering us a multiplicity of technically efficient means, but denying us the knowledge of ends, modern science destabilizes the philosophical search for universally valid principles and truths. Science's relentless destruction of previous forms of knowing and ways of seeing and its ceaseless processes of discovery, questioning, and reformulation mean that it is constantly undermining itself and the knowledge it produces.. (Maley, 2004, p.71).

Habermas further explains problems of scientific rationalization. Due to impressive experience of science and technology success, individuals have passively adopted virtues of science and technology by the processes of scientific rationalization. In details of science becoming success, some ideas that should be basics for thinking as science does are neutralization (subjective value-free), and controllability (Habermas, 1970). These two ideas have also been embedded in individual thoughts and then cause some problems. For instance, the idea of neutralization has been widely socialized or rationalized so that individuals agree with

exclusions of subjective value for every interaction. As a result, most of modern people tend to use objectivistic views (Baxter, 2002, p.521). Besides, individuals might adopt only that subjective-free knowledge to be valid knowledge. Furthermore, some universal laws that can gather from subjective-free methodology can bring about more accurate predictions. Therefore, it should be chanting that individual lives have been changed from uncertainty conditions to more certainty conditions. However, these chants by science and technology have caused social problems (Habermas, 1970).

According to Habermas, problems of rationalization have occurred in all three components of being life worlds (Baxter, 2002). Firstly, personality component involved by ideas regarding neutralization can produce rigid-type personality. Secondly, social component has been involved by systemic social arrangement. For example, societies are rearranged into many systems, such as economical and political systems; some future uncertain circumstances can be set as goals due to beliefs of controllability in terms of administration. As a result, primitive social structures are reformed and ignored. Lastly, cultural component is interfered by new values. Previous cultural pattern of interactions has been changed. Faiths in accumulated traditional norms or culture are slightly ruined. Consequently, a lively form of previous lives is gone (Manuel, 1984).

Habermas is interested so much in the cultural component because it is a root of knowledge as he stated “cultural knowledge both material and non-material knowledge become cultural values that reproduce in the life worlds” (Baxter, 2002; p. 525). However, Habermas incorporates Weber’s idea of cultural values into his theories: “cultural values are separate to be cognitive, normative and aesthetic spheres” (Habermas, 1984, p.234). Therefore, Habermas’ basic human interests (he interprets knowledge as interest) are categorized into three interests according to three Weber’s spheres of thoughts. In each sphere of thought, individual will produce ideas and reasons in accordance with the matters of thoughts in that sphere. For the first sphere of thought-cognitive sphere, Weber stated “the cognitive sphere of cultural values as empirical knowledge, predictive capacity, instrumental and organizational

mastery of empirical process” (Habermas, 1984, p. 159). Habermas mentioned that the cognitive sphere can produce some specified reasons that called ‘cognitive-instrumental rationality’. For the normative sphere, Habermas views that some specified ideas in this sphere should be ideas regarding good interactions among individuals as being together in a society. Some specified reasons to be like that should be for stabilizing, integrating and identifying one’s group. This pattern of reasons is called ‘moral-practical rationality’ (Habermas, 1984). For the aesthetic sphere, Weber claimed “Art becomes a cosmos of more and more consciously grasped, independent values which exists in their own rights” (Habermas, 1984, p. 160) Therefore, Habermas views that this sphere should be related to internal logics of self-reflection, critics, and freedom (Habermas, 1984). However, he does not mention details of a specific type of rationality regarding the aesthetic sphere of thought.

Interestingly, Habermas tried to reflect problems of scientific rationalization involving the spheres of thought. He adopted Weber’s idea of formal (bureaucratic) rationalization in aspects of system legitimacy. As Habermas stated- “formal procedures for positing and justifying norms establishing the legitimacy of social institutions” (Baxter, 2002, p. 523), he refers to individual passive respects for any systematic arrangement. As a result, cognitive-related thoughts have been much produced and reproduced in an individual, such as constructing laws, promoting administration, and setting capitalistic economic system. On the contrary, normative-related thoughts have been suppressed, like Weber stated, “the growing autonomy of law produces the detachments of moral-practical insights” (Habermas, 1984, p. 162). Therefore, loss of equilibrium among three types of thoughts occurs. Importantly, Habermas views that lack of interpersonal interaction can add more serious effects to the dominance of cognitive-instrumental rationality (Habermas, 1984). For instance, the cognitive-instrumental rationality can induce much more personal sense of autonomy however lack of communication will bring about uncompromising for some overlapped needs. Besides, the lack of communication will lead an individual to lose opportunities to learn mutual understanding that is an important condition in promoting social integrations. These social situations are altogether defined as ‘colonization of life world’ by Habermas (Habermas, 1984).

In details of ‘colonization of life world’, Habermas mainly describes that an individual has been indirectly pushed to produce dominantly the cognitive-instrumental rationality in everyday lives. Therefore, other types of rationality as well as interests have been recessed. As being a rational person, Habermas believes that one should act according to his/her reasons towards that act. Thus, he proposed that the cognitive-instrumental rationality can initiate an individual action called ‘strategic action’ (Habermas, 1984). The strategic action is defined as an individual act (with strategy) for one’s own goals in which these goals are usually for success and efficiency (Baxter, 2002). Since social members in modernity usually behave or act like ‘strategic action’; there has been wide-spreading increasing of conflicts.

In sum, rationalization of science and technology brings about detachment in sphere of thoughts and ‘colonization of life world’. The colonization of life world initially occurs by domination of cognitive-instrumental rationality. Finally, it leads an individual to act with strategies which consequently bring about social conflicts.

### **2.2.3 Actions as speech acts**

Like Weber, Habermas regards human as rational agents. Therefore, individuals have their own reasoning to lead their actions (Weber/Roth (trans), 1978). Unlike Weber, Habermas concerns these actions in aspects of individual speech act and interpersonal communication. Habermas noted his ideas as such “the necessity for coordinated action generates in society a certain need for communication” (Habermas, 1994, p. 274), which means he realizes an importance of generating speech acts to gathering coordinated actions from other persons (Habermas, 1998).

Habermas believes one of his specified speech acts called ‘communicative action’ is thoroughly used in everyday practices in pre-modern society (Habermas, 1998). In brief, Habermas refers ‘communicative action’ to interpersonal communication to reach interpersonal understanding and consensus decisions. According to Habermas:

The concept of communicative action refers to the interaction of at least two subjects capable of speech and action who establish interpersonal relations. The actors seek to reach an understanding about the action situation and their plans of

action in order to coordinate their actions by way of agreement (Habermas, 1984, p. 86).

Practically, ‘communicative action’ is a complex of providing the long argumentation, considering all modes of rationalities and reaching agreement (Habermas, 1984). Therefore, long argumentation is one of the important of predisposing necessities. Habermas views argumentation as “type of speech in which participants thematize contested validity claims and attempt to criticize them through arguments” (Habermas, 1984, p. 18). In order to have long argumentation, Habermas indicates that participants should have a value called ‘criticizability’. For criticizability, Habermas explains ‘criticizability’ as ‘the openness of rational expression’, which refers to “participants should show their rationality, seek to reply against claim, and respond to the offering reasons (Habermas, 1984, p. 18). In brief, having long argumentation needs validity claims and the openness of rational expression.

Concerning validity claims, Habermas refers to processes of affirmed reasons in utterance in which it should correspond altogether to the objective, the subjective, and the social worlds (Habermas, 1984). According to Habermas:

It appears to be... arbitrary whether this or that comes to be valid for an individual or a collective; some believe this other that, and what wins out depends on contingencies, on greater rhetorical skill or on physical force. This leads to consequences that are scarcely satisfying. One would then have to accept that for one individual “love your neighbor as yourself” is valid, while for another it is “slay your neighbor if he gives your troubles” It would be difficult to see why then one to pursue research or strove to gain knowledge (Habermas, 1984, p. 29).

Moreover, Habermas links validity claims to spheres of thoughts. There are three spheres of thoughts--cognitive sphere, normative sphere, and aesthetic sphere (Habermas, 1984). In the cognitive sphere, Habermas means knowledge associated with cognitive functions assuming like basic knowledge for working. As previously stated, science has been dominated in the modernity so that an individual is embedded by the unique scientific value, such as truth and efficiency. As a result, a validity claim regarding the cognitive sphere is truth as well as efficiency. For the normative sphere, it is related to common interests all persons as social members. Therefore, normative

values are associated with this sphere. However, individual normative values can be various and different in concerns depending on cultural socialization. Thus, a validity claim regarding the normative sphere should be appropriateness for each social context. Finally, the aesthetic sphere is associated with expression, autonomy and freedom. Besides, this sphere might lead an individual to the desire for standard values. To derive a higher standard for a society, it should have interpersonal consultations. As such, a validity claim regarding the aesthetic sphere should be criticizability with sincerity (Baxter, 2002).

Concerning the openness of rational expression, Habermas views it should be spontaneously learned from interpersonal interaction as he claims “argumentation plays an important role in learning process’ (Habermas, 1984, p. 18). Because achievement of interpersonal coordination needs argumentation, so people can learn their rational expression and criticize other rational expression.

Communicative action can lead to mutual understanding, agreement and cooperation which are advantages of having communicative action in societies. According to Habermas:

Concepts of social action are distinguished... according to how they specify the goal-directed actions of different participants: as the interlacing of egocentric calculations of utility (whereby the degree of conflict and cooperation varies with the given interest positions)... Differently, communicative action...as reaching understanding in the sense of a cooperative process of interpretation. (Baxter, 1987, p. 40).

Besides, Habermas claims that the communicative action is an important practice for social integration. According to Habermas:

When participants in interaction reach an understanding with one another as regards their situation, they stand within a cultural tradition that they simultaneously use and renew; when they coordinate their action through the intersubjective recognition of criticizable validity claims, they rely upon their membership in a social group and at the same time strengthen its integration; when adolescents participate in interaction with a component reference person, they internalize the value orientations of their social group and acquire generalized capacities for action (Baxter, 1987, p.48).

Nevertheless, Habermas views that communicative action has been grounded in normal practices in pre-modern lives called normative-regulated actions. Social agreement can simply reach due to homogenous norms in social members. Remarkably, rationality that supports such a norm-regulated action or agreement is called moral-practical rationality (Habermas, 1984).

Moreover, the communicative action can be grounded by an invasion of science and technology which has caused a specific type of action called ‘teleological action’. It is defined as “communication of those who have only the realization of their own end in view” (Bolton, 2005, p. 13). However, individuals in modernity usually have been embedding views of (scientific) control and success. As a result, teleological actions might refer to getting someone to do something. Therefore, it seems that interpersonal agreement might not be necessary. Rationality that supports such a teleological action is called cognitive-instrumental rationality (Habermas, 1984). The teleological action (goal-oriented action) is termed as ‘strategic action’ by Habermas (Habermas, 1984). According to Habermas, the strategic action is individual speech act that influences others in order to self concern regarding truth and efficiency (Johnson, 1991, p. 189).

However, Habermas views that norm-regulated actions and strategic action should be resisted because both of them are concerned only with a single sphere either the cognitive or normative sphere. On the contrary, the communicative action is reached by interpersonal argumentation; therefore it must involve multiple spheres of thought. Due to the communicative action’ advantages as previously mentioned, the communicative action should be recovered and promoted in the modern societies.

#### **2.2.4 Application of communicative actions in medicine**

Habermas mentions that rationalization and life world colonization has occurred by systems (Lee, 2007). As such, medical practices have been modulated to be medical systems or ‘medicalization’ (Scambler, 2001). Therefore, physicians and patients have been influenced by the extent of medicalizing in everyday life so that it can possibly cause problems regarding life world colonization (Scambler, 2001). For instance, in the past physicians were socialized to make treatment-decisions as

legitimate persons (Ritzer, 1996). Therefore, physicians' communications or 'the voice of medicine' tended to be strategic actions, which had been investigated. According to Scambler:

“..when a doctor, wittingly or otherwise, dominates or controls an encounter with a patient this typically has an effect of absorbing and dissolving the patient's self-understanding into a system of purposive-rational action, namely the framework of technical biomedicine” (Scambler, 2001, p. 55).

On the contrary, patients' communications or 'the voice of life world' has been suppressed. Since he/she has been rationalized by systems in aspects of producing efficiency, technology and accuracy (Ritzer, 1996), therefore physicians have tended to lack concerns for patients' cultural values. Besides, physicians have tended to embed their values (of efficiency, technology and accuracy) in patients' thoughts. As a result, sharing ideas or meanings between physicians and patients does not occur. Then, mutual understandings cannot be reached. According to Mishler:

“the reason is that the voice of medicine relies exclusively on the biomedical model. This model, reflecting the technical-instrumental framework of the biosciences, strips away social contexts of meaning on which a full and adequate understanding of patients and their illnesses depend. Effectiveness of practice depends on such an understanding ...humaneness and effectiveness of care are bound together and do not stand in opposition to each other (Mishler, 1984, p. 192).

The theory of communicative action can be considered to apply in the problems of medicalization, in which communicative interactions between physicians and patients should be retrieved. As previously mentioned, the communicative actions are predominately used in everyday practices in pre-modernity. Therefore, interactive participations and mutual understandings among life worlds are normally reached. As a result, cultural values or social contexts are agreed as significances. Reciprocally, the communicative interactions are prosperous. According to Habermas, “..Because it situates technical action within a larger human context, communicative interaction is shaped not by scientific terms and predictions but rather by cultural codes, social norms, and learned expectations..... these codes, norms, and expectations arise not from scientific theorizing but rather from pre scientific social participation in everyday life” (Habermas, 1970, p. 93).

There have also been some investigations regarding real practices of physicians' communications (Wiggins, 1986). For results of investigations, there have usually been breakdowns in communication in the forms of inadequate information, lack of consistency of information, interruption communication by physicians, which possibly induce patients' incorporation (Beckman, 1984; Borgsteede, 2007). All of these results might be explained by a concept of 'strategic action'. In other words, physicians have been colonized by system so that they unconsciously use strategic speech acts and spontaneously ignore communicative speech acts in communications with their patients. Therefore, problems of medicalization can be systematically solved by a concept of 'communicative action' (Meadwell, 1984).

## **2.3 Rationality concepts**

### **2.3.1 Philosophical development of rationality**

Generally, rationality is a term with ideas of reasons. To have reasons, individuals must involve knowledge and belief system. According to Moshman, human thoughts of reasoning need justification in justifying that what ideas or knowledge or actions should be believed (Moshman, 1994).

There have been philosophical thoughts in order to understand why individuals have reasons or rationality since ancient Greek. Beginning with Plato; he explains that reasons are associated with knowledge. According to Burnyeat's summary, Plato describes that knowledge is nothing but perception and is justified as true belief, however, one has to know that a given proposition is true not only by the relevant true proposition but by a good reason (Burnyeat, 1990). Similarly, Socrates, a prior ancient philosopher, views that reasons justify knowledge that is correlated with virtues; virtues are true and bring about happiness (Hope, 2000). Another important Greek philosopher, Aristotle mentions knowledge and belief system in terms of logics of priori and posterior. He stated "To say of something which is that it is not, or to say of something which is not that it is, is false. However, to say of something which is that it is, or of something which is not that it is not, is true" and ".....we know the cause on which the fact depends, as the cause of that fact and of no other, and, further,

that the fact could not be other than it is” (Aristotle/Ross (trans), 1928). In sum, ancient philosophers gave ideas that reasons are related to knowledge, justification, and thoughts of logics.

Therefore in later times, philosophical thoughts were dominantly described in aspect of metaphysic of believable knowledge. For a long period of medieval time, there have been fighting between different sources of believable knowledge. In Christianity idea, the first source of believable knowledge comes from the sense of mind. The other source is that individuals can reach believable knowledge through their experienced perception (Aristotle/Mure (trans), 2007). However, the strong influence by religion brings about the tendency of truth-claim regarding to God-sense mind. For instance, Thomas Aquinas, a philosopher, states real things (God and creatures) are the foundation of truth. A human acquires knowledge respectively through senses, understanding and judgment. Though Aquinas states some part of the foundation of truth deriving from God, he also stated that human intellect can bring about the truth (Aertsen, 1988). Eventually, experienced or evidence-based knowledge is based on scientific development.

In the Renaissance period, scientific thinking is more liberated. Galileo, an empiricist, showed his experiment at Pisa which drew individuals’ attentions into natural science and scientific method (Pietschmann, 2001). On the contrary, Descartes, a rationalist, introduced an important idea of human thought in his famous proverb-“I think therefore I am” (Descartes, Cottingham (trans), 1984). Descartes also introduced mechanistic thoughts or causal relationships and the deduction logic (Garber, 1992). Then, the experiments as consistency of repeated phenomenon, considering causal relationship and the deduction logic become reasons to support believable knowledge.

In the enlightenment period, science has rapidly progressed and shown their usefulness in industrial evolution. Moreover, the knowledge derived by scientific method becomes the most believable knowledge. Reproducibility of scientific laws brings about universal laws. Therefore, the remarkable characteristic of science is

universal truth (Pietschmann, 2001). As a result, one of the rules in scientific methods is the exclusion of objectivity views or values claimed reasonable for verifying truth.

Later on, Kant who is a well-known idealism German philosopher mentioned that scientific knowledge is not the only truth or pure reason. Kant stated that knowledge is composed of two components--‘object’ as thing-in-themselves (thing without perception) and, ‘subject’ as agreement or verification. The importance is, not the part of ‘object’ that is being as it is, but ‘subject’ or individuals who have to verify under agreement before it becomes their knowledge. According to Kant: “Truth is said to consist in the agreement of knowledge with the object... For as the object is external to me, and the knowledge is in me, I can only judge whether my knowledge of the object agrees with my knowledge of the object” (Hanna, 2000, p.227). Moreover, Kant claimed that pure reasons are intuitive and associated with mind’s process of verification and morality (Kant, 1789/1990). In brief, Kant led to concern point-of-views in reasons regarding agreement, subjectivity view, and morality.

George Wilhelm Friedrich Hegel was, a later world- influenced philosopher, was influenced by Kant’s ‘pure reason’. Hegel initially explained the nature of mind. He states that once a person differentiates his/her consciousness from an observing object, which means there are different criteria of being that object in his/her mind. Every once the difference still happens in consciousness, the mind processes will conform the difference until no difference occurs in later observations. Hegel believes that the final conformation is absolute knowledge or a new point of view arising to overcome and reconcile at a higher level of truth. Hegel claims that his mind process, called ‘dialectic method’ that is starting with ideas containing within itself incompleteness then aiming to give rising the opposition ideas is reasoning. Hegel mentions that human’s final goal is freedom. This implies that human seeking for freedom is reasonable (Hegel 1837/1995). For Hegel, reasons are associated with goals for absolute knowledge, rising of opposing ideas and freedom.

In short, philosophical development of rationality is associated with knowledge and verification of knowledge. Reasons are shaped chronically by social

progression. The verification of knowledge is initially judged by sensory experience and logics, then, scientific method. Knowledge derived by applying scientific method is believable or true knowledge. Both true knowledge and scientific processes become reasons. However, the scientific method as value-free processing brings about reasons regarding objectivity view. Philosophical thoughts that are belief in the process of mind justification reveals reasons regarding subjectivity views, for example, desire of freedom and dialectic thinking. Moreover, Kant's philosophy leads to concern reasons regarding both objectivity and subjectivity views in terms of agreement and morals.

### **2.3.2 Rationality in modernity**

Influenced by former philosophical thoughts together with scientific evolution, societies have been rapidly progressed. Based on capacity of reasoning, individuals should have freedom. One of the main political thinkers, John Locke, inspired with major concepts of human freedom in a large society; for instance, social contract, and human rights. These result in a political change of becoming independent states in many areas of the world. For example, USA declaration was in c. 1776 and French revolution occurred during c.1789-1799 (Waldron, 1984). In addition to political changes, Adam Smith introduced a concept of free market or capitalism including ideas of 'division of labor', 'pursuit of self interest' and 'freedom of trade' (Waldron, 1984). As a result, capitalism is rising. There were rising of bourgeoisie who were the ownership of trade or capital assets, the spread of knowledge by technology of publication, the expansion of transportations, the increasing in the sense of autonomy and capability, and the developing in proper rationality for this new society.

A well-known sociologist, Max Weber, views that modernity is detached from religious beliefs and enters to the world of intellects and reasons. According to Weber: "The fate our time is characterized by rationalization and intellectualization and above all by the disenchantment of the world" (Weber, 1918, p.35).

Weber views that individuals have their own reasons to drive their actions (Rutgers, 2006). There are two main kinds of Weber's rationalities, which are purpose- and value-rationalities. Weber explained the two main related motivations referring to

kinds of rationalities (Rutgers, 2006). The first motive is expectation of behaviors by the outer world, which leads individuals to have purpose-rationality or practically called formal rationality. The second motive is a conscious belief in the ethical, religious, and aesthetic intrinsic values, which leads to have value-rationality or practically called substantive rationality.

Weber credits on formal rationality that is the best form of rationality because Weber believes that individual should act regarding purposes. Furthermore, it induces the whole thinking of ‘means’, ‘end’, ‘values’ and the most importance-‘consequences’ (Kalberg, 1980). Weber revealed that the consequence that modern people desire is the control, to a great extent of certainty. Weber stated “rationality refers to mental processes that consciously strive to master reality” (Kalberg, 1980. p.1159). Therefore, modern society structures are constructed under formal rationality.

Formal rationality is rationalization into society as hierarchy of organization structure and system administration (Swirdle, 1973). In bureaucracy and capitalism, there are goals for efficient production; means of division of labors, application of technology, structural orders and formal relationships, values of accuracy and generalization. As a result, individuals have been embedded by values of efficiency and expectation of efficient behaviors so that they will choose their actions or behaviors subjecting to the value of efficiency. In making a choice, individuals have to calculate and compare all the possible ways to get the most efficiency. Furthermore, individuals believes that this kind of thoughts and actions make a consequence of the better society (Kennedy, 2004).

Substantive rationality, another Weber’s rationality, can be distinguished from formal rationality in aspects of ‘value’, not for efficiency or controllability, conducting ‘end’. Moreover, substantive rationality is, to some extent, associated with traditional beliefs and emotion, but not in formal rationality (Rutgers, 2006). Values for substantive rationality most likely involve clusters of values (Takayama, 1998). According to Weber:

“Substantive rationality”...means that the decision of legal problems is influenced

by norms different from those obtained through logical generalization of abstract interpretations of meaning. The norms to which substantive rationality accords predominance include ethical imperatives, utilitarian and other expediential rules and political maxims...(Kennedy, 2004: p.1041).

Jurgen Habermas, a famous sociologist of Frankfurt school, is another one who mentioned about human rationality in his works. The Frankfurt school is well-known for production of critical ideas. The hearts of Habermas' critics are despite social progression under scientific rationality, but individuals still lack of freedom (Baxter, 2002).

Habermas's view types of rationality are different from Weber's. Firstly, Habermas claims 'cognitive-instrumental rationality' is like Weber's purposive rationality but in some different aspects. Habermas sees 'cognitive-instrumental rationality' as correlated with the material or objective knowledge which is constructed in term of truth and efficiency, while Weber is interested in a process of thought that is reasonable (Bolton, 2005). Therefore, Habermas's 'cognitive-instrumental rationality' refers to something that constructs actions regarding this rationality, which is normally from egocentric values. For instance, making technical guidelines is formal rationality because they are set for control practices into standard or aim for the same repeated results by choosing the effective mode that is the technical guideline. In Habermas's sense, technical guidelines are constructed usually by experts with their true knowledge in order to get their values of efficiency from their calculated ideas of the best mean.

Habermas views, like Weber's substantive rationality, 'moral-practical rationality' in aspects of individuals' everyday actions regarding norms (Bolton, 2005). But, Habermas stresses on interactions between individuals in which individuals should long-term practically learn in the forms of morals. Morals and laws, in the sense of Habermas, are knowledge of the social world (Habermas, 1984). However, norms or morals that individuals have learned are still subjective learning. The reasons for one's normative-regulated actions might be the reasons of their own views especially in aspect of behaving in pluralism (Habermas, 1984).

Based on Habermas' differentiation spheres of thoughts, the aesthetic sphere is associated with individuals' sense of self, desires, creation, and emotion, in which Habermas claims that these thoughts induce personal drives of setting values, for example, freedom, equality, compassion and beauty (Habermas, 1984). These thoughts are linked to rationality of emancipation (Roderick, 1985).

Habermas sometimes regards 'communicative rationality' as the meeting of cognitive-instrumental rationality, moral-practical rationality and rationality in aesthetic sphere. On the other hand, individuals can think of a situation regarding the three worlds. Habermas stated:

Here we find the three dimensions contained in the concept of communicative rationality: first, the relation of the knowing subject to a world of events or facts; second, the relation to a social world of an acting, practical subject entwined in interaction with others; and finally, the relation of a suffering and passionate subject (in Feuerbach's sense) to its own internal nature, to its own subjectivity and the subjectivity of others. (Roderick, 1985, p. 209).

The ideal 'communicative rationality' occurs only in the interpersonal communication settings under communicative action. If individuals have 'communicative rationality', it would bring deconstruction of social values (Roderick, 1985). Moreover, individuals would transcend into the higher moral state that is communicative ethics (Habermas, 1995).

### **2.3.3 Rationality as morality**

Kant, an important German moral philosopher, states that morality is highly associated with rationality. Kant explains that human is a rational agent, who is capable of making rational decisions and acts under the decisions. For morality, Kant stresses that it is associated with right actions performed with right or superior motives that are called 'good will' (Sullivan, 1989).

Kant stated that 'good will' is reasoning under moral or categorical imperatives. Moral imperatives mean commands without considering consequences or personal interests/desires (Sullivan, 1989). Kant stated 'duty' as an example; the duty is duty, and individuals must do it whether or not they want to. In contrast, another imperative that is called hypothetical imperatives is considering on consequences,

personal interests (Sullivan, 1989). For instance, individuals make a decision to act according to conditioning; someone wants to see the new *Star Wars* movie on opening day, and then he must stand in line for hours.

Kant claims that ‘good will’ is associated with ‘maxims’ and everyone should live according to ‘maxims’ (Potter, 1994). Therefore, ‘maxims’ are reasons for actions. In order to determine if the ‘maxims’ is ethical, there must concern three aspects that are autonomy, respect for humanity, and kingdom of end (McCarty, 2006). Kant claims that autonomy is not for self-pleasure, happiness and desires, but for individuals’ sense of good (Potter, 1984). Importantly, Kant views that once individuals ‘maxims’ become universality, and then the ‘maxim’ are purely ethical. Kant stated “Act as if the maxim of your action were to become by your will a universal law of nature.” (McClosky, 1976, p. 392)

In sum, Kant’s morality is associated with rational agents and ‘good will’ motives. Rational agents would make decisions to perform moral actions under moral reasons. For moral reasons, Kant concentrates on autonomy, humanity, and importantly universality. Kant’s morality concept has influence the descendent social German thinkers such as Max Weber and Jurgen Habermas, whose works are in accordance with individuals’ rationalities inducing actions, whereas Habermas’ rationalities are imitatively categorized into two types regarding Kant’s moral or hypothetical imperatives. Cognitive-instrumental rationality is similarly defined as hypothetical imperatives. Moral-practical rationality is similarly defined as moral imperatives.

In Habermas’s moral point of view, morals are associated with reasons. Habermas believes that there exist ‘standpoints’ or moral reasons, which have to be shaped by pragmatic and ethical reasons. Habermas views that moral reasons should be neither the pragmatic reasons (personal preferences and goals) as the judgment, nor the ethical reasons (inner social/regulation awareness) that are reasons learned to be self-understanding. But, they should be the intersubjective and universalizing moral point of view, which he calls moral reasons (Lee, 2007).

For Habermas, moral reasons mean an enlargement of perspectives involving reasons of the social communication world. To have moral reasons, individuals are required to take the perspectives of everyone else under processes of argumentation. According to Habermas:

The moral point of view calls for the extension and reversibility of interpretative so that alternative viewpoints and interest structures and differences in individual self-understandings and worldviews are not effaced but are given full play in discourse (Habermas, 1993, p. 58)

Habermas focuses on the outcome of process of debating rationality for normative judgment during communication, in which it is called communicative (discourse) ethics (Habermas, 1995). Influenced by Kant, Habermas views that universalization is important. Therefore, Habermas suggests that argumentation could be continuing until agreement of participants has reached. According to Habermas, he stated “a norm is valid when the foreseeable consequences and side effects of its general observance for the interests and value-orientations of each individual could be jointly accepted by all concerned without coercion” (Lee, 2007, p. 123).

Habermas further claimed that there will be rationalization of participation in communication and importantly self-critical and reflexive ideas in the process of debating rationality (or communicative action). For self-criticism, Habermas stresses that it helps individual to be liberated from constructed knowledge. According to Habermas:

Rationalism must go back into itself and overcome its own blindness in order to open up dialogically what it can learn from the traditions of other cultures. An inter-cultural encounter worthy of the name would also demand that the submerged elements of our own tradition be brought to light (Habermas, 1994, p. 96).

Habermas claims that morals come from cognitive sphere of thoughts so it is learned and developed under consciousness (Habermas, 1995). Habermas described that moral consciousness is gradually developed from the early child to adult. For example, the first stage that is hedonism under obedience; the second stage that is hedonism under exchange; the third and forth stage that are concrete morality; the fifth stage that is civil liberties and legal freedom; the sixth stage that is moral freedom; and the last stage is political freedom.

Corresponding to cognitive psychology, Kohlberg-a psychologist stated moral is developed as personal reasoning (Frierson, 2008). Based on his researches, Kohlberg mentioned there are six stages of moral development. The basic characteristics of reasons in 6 stages can be categorized into pre-conventional stage that is associated with self-awareness; conventional stage that is social/regulation awareness; and post-conventional stage that is awareness of universalism (Craine, 1985).

The details of Kohlberg's moral stages are as follows (Kohlberg, 1984). For pre-conventional stage, the first stage is characterized by blind obedience to rules and authority and a fear of punishment. The second stage is characterized by seeking to pursue one's concrete interests, recognizing that others need to do the same, and a calculating instrumental approach to decision-making. The second stage sounds to have meaning like 'cognitive-instrumental rationality'. For conventional stage, the third stage is characterized by trying to live up to the expectations of others for good behavior, by having good motives, and by fostering close relationships. The fourth stage is characterized by a concern for maintaining the social system in order to promote social order and welfare. For post-conventional stage, the fifth stage is characterized by judging the moral worth of societal rules and values insofar as they are consistent with fundamental values, such as liberty, the general welfare or utility, human rights, and contractual obligations. The sixth stage is characterized by universal principles of justice and respect for human autonomy.

Some thinkers believe that there are further stages of moral development (Power, 1981; Michael, 1996; Habermas, 1995). Habermas sees the association of highest stage of morality and speech acts, which Habermas calls universal ethics of speech (Habermas, 1998). According to Habermas, if interpersonal argumentation can happen in communities or societies, it implies that individuals have willing to accept some different opinions, realize equality, and importantly eager to communicate with others. This situation might be called transcendental morality (Power, 1981). Transcendental morality that Habermas calls 'universal ethics of speech' is in aspect of universalization for specific groups. On the contrary, Kohlberg sees its wider

applications in aspect of universalization under world-views or cosmic orientation. Nevertheless, the transcendental morality is claimed to be the seventh stage of moral development (Power, 1981).

Furthermore, the eighth stage possibly the last rational stage. This stage refers to rational agreement through dialectic dialogue (Reid, 1977). According to Habermas, it needs ‘supposition of rationality’ for the process of debating rationality, such as sense/idea of equality, openness and criticism (Lee, 2007). If individuals learn to have these senses, they would develop opposing ideas and dialectic argumentation (Habermas, 1984).

In sum, morality is learned and developed by social interactions. Knowledge of morals becomes personal reasons that conduct personal actions. Cognitive-instrumental rationality, moral-practical rationality and communicative action are associated with moral reasoning.

## **2.4 Ideology concepts**

### **2.4.1 The origin of ideology**

The word ideology was termed by combining ‘idea’ and ‘logy’, by Destutte de Tracy in 1796 (Kennedy, 1979). Destutte de Tracy referred ideology to science of ideas in which he meant making ideas into logics.

### **2.4.2 ‘Ideology’ and science**

Science was gradually developed from natural philosophy during c.1500-1700. The nature of universe, the so called natural philosophy, has eventually developed into natural science. Natural science refers to a naturalistic approach to the study of universe, in which it mainly derives Aristotle’s natural philosophy (Pietschmann, 2001). These are logics especially inductive and deductive logics.

Initially, ideology is constructed under scientific logics. That is applying scientific concepts to organize collective ideas. Then, it becomes a habit way of looking or thinking at things (Hawkes, 2003). Deductive logics, in brief, a set of ideas

illustrating that if a thing respects to a rule then subsets of that thing must respect the same rules of that thing. For inductive logics, individuals think like, the sun will be rising in the east tomorrow because they have repeatedly seen the rising sun in the east. Therefore, individuals assume to think, it is a general rule that the sun will never rise in other directions.

Galileo Galelei (c.1564-1642) was a well known physicist and philosopher who introduced the world the Pisa's experiment. Galileo pioneered the use of quantitative experiments. The world is influenced by a scientific concept of 'reproductability' that means any law of nature can repeat and prove for the same result (Pietschmann, 2001). Then, experiments or the same results after several repeats become a set of ideas or ideologies in aspect of truth. Consequently, individuals learn that they should follow those repeatedly-proved truths in terms of generalization laws.

Rene Descartes (c.1596-1650), a philosopher and mathematician, gave the world ideas of the mechanical world. The machine could be understood by taking its pieces apart, studying them, and then putting them back together to see the larger picture.

"All the functions which I have attributed to this machine (the body), as the digestion of food, the pulsation of the heart and of the arteries; the nutrition and the growth of the limbs; respiration, wakefulness, and sleep; the reception of light, sounds, heat...., in the organs of the external senses; the impression of the ideas...; the internal movements of the appetites and the passions..... the external movements of all the limbs, ..... I say that it should consider that these functions in the machine naturally proceed from the mere arrangement of its organs, neither more nor less than do the movements of a clock, or other automation.." (Huxley, 1904; p.181).

From Descartes' the above idea, it includes reductionism view and mechanic causation, which lead to mechanistic-view ideology. The mechanistic-view ideology is a thought of a former thing can cause a later thing or a later thing will not happen without the former thing (Steel, 2007). As a result, individuals learn existed relationships between the former and the later situations that are causal relationships (Hitchcock, 2007). Thus, if individuals know causes, they will automatically think of possible effects or consequences of those causes.

Consequently, the ideology of causal relationships leads an individual to learn ways of prediction. Statistics is a constructed tool to reach a certain prediction. Once individuals know how many the possibilities of future situations are, they can initiate their plans. Future plans become something individuals should normally do. Therefore, goal-directed planning becomes an ideology of rationale actions (Ritzer, 1996).

Due to scientific revolution, the scientific method is developed and respected to provide the world credible knowledge. Credible knowledge is supposed to be knowledge derived by using the scientific method. The scientific method concerns neutrality, objectivity and above the contending forces in society and culture (Young, 2005). Hence, the scientific method becomes valuable ways to have credible knowledge.

The famous proverb “For also knowledge itself is power” by Sir Francis Bacon (c.1561-1626) introduces ideas of collecting scientific knowledge to individuals (Rodriguez Garcia, 2001, p. 109). Moreover, ‘the power from knowledge’ Bacon meant that human can control the world. According to Bacon, he stated “a concept of human happiness ....by reducing the necessary knowledge to the amount fixed by the requirements of domination over natural reality” (Rodriguez Garcia, 2001, p. 110). Therefore, controllability by science becomes a human ideology.

#### **2.4.3 Ideology and the progression of society**

Caused by new ways of scientific thinking, the individuals in the 18<sup>th</sup> century of enlightenment were increasing their interests in learning logics and reasons. Traditional beliefs especially politics and religions were re-examined and sometimes rejected. The church was rejected for it is not the only source of truth. Individuals’ respects in authority and community of the state was destroyed since the middle classes were aware that they were paying taxes to support a fabulously expensive aristocracy who contributed nothing of value to society (Outram, 2005). Therefore, sense of individualism and freedom initially emerged.

Core ideals of ‘enlightenment’ are freedom and reason. Freedom means being able to think rationally for oneself. With reasons, individuals can seek knowledge and can reach (scientific) truth. Also, individuals should be free to use their own reasons to think what they want; moreover, how much power should the state have over individuals’ lives. Sets of ideas or ideologies are associated with conduction how societies should be, how societies are formed under thoughts of reasons (Outram, 2005).

Influenced by the enlightenment, political ideas have been developed from individuals’ senses of freedom, which derive from several philosophical thinkers. An important idea by a British thinker, John Locke (c.1632-1704), advocates inalienable rights that mean all human beings in the natural state are equal and free to pursue life, health, liberty and possessions. For government concepts, Locke stated that the government power is not absolutely arbitrary over the lives and fortunes, but it is the joint power of every member of the society giving up to the legislation. These Locke’s ideas influence political ideologies of liberalism, rights and governmental separation of power (Waldron, 2002).

In sum, the ideologies associated with science, freedom and reason have been embedded in individual thoughts and led to arrange for social formations in the 19<sup>th</sup> century. The embedded ideologies as well as cultural intellectuals have effect on the individual level (Disco, 1979). As a result, the public defends the religious interests of feudal aristocracy and exploitation. The scientific basis of marketing in goods and labor is adopted instead. Therefore, the new ideologies, are the free markets, equality and freedom, are obviously individual inspirations.

In modern society, science and the new ideologies influence structures of societies. For instance, these ideologies have brought about liberal democracy and capitalism. Capitalism is needed to be based on rationality because it is a view of arrangement on the assumption of imbalance in numbers of resources and people. Foley stated: “According to Hobbs and Locke, tradition of political philosophy, political and economic organization of modern society should be as a result of the

interaction of naturally constituted rational individuals confronts each other as competitors for scarce resource” (Foley, 2003. p. 1). Moreover, another capitalism view is the application of scientific knowledge on production, distribution, investment, pricing, advertisement, service and so on.

On individual level, modern societies are conducted by scientism or restrictions of other reasons to scientific reasons. Industrial societies, power of bourgeois and also ideas of social control are developed. According to Disco, he stated

Projected in scientism, of course, is the large-scale integration of the intelligentsia, via science and technology, into the bourgeois productive order. As a project of new class, scientism seeks to expand both the economic basis of that class in term of the integration of science into the forces of production, by redefining politics as a matter for scientific competence, technological manipulation, and in the various social technologies of administration and control. (Disco, 1979, p. 182)

As a sequence, ‘functionalism’ was developed by ideologies of natural science or scientism in the early 20<sup>th</sup> century. Functionalism is a social paradigm maintaining that a society should be systematic like a mechanic organism and attempted to construct social institutions as collective means to fill individual biological needs (Young, 2005). To be a functional system, functionalism focuses on the structure-individuals and their functions in which both of them should continue their functions in order that a system would not be failed (Ritzer, 1996). Therefore, functionalism constructs individuals’ ideologies of duty; for example, values, norms, and tradition rituals as well as, ideology of social control through socialization of right or wrong judgments.

However, there have been opposing ideas of the nature of society. Karl Marx (c.1818-1883), a social philosopher proposed that societies are driven by economics that he means productions (Marx, 1845). Individuals have their own modes of production and produce some kinds of product to societies. Moreover, Marx sees that superstructure of societies are composed of two classes which are ‘bourgeois’-capital man and ‘proletariat’-laborer. All members in societies are influenced by the ruling class that is everyone knows what class they are and what product they should produce. Thus, in Marx’s idea, the ruling class is such an ideology. Moreover, Marx

criticizes that this ruling-class ideology has brought about systematic misinterpretation or concealment the realities of domination, subordination, exploitation in social relations, which are driven by capitalism (Ritzer, 1996).

Later, ideologies become the new meaning in aspect of 'false consciousness' which vary in meaning in critical theories. According to Disco, he claims the meaning of ideology from a literature by Friedrich Engels as follows:

Ideology is a process accomplished by the so-called thinker consciously; it is true, but with a false-consciousness. The real motives forces impelling him remain unknown to him; otherwise it simply would not be an ideological process. Hence he imagines false or seeming motive forces. Because it is a process of thought either his own or that of his predecessors. He works with mere thought material, which he accepts without examination as the product of thought and does not investigate further for a more remote source independent of thought; indeed this is a matter of course to him, because, as all action is mediated by thought, it appears to him to be ultimately based upon thought. (Disco, 1979, p. 159)

The ideas of concealment the realities of domination transfer to later social thinkers called 'Marxism'. One group of them is the thinkers from the Frankfurt school. They followed the ideologies of domination by capitalism, but in terms of unity of reasons. Importantly, Critical theories of Frankfurt school are aimed to disclosure and criticize dominated ideologies so that individuals can free themselves from the dominated ideologies then have capacities of analyzing in various modes of reasons and judge in the appropriate ways (Bottomore, 2002).

Habermas is the second generation and famous thinker of the Frankfurt school who introduced the ideas of "technology and science as ideology". For Habermas, scientific ideology is defined as an increasing range of problems that are amenable to technical solutions (Habermas, 1970). In Habermas' view, science is easily accepted to be excellence because it claims valid for objectivity and neutrality. As a result, science legitimates patterns of domination in modernity. Habermas stated:

Technocratic consciousness is, on the one hand, "less ideological" than all previous ideologies..On the other hand today's dominant, rather glassy background ideology, which makes a fetish of science. Is more resistible than other ideologies of the old type...(Habermas, 1970, p. 111).

Habermas explains the influences of science and technology upon individuals through learning processes (Habermas, 1970). Habermas believes as critical predecessors did in relations of productive forces to human. Consequently, he postulated that a growth of cognitive knowledge of productions, such as the accretion of technical knowledge (domination of nature) and organization knowledge (domination of human), come from the transcendence capitalism-induced state regulations to individuals (Disco, 1979). Therefore, legitimation of technical knowledge is embedded in cultural intellects then becomes technocratic ideologies (Habermas, 1975).

Habermas reduces human knowledge into rationality so that he can further explain. He specifies two concrete modes of rationality. One of them is instrumental rationality that refers to the forces of production involving with the accretion of technical knowledge (domination of nature) and organization knowledge (domination of human). He has claimed that instrumental rationality induces instrumental or strategic action that refers to an action without agreement (Habermas, 1984). The extension of instrumental rationality represses, moral-practical knowledge or the knowledge of social interactions; because instrumental rationality can produce productions without interpersonal interactions (Habermas, 1970).

Habermas keeps his explanation in aspects of social interactions with language. So it can link instrumental rationality and instrumental action to ideologies. He sees that individuals who are dominated by instrumental rationality have ideologies of 'systematically distorted communication' (Habermas, 1984) According to Disco, a hidden individual character of distorted communication is desires for success so that there are some strategies. Disco viewed:

Ideology is pictured as the collective analogue of individual neurosis because they coerce behavior, and prevent its deeply rational steering or analysis by proffering justifications which in fact are not discursive justifications. As collective neuroses, therefore, all ideologies prevent the discursive justification...(Disco, 1979, p. 207).

Besides, Habermas has seen that an ideology of distorted communication is politically embedded in speech structures of everyday practices (Disco, 1979). To

eliminate an ideology of distorted communication, it should begin with a critique of all ideologies. Therefore, individual abilities to criticism should become a value and probably an ideology in post modernity.

Habermas extends the elimination of distorted communication beyond individual criticism to interpersonal criticism. Because interpersonal criticism is a process of reasoning through speech-act interactions so that individuals would learn moral-practical knowledge. Therefore, the prerequisite for interpersonal criticism should be participation in communication. In Habermas' views, the opposing for communicative participation is restrained forces that come from inequality so he unified participation and making equality in the name of 'deliberate democracy'. Thus, deliberate democracy is the new ideology for against distorted communication (Calhoun, 1999).

#### **2.4.4 Ideology and Habermas's morality**

The other prerequisite for interpersonal criticism is participants' morals (Habermas, 1995). Moral-practical knowledge will shape individuals' morals to conform to generalizability of interests and consensus (Habermas, 1970). Because this kind of morality is deconstructed from all influencing knowledge, therefore Habermas claims that this kind of morality is on a higher stage than that of universal goods for all, such as equality. Communication for consensus is truly and practically morality for all.

In details, Habermas sees the process of reasoning debates to reaching generalizability of interests needs some moral values. Habermas not often mentioned that 'criticizability' is associated with longer argumentation. However, there are some reviews that 'criticizability' is associated with self-reflection, openness for criticism, participation, respects in equality (Lee, 2007). Individuals will learn moral-practical knowledge through communication reasoning debates if they have values of 'criticizability'.

The process of reasoning to generalizability interests is called 'discourse ethics' by Habermas. For discourse, it means either written or spoken communication

or debate or a formal discussion or debate (van Dijk, 1997). For Habermas, discourse ethics refers as “..those action norms are valid to which all possible affected person could agree as participants in rational discourse” (Froomkin, 2003. p.770). Having rational discourse, individuals should be free in processing of participation, contribution, reasoning, debating, and bargaining in order to mutual understanding (Froomkin, 2003). Therefore, rationale discourse is a learning process of individual ethics.

In summary, Habermas views that communication for reasoning debates needs some moral values, perhaps ‘criticizability value’. On the contrary, communication for reasoning debates forms some individual ethical ideas that might develop to be higher individual morals.

#### **2.4.5 Ideology, social values and morality other than Habermas’s views**

According to Park, ideologies are fundamental value-laden. He stated “the fundamental values contain generally basic traditional moral elements that are in effect acknowledged in present society” (Park, 2006, p. 3). Because basic traditional moral elements have an important function to social integration, therefore, social values are associated with morality and ideology (Park, 2006).

Moral responsibility is inevitably to claim for religious influences. Religious beliefs are associated with morality in aspects of conducting practices of virtue (Jayaram, 2006). Some religious-related norms become ideologies. For example, Karma is the central to Hinduism and Buddhism; an individual is responsible for his/her action (Karma), virtue (good Karma) which will return to someone who behaves in virtue. Therefore, Karma acts as social value or ideology.

Norms as “social conventions are the agreed-upon uniformities in social behaviors determined by the social system in which they are formed (Nucci, 2001, p. 7). These social uniformities or standards serve to coordinate individual interactions, by providing them a set of expectations regarding appropriate behaviors, in order to participate within a social system. For instance, respects for and beliefs in those who

are older, respects by authority, and responsibility for their own duty are Thai norms in majority. Norms, some parts, are social values and morality (Carpendale, 2000).

In sum, ideology is a set of expected norms and values that conduct the righteous livings in a society. Individuals interact with social norms and values and transcend to their morals.

#### **2.4.6 Medical ideologies**

By one of many definitions, ideology is an interlocking set of ideas and doctrines that represent individuals' relationships to the real conditions of their existence. As a result, ideology impact individual lives by shaping their perception and interpretation of their experience. Physicians are shaped by ideologies in which it appears on the macro level--medical encounter context and on the interaction level--physician-patient communications (Waitzkin, 1989).

Conception of work driven by economical forces is an ideology influencing on medicine. For instance, health has been interpreted as ability to work; public health policies consistently emphasize the importance of a healthy work force; a widely medical standard is judged by cost-effectiveness in terms of work productivity (Weinstein, 1977).

Class consciousness, in aspect of hegemony of medicine, is an ideology for social control. Physicians are reinforced to convey ideological notions or shape patients' roles in desirable behaviors (Waitzkin, 1979). Moreover, domination of medicine shapes medical personnel perceptions as dominant class, in which it brings about transformation of social relations into thing-like being (Taussig, 1980). These social relations shift physicians' attentions away from total social relations that are root causes of personal troubles to objectified symptoms and signs.

Scientific ideologies are largely embedded in physicians. Normally, physicians have perspectives in aspects of scientific methodology and technical control (Habermas, 1970). Scientific methodology is associated with reductionism and value-free perspectives. As such, physicians tend to exclude socio-cultural aspects in

order to get accurate diagnosis; physicians are taught the scope of medicine in reduced and differentiated aspects which are diagnosis, treatment, rehabilitation, promotion of health; however, physicians tend to focus on diagnosis and treatment. For technological control, medicalization is an example of health professionals' expanding role in social control (Conrad, 1980). Controllability is embedded and attempted in medical practices such as vaccination, birth control, and death control.

Domination of technocratic consciousness is obvious on interaction levels (Scambler, 2001). Physicians usually have technical concerns and attempt to dominate other concerns by patients. According to Waitzkin, he described two voices in medical encounters.

Transcription from recordings of doctor-patient communication and describes two voices that compete with each others. The "voice of medicine" involves technical topics (of physiology, pathology, pharmacology, and so forth) which concern doctors in their professional work. Alternatively, the "voice of the life world" comprises the everyday; largely non-technical problems that patients carry with them into the medical encounter...Patients often try to raise contextual issues through the voice of the life world. Doctors, however, are equipped to deal with such issues and therefore repeatedly return to the voice of medicine. (Waitzkin, 1979, p. 232)

In sum, medical ideologies influenced by science and technology are main ideologies because they are reproduced in physicians' everyday life and in everyday physician-patient interactions.

## **2.5 Buddhism for solution social conflicts**

Buddhism is well known for its instructions regarding nature and rationality (Hoffman, 2002), which is in harmony with scientific progression or modernity. As such, Buddhism opens itself to query and scrutiny. Buddhism also does not blind faith but suggest its adherents to think, to question and to develop acceptance based on understanding. Moreover, Buddhist principles do not explain the problems in the world as part of a mysterious plan of a deity but insists that mankind takes responsibility for its own actions. Therefore, Buddhist principles might be another instrument for solving the social conflicts, especially euthanasia.

Thai culture has been embedded by Buddhism for more than seven hundred years. There are numerous Buddhist instructions without mystical faiths. All of them need individuals to have self-understandings and self-practices, so that individuals could have their higher and higher mind developments. As a result, Buddhist principles seem to be a matter regarding individual levels. Contrastingly, the Habermas theories seem to approach at social interactions that involve both individual and social levels.

The Buddhist sees things as natural beings. That is shown by the instructions regarding ‘the three characteristics of existence’. The subject matter of ‘the three characteristics of existence’ is to demonstrate the truth that a root of human sufferings is attachment of non-everlasting things (Prayutto, 2004). For details, ‘the three characteristics of existence’ are composed of the nature of existence-change or uncertainty (Arnica, อนิจจัง), the nature of human thought-avoiding changes (Dukkha, ทุกขัง), and the nature of resolution-realization of changes (Anatta, อนัตตา).

Moreover, Buddhist principles go beyond making clear understanding regarding the nature to suggestion what a human life should be. That is ‘heedfulness’ (Appamada, ไม่ประมาท). The meaning of ‘heedfulness’ does not just mean ‘aware of careless’, but it means rather broadly, like implying constant care and circumspection, not allowing oneself to stumble into harmful ways, not allowing oneself to miss any opportunity for betterment, a clear awareness of what things need to be done and what left undone, non-negligence, and performing one's daily tasks with sincerity and with unbending effort towards improvement (Payutto, 1988). However, it may be said that ‘appamada’ is the Buddhist sense of responsibility (Payutto, 1988).

Importantly, there is an essence mind action called ‘Sati’ that governs other mind actions such as ‘appamada’, ‘anicca’, and et al. Sati is most simply rendered as ‘recollection’ or memory. On the contrary, it means deeply as the gatekeeper for guarding and restraining ones by preventing taking foolish pleasure in

the bad and by preventing badness from sneaking into the mind. In other words, ‘sati’ reminds one to do something good and to give no ground to the bad (Payutto, 1988).

As previously mentioned, Habermas claims that all of the social ideologies could bring about knowledge and specific types of systematic thinking (cognitive-instrumental and moral-practical rationalities. He also indicated all the normative knowledge including religious beliefs has been involved with a specific type of rationality-moral-practical rationality. Approaching by Habermas concepts, Buddhist truth such as ‘anicca’, ‘dukkha’, ‘anutta’, ‘appamada’, ‘sati’, and so on might be viewed as some of Buddhist ideologies. However, the Buddhist ideologies seem to be based on truth of nature not truth of social constructions as Habermas’ ideologies.

For the rationalities, Habermas suggested that an individual should have a systematic thinking called ‘critical thinking’ in order to have the communicative actions (Habermas, 1984). Interestingly, Buddhist thoughts are well known for promoting self-reflection, which some of them can potentially be compatible to ‘critical thinking’, for examples of Kalama Sutta (กาลามสูตร), ‘do not go upon what has been acquired by repeated hearing’, ‘nor upon rumor’, ‘nor upon tradition’, and so on. However, the Kalama Sutta seems to be basic instructions for practicing critical thinking. Importantly, the Buddhist mentions deeply into the mind process for critical thinking called ‘yonisomanasikara’.

‘Yonisomanasikara’ refers to a critical reflection, thinking be way of causal relation or by way of problem solving, reasoned attention, systematic attention or analytical thinking (Chanvipadilok, 2007). Moreover, it could be simply refered as creating a new thought (Phra Suthivorayan, n.d.). ‘Yonisomanasikara’ as an internal factor regarding the thinking process has to be accompanied with an external factor that is right information or good friend (‘kalyanamitta’ กัลยาณมิตร). ‘Yonisomanasikara’ can be differentiated into ten practical methods and they are presented as follows (Phra Suthivorayan, n.d.).

Firstly, ‘paticcasamuppada’ or relative method refers to giving one mind thoroughly and systematically to the causal law. As such, this being comes to be from

arising of that, therefore, this is not being due to that does not come to be. Secondly, ‘khandavibhanga’ or analysis method refers to giving one mind know a being that is aggregated for usage is from the parts that are rightly set. Thirdly, thinking based on ‘Tilakkhaṇa’ (‘the three characteristics of existence’) refers to generating insight of mind with deep understanding in ‘the three characteristics of existence’. Fourthly- problem solving method, it refers to thinking based on ‘ariyasacca’ (‘the four noble truths’ อริยสัจ 4). As such, one should realize imperfection of the world and the lives, which causes sufferings; one should realize all the sufferings come from the attachments with an imagined self; one should realize that these sufferings could be ended; and one should develop higher thinking according to the path (eightfold noble path) for cessation sufferings. Next, ‘atthaparikkha’ or systematic thought refers to an intellectual thinking on relation between theory and practice.

For the sixth method-three dimension method, it refers to thinking in all three dimensions- optimistic, pessimistic, and realistic views. The seventh method (‘paccayapatisevana’) refers to systematic thought on true value and artificial value. For example, ‘Wisely reflective, one uses aimed food not for sport, not for indulgence, not for personal charm, not for beautification, but just enough for the support and sustenance of the body, for keeping it unharmed’(Phra Suthivorayan, n.d.). The eighth method is a thought that could promote enlightenment or development by thinking of good achievement and perseverance on exertion (‘kusalabhavana’). The ninth method is thoughts according to the present. Lastly-‘vibhajjavadi’, it refers to thoughts regarding holistic relationships with practicing by questioning, silence and answering. This method has been mentioned as ‘dialectic method’ in the western societies (Raapana, 2001). Besides, Habermas’ critical thinking could be compatible with the tenth method of Buddhist’s systemic thinking (Scambler, 2001).

In sum, ‘yonisomanasikara’ is for one to see things deeply to their roots instead of seeing at the surface of them by systematic attention. It could be included in Buddhist’s ‘right thought’ in the noble eightfold path (Phra Suthivorayan, n.d.). There are more several methods of thinking in Buddhist principles than the western theories stated (Scambler, 2001). Importantly, all the methods could be altogether correlated.

It should be noted that the Buddha views the nature of existence in aspect of all relevance and holistic views. As stated in the four noble truths, the matters begin with indicating existence of sufferings in human beings, causes of these sufferings that are from attachments, and means to pointing the cessations of these sufferings.

In case of ‘the way to end sufferings’ (Bhikkhu Bodi, 2000), the Buddha begins to set the first priority because the understanding of sufferings (dukkha) must be deeply rooted prior to steps of performance. In explanation of the nature of existence, the Buddha reminds that the real problem of life is ‘dukkha’ that is a basic un-satisfactoriness running through lives due to individual attachments to non-everlasting things. The attached non-everlasting is some existing ideas called ‘defilements’. The common defilements are greed (lobha, โลก), aversion (dosa, โทสะ), and delusion (moha, โมหะ), which can generate other defilements. However, the actual root of these defilements is ‘ignorance’ (avijja, อวิชชา). ‘Ignorance’ is not mere absence of knowledge, but it means a lack of knowing particular pieces of information, a vast accumulation of itemized knowledge in its own way, and conjuring up a mass of distorted perceptions and conceptions which the mind grasps without awareness of its own deluded constructs. Besides, the Buddha says regarding corrections of ignorance is needed ‘panna’(wisdom, ปัญญา). Not by learning or accumulating of facts, ‘panna’ can be gained by cultivation through a set of conditions that compose mental factors, components of consciousness which fit together into a systematic structure called a path in the word’ essential meaning, and a causeway for movement leading to end the sufferings called ‘the noble eightfold path’ (Bhikkhu Bodi, 2000).

For the eightfold path, it is not just a path to the end to suffering, but it is a gradual path of self-improvement (Prayutto, 1988). Therefore, it is adapted the nature of existence into practices of eight perspectives- ‘right views’, ‘right intention’, ‘right speech’, ‘right action’, ‘right livelihood’, ‘right effort’, ‘right mindfulness’, and ‘right concentration’ (Bhikkhu Bodi, 2000). The noble eight paths are not steps to be followed in sequence, one after another. On the contrary, these factors can be practiced simultaneously so that a factor can support each others. Considered from the

standpoint of practical training, the eight path factors can be divided into three groups: (i) the moral discipline group (*silakkhandha*), made up of right speech, right action, and right livelihood; (ii) the concentration group (*samadhikkhandha*), made up of right effort, right mindfulness, and right concentration; and (iii) the wisdom group (*pannakkhandha*), made up of right view and right intention (Bhikkhu Bodi, 2000).

Right view (*samma dhiti*, สัมมาทิฐิ) is the forerunner of the entire path, which could make one understand the starting point, destination, and the successive landmarks (Bhikkhu Bodi, 2000). Importantly, it could govern attitudes, actions, and whole orientation to existence because the right view has structured perception, then ordered values, and formed one's own idealistic framework in interpretation the meaning of beings in the world. These views are conditioning actions by lying behind choices and goals; besides, lying behind efforts to turn the goals from ideals to actuality. There are two different kinds of views--wrong view and right view (Bhikkhu Bodi, 2000). The wrong view will lead one toward courses of actions that eventuate in suffering. On the contrary, the right view will steer one toward right actions and freedom from suffering. For the right views, there are two kinds as well (Bhikkhu Bodi, 2000). The first is, called 'mundane right view', refers to the laws governing material and spiritual progress within the round of becoming, or with the principles that lead to higher and lower states of existence. The second is called 'supramundane right view', refers to the principles essential to liberation from the cycle of recurring lives and deaths. Interestingly, the mundane right views might be compatible to Habermas' communicative rationality.

Right intention (*Samma Sankappa*, สัมมาสังกัปปะ) or sometimes called 'right thought' means purposive aspect of mental activity, which involves the cognitive function. The Buddha states that the cognitive and purposive sides of mind do not remain isolated in separate compartments but intertwine and interact in close relation. Besides, this purposive aspect of mental activity is influenced by emotional predilections preference. However, the emotional predilections are influenced by views and they have reciprocal effect as well. Therefore, penetrating views of the nature of existence will be gained deep reflecting and validating investigating and then

brought about a restructuring of values or sets of mind moving toward goals commensurate with the new vision. This mind process is subjected to be right intention (Bhikkhu Bodi, 2000).

There are three sets of right intention, which are intentions for renunciation, good will, and harmlessness (Bhikkhu Bodi, 2000). For renunciation, there are thoughts that seek for abandoning own desires. To deeply understand desire, it needs to alter one's perception to be a wise consideration (yonisomanasikara). As previously mentioned, yonisomanasikara is thoughts or considerations that dig into the roots of involvements, explore to long-range consequences and evaluate the worthiness of one's goals. For good wills, it opposes ill wills that are governed by anger and aversion. The remedy that the Buddha recommends to counteract the ill wills is 'metta'. 'Metta' (เมตตา) is a compound of loving-kindness in an intense feeling of selfless love for other beings radiating outward as a heartfelt concern for other well-beings and happiness. Once one has 'metta' toward oneself, one would extend to others by expanding sense of identity beyond its ordinary confines and learning to identify with others. This process is like a psychological process of thought that entirely frees from theological and metaphysical postulates to be a simple, straightforward course of reflection, which enables one to share the subjectivity of others and experience the world from the standpoint of his/her, own inwardness (Bhikkhu Bodi, 2000). Lastly, the intention of harmlessness is a thought guided by compassion ('karuna', กรุณา). Like 'metta', compassion arises by entering into the subjectivity of others, by sharing their interiority in a deep and total way (Bhikkhu Bodi, 2000). The compassion refers to one's contemplating a person's suffering, either directly or imaginatively, and then reflecting it like oneself. In sum, these right thoughts are dynamic and correlated since they are based on the right view of the four noble truth. Interestingly, the right intention or thought might be compatible with some parts of Habermas's 'communicative action'.

The next three paths are right speech, right action, and right livelihood, which can be viewed as 'right conductions' that some of which are associated with

morality called ‘sila’ (precept, สีล). Sila means harmony and coordination, viewed by the Buddha on the levels of social, psychological, karmic, and contemplative. The Buddhist five basic precepts include some of the noble paths regarding right speech, right action, and right livelihood. Notably, harmony and coordination are some indications for Habermas’ communicative action.

For the right speech (*samma vaca*, สัมมวาจา), the Buddha views that all verbal animals should aware of the importance of speech since it can ruins lives, create enemies, and so on. There are four components of right speech, which are abstinence from false speech, slanderous speech, harsh speech, and idle chatter. For instance, ‘*musavada veramani*’ (มุสาวาจา) or false speech refers to avoiding telling lies, which can lead to disruption of social cohesion and solidation. Therefore, saying the truth is a must on the social level. However, the more significance would be on the individual level because the individual commitment to truth has been transcended to the domain of ethics and mental purification. The truthful speech is significant to learning and wisdom since the wisdom is embedded in the realization of truth. In addition, truth is not just a verbal proposition but the nature of things as they are. To realize truth, individual whole being has to be brought into accord with actuality with things as they are a vital requirement in communications with others. As a result, one respects thing as they are by speaking the truth. Once the truthful speech establishes a correspondence between own inner being and the real nature of phenomena, the wisdom would happen so that one could fathom the real nature (Bhikkhu Bodi, 2000).

For the ‘right action’ (*samma kammanta*, สัมมากัมมันตะ), it means refraining from unwholesome deeds that occur with the body as natural means of expression. The Buddha mentions three components of the right action; that is the abstinence from taking life, from what is not given, and from sexual misconduct. The right action is claimed to be related to the second path--‘right intention’. It is noted that these right actions are incorporated into unlawful actions.

For the right livelihood (*samma ajiva*, สัมมาอาชีวะ), it is a conduct for one's living in a righteous way. The Buddha mentions that wealth should be gained in accordance with certain standards. That practically means livings by legal, peaceful, gentle, honest, and harmless. Some strictly forbidden occupations are, for example, those concerning weapons, poisons, and intoxicants.

The last division of path--the concentration group-- is composed of right effort, right mindfulness, and right concentration. These three paths altogether work for having insight, wisdom and serenity. As a metaphoric tale stated,

Three boys go to a park to play. While walking along they see a tree with flowering tops and decide they want to gather the flowers. But the flowers are beyond the reach even of the tallest boy. Then one friend bends down and offers his back. The tall boy climbs up, but still necessitates reaching for the flowers from fear of falling. So the third boy come over and offers his shoulder for support. The first boy is standing on the back of the second boy, and then leaning on the shoulder of the third boy, to reach up and gather the flowers. In the smile, the tall boy who picks the flowers represents concentration with its function of unifying the mind. But to unify the mind concentration needs supports: the energy provided by right effort, which like the boy who offers his back. It also needs stabilizing awareness provided by mindfulness, which is like the boy who offers his shoulder. When right concentration receives these supports, it can draw in the scattered strands of thought and fix the mind firmly on its objects. (Bhikkhu Bodi, 2000, p. 31).

For details (Bhikkhu bodi, 2000), 'right effort' (*samma vayama*, สัมมาวาชามะ) refers to mental energy in the process of purified-mind practicing. The Buddha mentioned four steps for right efforts. Firstly, to prevent the arising of unarisen unwholesome states means to overcome hindrances like sensual desire, ill will, dullness and drowsiness, restlessness and worry, and doubt by treating these senses into a total withdrawal from the sensory world. Secondly, to abandon the arisen unwholesome states means to get rid of unwanted desires by mediation on impermanence, forces of shame (*hiri*, หิริ) and moral dread (*ottapa*, โอตปปะ), a deliberate diversion of attention, deep investigation of these desires, and by suppression. Thirdly, to arouse unarisen wholesome states means to develop enlightenment factors in which the right effort involves in a part of investigation. This investigation needs inceptive energy (shaking off lethargy), perseverance (propelling practice without slackening), and invincibility (leaving the hindrances).

For ‘right mindfulness’ (samma sati, สัมมาสติ), it refers presence of mind, attentiveness or awareness (Prayutto, 1988). It is not a kind of awareness at work (applying cognitive function) as in usual mode of consciousness. On the contrary in the practice of right mindfulness, the mind is trained to remain in the present, open, quiet, and alert so that the whole process of thoughts is a way of coming back into the present, of the standing in here and now without slipping away, without getting swept away by the tides of distracting thoughts. In other words in the ordinary consciousness, the mind begins a cognitive process with some impression given in the past or present (mental constructs). This process of mental construction would cause the deluded mind, cloaked in ignorance, projecting its own internal constructs outwardly. As a result, what one knows as the final object of cognition, what one knows as the basic of values, plans, and actions, is a patchwork product, not the real one (Bhikkhu bodi, 2000). On the contrary in the mindful consciousness, the mind begins with an initial immediate impression, then processes into seeking interpretation, categorization, assumptions, and synthesis as complex interpretative schemes as the object to itself. However, right mindfulness gains by own practices and by contemplation of the body, contemplation of feeling, contemplation of the state of mind and contemplation of the phenomenon. Remarkably, the right mindfulness might be compatible with Habermas’ criticizability value.

The last path--‘right concentration’ (samma samadhi, สัมมาสมาธิ) refers to the centering of mind and mental factors rightly and evenly on an object. Once one gets Samadhi (wholesome concentration), one can collect together the ordinarily dispersed and dissipated stream of mental states to induce an inner unification. As a result, these can bring about the purified mind process of investigation so that all exists are viewed as they are (wisdom). On the contrary, the untrained mind is that in concentration moves in a scattered manner like a flapping of a fish that is taken from the water and thrown onto dry land. It might be called a distracted mind, which can produce worries and concerns, a constant prey to the defilements, views of only fragments, and distortions, by the ripples of random thoughts (Bhikkhu bodi, 2000). The more having Samadhi, the more freedom from distraction. Then, softness and serenity in mind would occur. Development of concentration needs preliminary requirements such as

right views and thoughts, purified moral discipline, and practices. It should be noted that freedom from Samadhi might not be the same as freedom from social construction as Habermas stated.

In summary, the Buddhist principles are aims to end sufferings. The human sufferings could be ended by serenity of mind and insight, which could occur under attaining wisdom. To derive wisdoms, one should have deep understandings of nature as it is which needs the process of purified mind. The Buddha mentions the complexity of purified-mind process into practices as the noble eightfold path. Interestingly, the Buddhist principles could possibly help to solve social conflicts by promoting individual wisdom in order to solve the social problems based on deep and thoroughly investigation until reaching perfect comprehension of the Buddhist philosophy. As a result, the perfect problem solving would be possibly achieved.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

This research is aimed at revealing influences of social ideologies on physicians' types of rationalities and then on strategic or communicative actions regarding end-of-life care including euthanasia. As such multiple couple relationships could be investigated. Moreover, all the couple relationships that are in concerns should altogether be composed as a structural model. Therefore, these multivariate causal relationships forming a structural model, needs a holistic approach. Besides in order to clearly demonstrate these causal relationships, numerical data should be gathered. As a result, the study was designed as a quantitative study; and all related-numerical data were simultaneously analyzed by an advanced statistics called 'Linear Structural Relationship model'.

This study methodology in aspects of ethical concerns has been approved by the ethics committee of the Institutional Review Board (IRB) of Mahidol University (MU) since August, 6, 2009. The registered number of MU-IRB is 2009.174.0608.

### **3.1 Population and sample**

The target populations of this study were general practice (GP) physicians who graduated from Thai medical schools. However, this study is intended to include the GP physicians who have gained experience as general practitioners for a few years and are going to be trained as medical specialists in the near coming future. This is due to the fact that communicative behavior is a necessity and can be absorbed during the period of their specialist training.

In Thai tradition, most of GP physicians prefer to be specialty physicians. Therefore, general physicians who meet criteria of The Medical Council of Thailand can apply for their preferred specialty-medical curriculums in all Thai medical-school hospitals offering those programs of studies. Once GP physicians pass the admission examination, they will be specialty-trainees and called ‘residents’. Generally, there are three years of training. Residents are categorized by number of year in training. The first-year residents, called for who has been trained less than one year, have collectively been socialized as specialty physicians less than the second and the third year residents, respectively. Therefore, the target group (samples) in this study was purposefully the first-year residents in the academic year 2009 at King Chulalongkorn Memorial Hospital. The reason is that ideologies and rationalities of the first-year residents would less likely be intervened by specialty ideologies. In addition to selection by the number of year in training, this study purposively included residents only from King Chulalongkorn Memorial Hospital due to its long-term medical schools (since 1947). As a long-term medical school, King Chulalongkorn Memorial Hospital has been continuously increasing facilities to provide increasing numbers of specialty training curriculums and residents. Recently, there have been residential positions approximately available 200 new residents for over 10 special training programs each year. For this number of first-year residents, it should be suitable for this study sample size that would be shown its calculation in the following section.

For the sample size, this study was designed to demonstrate the paths of ideologies, rationalities, and physicians’ types of communication. Therefore, path analysis was apply to the analysis. For path analysis, the sample size should be derived from the number of parameters (observations) which depends on the number of variables in the model. Generally, the maximum parameters depending on the number of variables in the model that can be calculated by the following formula (Norman, 2003):

$$\text{The maximum numbers of parameters} = k(k+1)/2$$

when  $k$  = the numbers of variables in a model

The numbers of parameters of a model indicate the sample size in which 10 samples will be required for 1 parameter (Streiner, 2005). According to the conceptual framework of this study, there are 8 variables. Therefore, the maximum numbers of parameters in this study are  $(8 \times 9)/2$ , which is equal to 36. Then, the sample size in this study should be approximately 360 residents. However according to the study's conceptual framework, the actual number of expected observation is approximately 20 observations, which is not equal as the maximal parameter that could possibly be (calculated maximum observations = 36). Therefore, the sample size that should be planned was approximately 200 residents. Notably, the least number of sample sizes for path analysis that have ever been recommended is that the sample size should not be less than 100 samples (Hoyle, 1995). As all the first-year residents at King Chulalongkorn Memorial Hospital in the academic year 2009 was approximately 200 persons, therefore, these residents were reasonably to be included in this study.

### **3.2 Research instruments**

Based on the study conceptual framework (see chapter I), the number of variables that should be assessed is eight variables. They are categorized into three groups. First, a social ideology group is to be dealt with the medical ideology, the system ideology, the morality ideology, and the criticizability value. Second, a rationality group is to be dealt with the cognitive-instrumental rationality and the moral-practical rationality. Finally, an action (speech act) group is composed of the strategic action and the communicative action. As previously mentioned, these variables were planned to assess in aspect of quantitative data. Therefore, the study questionnaire was then developed accordingly.

Initially, all of eight variables were clarified for their thoroughly specific meanings based on Habermas' theories. Then, operation definitions of eight variables were set up (see chapter I). Forms or methods of assessment depending on characteristics of the defined variables or constructs could be categorized into three groups as previously stated. After clear concepts of these variables, item-generating was then the next step.

For the social ideology, all four constructs have common characteristics that are ideas embedded in physicians' thoughts. Therefore, assessments of the social ideologies were designed to construct idea-embedded statements. Contents in these statements correspond with specific meanings of each ideology. As a result, the social ideology assessment contained four scales (the medical ideology scale, the system ideology scale, the morality ideology scale, and the criticizability value scale). In processes of evaluation, responses by physicians were set as degree of agreement with Likert-type scale 1-6. In order to disguise the respondents, contents in these statements were mixed up between positive direction and negative direction toward the main meaning in each subcomponent. Thus, it needed to convert the responded scores of the negative-direction items before analyzing. Moreover, all items of these four scales were mixed up into the social ideology scale, which was a part from the totally four parts of this study questionnaire. Constructions of the four scales in details will be explained in the following paragraphs.

For constructing medical ideology scale, it was composed of two subcomponents. Based on Habermas' concepts of scientific domination (Habermas, 1970), there have been some scientific-related ideologies involving individual modern lives. Predominately found in physicians, ideas regarding subjective-free concerns and universal acts by universal laws are embedded in forms of 'reduction' ideology, in which these perspectives have induced physicians' reductive ideas, such as interests in disease instead of health, and interests in physical illness instead of concluding mental problems. Besides, it cannot be denied that common ideas embedded in the modern lives are attempts to control (controllability) environments to be suitable for human beings, such as control infectious diseases, inventing technologies for any convenience, and attempts to accurate prediction in any circumstances. Therefore, the 'reduction' view and the 'controllability' view therefore were concluded in the medical ideology. Then, the items regarding the subcomponent definitions were generated. Some examples of the generated items are as such, 'Physician's main duty is to treat diseases.' ('reduction' subcomponent); 'Better health is a result of advances in medical technology.' ('controllability' subcomponent)

Regarding construction the system ideology, it was composed of three subcomponents. The main matter of Habermas' theories states that individual lives are involved by systematic arrangement called 'the system'. The systems have existed by agreements of social members, and they can interfere with individual lives. Habermas describes that the system influences individuals by transferring some values then melting into reasons of preferred formality (Habermas, 1984). Being formal or systematic arrangement, it brings about controllability and predictability, which they altogether lead to high productive yields (Ritzer, 1996). In capitalism system, productivity addition to efficiency should be ultimate values. As a result, the system seems to be maintained by spreading these three ideas into all individuals. All of physicians are involved as well. Therefore, ideas regarding formality, productivity, and efficiency are altogether investigated in terms of system ideology. Amount of items according to definitions of these mentioned subcomponents were constructed. Some examples of the generated items are, 'Good organizations, including medicine, are those that operate systematically.'; 'A society will sustain on a condition that people must work'; and 'Physicians must be conversant with management'. These three examples were included in formality subcomponent, productivity subcomponent, and efficiency subcomponent, respectively.

For constructing the morality ideology, Habermas views that the second human interest, the so called 'interaction interest', is associated with all social-being interactions (Habermas, 1984). Norms and morals are related to these social-being interactions. Therefore, all general ideas that have been commonly mentioned in Thai culture that are associated with being a good man and being good social members can be included in this scale. For instance, generated items were 'Respecting others is a must.'; 'We are all independence.'; 'Abstinence from alcoholic drinking is virtuous.' and 'Let life take its natural course.'

Focusing on the criticizability value, the third human interest-emancipation interest or human freedom should be an important desire of an individual, but it has been suppressed by social constructions (Habermas, 1984). Most of social conflicts have been derived from self-interests embedded by social

constructions (Ritzer, 1996). Therefore, Habermas claimed the necessity of accepting the idea differences. The method proposed by Habermas is interpersonal communications, in which he views that these communication processes can bring about mutual understandings, the acceptance of idea differences to conflict solution. As a result, individuals should have open minds that Habermas means 'being criticized', 'eager to criticize' and 'able to criticize' (Baxter, 2002). 'Being criticized' and 'eager to criticize' might be concluded as participation ideas (values regarding enjoying discussion). For 'able to criticize', it might be critical ideas (values regarding social deconstruction). These two values were set as subcomponents of the criticizability value scale. Then, generating items were proceeding. For the participation idea component, generating items were for example, 'Those with limited experience should say last.'; 'The saying 'speech is silver, silence is gold' should be upheld as a principle of one's performance.', and 'One should not express his own viewpoint if it is different from that of the majority.'

Concerning the second group--the rationalities, they are patterns of reasoning. Therefore, judgments regarding some particular conditions are necessary. Assessments of the rationalities were in the forms of two vignette-based and dynamically end-of-life care settings that need decision makings. In details, each vignette was composed of a background part, which contained background of the diseases, patient conditions, and physician conditions. A communicative-interaction part, another part, contained reasons behind decision-makings/thoughts that came from patients, relatives and physicians, who involved in the vignettes. Focusing on the background part, two kinds of patients suffering from two terminal diseases were created. One of them contained contents regarding surgical treatment, the other contained contents regarding intensive care treatments. Both of these treatments cannot cure the diseases, and can possibly cause serious adverse effects. Besides, differences in two patients' perspectives were set. They were perspectives of did not refuse and tried to refuse the offering treatments. Focusing on the communicative-interaction part, the supportive reasons in the two vignettes were designed to mix between those of the cognitive-instrumental rationality and the moral-practical rationality. Respondents could assess the provided reasons in aspects of their degree of

agreement with Likert-type scale 1-7. These two vignette-based rationality scales were altogether included in a part in the questionnaire.

Focusing on construction the reasons regarding cognitive-instrumental rationality, contents should be physicians' reasons of limited concerns, such as self-interest values, predominately focusing on medical knowledge, or preference of accuracy, controllability and efficiency. For example, supposing a physician gives his advanced-cancer patient a reason for a provided treatment that it may not be cured, but cause pain afterwards. Realizing his patient's fear of pain, he tries to reason with her that the pain can be under control due to the advance technology of medical devices. Another example of content regarding preference to be accurate is that a physician gives his patient a pro-reason for a surgical treatment to know exactly the tissue pathology. In both cases, to what degree of agreement should be justified.

For construction of the moral-practical reasons, contents were set according to Kohlberg's theories since Habermas' moral-practical rationality is related to reasons regarding multiple dimension concerns (mainly regarding social contexts). Based on Kohlberg theories, individual morals develop from self-interest doing virtues (preconvention stages), such as if a boy does not telling a lie for fear of punishments, it means that this boy's moral reason is limited at his self-interest. Remarkably, this preconvention stage of moral is seemed to be compatible with the cognitive-instrumental rationality. For the next stages called 'conventional stages', these stages are stated associated with social-interest doing virtues, such as one not killing the other due to against civil or religious laws. For example, a reason stated in the questionnaire was a physician attempted to refuse to the cancer patient's decision for no further treatment with his reason that he has to perform treatments because it was his duty. The last basic stages called 'post conventional stages', these stages are virtues regarding senses of humanity, equality and all happiness. For illustration, one should not kill the other because he is a human. For instance, a reason stated in the questionnaire was that a physician did cardiopulmonary resuscitate for the cirrhosis patient. After recovery, the patient told his intention of no resuscitation to this physician. However, this physician gave a reason for what he did that anyone would

offer some assistance for one who is suffering or dying. Since the basic moral stages of Kohlberg regarding convention and post-convention are morals beyond self-interest, so the provided reasons of moral-practical rationality were set corresponding to them.

Regarding the actions, they are assumed as speech acts. Therefore, it is necessary to create some particular conditions in the forms of conversations (dialogues between physicians and patients). Assessments of the speech acts were in forms of three vignette-based and dynamically end-of-life care conversations. These three vignettes contained a background part that described terminal physical conditions of three patients. Besides, four dialogues (a dialogue part) were created regarding treatments for each vignette. The dialogues were conversations debating in cares for the patients in vignettes, which conducted by either patient or their relatives with a physician. In total, there were 12 dialogues including in three vignettes. In each dialogue, some physicians' cues of speaking were blank in order to let respondents make assessments. The assessments were judgment for four prepared utterances (in each dialogue) in which two utterances were in aspects of strategic speech acts and the rest utterances were in aspects of communicative speech acts. The respondents were asked to assess their opportunities to use each utterance in case of total 6 times of opportunities. As a result, ratios of probability that were 1/6, 2/6, 3/6, 4/6, 5/6, and 6/6 became choices of assessments.

Focusing on constructing the strategic speech acts and the communicative speech acts, it needs to know their definitions or differences between them. Habermas has recommended that differentiation utterances between the strategic speech acts and the communicative speech acts can be done by checking four 'validity claims' ('comprehensibility', 'truth', 'appropriateness', and 'sincerity') (Habermas, 1984). In brief, comprehensibility refers to a speaker has to select a comprehensible expression or practically tries to rephrase sentences. Therefore in the questionnaire, utterances regarding strategic speech acts were incomprehensible voices by physicians, such as using medical terms, confused meanings, and unclear explanations. On the contrary, utterances regarding communicative speech acts were physicians' understandable

voices if assessed by lay people. For the truth validity, it refers to one's application of his/her knowledge in terms of truth belief or evidence. Remarkably, it might be impossible that a physician could suggest treatments with untrue knowledge or irrelevant medical knowledge. Therefore in the truth claim, utterances regarding strategic speech acts contained incomplete information spoken to patients; whereas utterances regarding communicative speech acts contained complete information. For appropriateness claim, it simply refers to concerns for other interests. Thus, it should practically be sharing presuppositions among speakers at conversations. As a result, physicians' utterances that showed concerns in patients/relatives perspectives became the communicative speech acts. Some physicians' utterances that repeatedly implied physicians' perspectives were subjected to be the strategic speech acts. Finally, the sincerity claims regarding communicative speech acts practically were physicians' utterances that showed reluctance to promote patients/relatives to share their information. On the contrary, physicians' utterances that implied suppression of sharing information by patients/relatives were subjected to be the strategic speech acts.

In summary, the instrument of this study was a Thai-version, self-administered questionnaire constructed based on Habermas' theories and other related-theories. The questionnaire was constructed in Thai language and composed of four parts as follows:

Part I: This part included characteristics of the respondents such as age, gender, and in-trained specialty of medical curriculums. This part was presented in the forms of open-end questions

Part II: This part was for assessment physicians' social ideologies. It included four scales that were the medical ideology scale, the system ideology scale, the morality ideology scale, and the criticizability value, which their items were mixed up. A Likert-type scale 1-6 was used for evaluation degree of agreement upon the statements regarding ideas.

Part III: This part was for assessment physicians' rationalities. It included two mixing scales of the cognitive-instrumental-rationality scale and the moral-practical rationality scale. A Likert-type scale 1-7 was used for evaluation degree of agreement upon the statements regarding supportive reasons.

Part IV: This part was for assessment physicians' actions of communication. It included two mixing scales of the strategic action scale and the communicative action scale. A Likert-type scale 1-6 was used for evaluation probability of using the speech acts.

### **3.3 Qualification of the questionnaire**

Content validity was initially and independently performed by four experts (in social science, medicine, and end-of life-care practices). For the ideology scale, all of constructed items were carefully examined whether their item contents corresponded with their operation definitions. For those vignette-based forms, all the background contents in the vignettes (two vignettes in the rationality scales and three vignettes in the action scales) were supposed to be closed to actual situations of end-of-life care settings. The experts in medicine and end-of life-care practices performed evaluation for these matters. For the assessment part of rationality scales, all the experts agreed with every supportive reason whether it corresponded with its definition regarding rationalities. Besides, the provided moral-practical reasons were also examined for their relevance to the theoretical characteristics of Kohlberg's moral reasoning (stage 3, 4, 5, and 6). For the assessment part of the action scales, all the experts agreed that the provided speech acts could represent as the strategic speech acts or the communicative speech acts. Furthermore, a comprehensible examination, such as inappropriate grammar, inappropriate or unnecessary words, confused meaning and overlapped meanings- were altogether thoroughly reviewed.

As a result of verifying content validity, some statements or items were excluded; some were adjusted or revised. Furthermore, some vignettes were modulated to be close to real end-of-life care settings. Several reexaminations for content validity were carefully one until all the experts approved for all the items and the vignettes. After the final approval, the social ideology scale (including four ideologies) contained 111 items (approximately 30 items per each ideology scale; the rationality scales (including two rationalities) contained 30 statements of reason; and the action scales (including two speech acts) contained 48 speech acts.

Reliability regarding internal consistency (Cronbach's reliability) was then tested. Samples for qualifying this reliability test were the first-year residents at King Chulalongkorn Memorial Hospital in the academic year 2008 because these samples had characteristics so close to the purposive samples in the main study. A number of samples for reliability test were approximately 30 persons. For qualified indices, the item-total item correlations, item-item correlation coefficients, as well as the alpha of Cronbach were reviewed to guide for further modulations.

In addition to the internal-consistency reliability test, another process of identifying for good items was a discrimination method. All of the item scores were supposing divided into two groups that were those high given-score group (30% of total samples counting down from the highest score) and low given-score group (30% of total samples counting up from the lowest score). Then, the mean difference between these two groups was tested by t-test on every item. Items whose mean-score differences were found no statistical significance were taken into consideration for possible exclusions.

The first modulation was achieved by item revision and item exclusion. After that, the second reliability test was performed. The revised questionnaire was handed out to another group of samples (approximately 30 persons). Finally, the second tested results indicating acceptable alpha of reliability in all of the eight scales.

In summary, the eight scales had been verified for content validity. After (content) validating, the first adjusted questionnaire was processed into the first internal consistency reliability test. Some items or statements among eight scales were excluded or adjusted based on the indices as previously mentioned. Then, the second adjusted questionnaire was prepared for the second process of reliability verification. The second result revealed small adjustment needed. Then, exclusions of some items were done. Consequently, the remaining items could make good alpha values for every scale (Table 3.1). Therefore, the final-version questionnaire contained qualified eight scales.

**Table 3.1** A summary of the final-version questionnaire after verification; eight scales with their alpha values

| The scale in the questionnaire<br>(number of items)    | Subscale<br>(number of items)        | Alpha value |
|--------------------------------------------------------|--------------------------------------|-------------|
| Medical ideology scale<br>(16 items)                   | ‘reduction’ (10 items)               | 0.9087      |
|                                                        | ‘controllability’ (6 items)          |             |
| System ideology scale<br>(14 items)                    | ‘making formality’ (6 items)         | 0.8238      |
|                                                        | ‘productivity’ (6 items)             |             |
|                                                        | ‘aiming at efficiency’ (4 items)     |             |
| Morality ideology scale (14 items)                     |                                      | 0.8481      |
| Criticizability value scale<br>(17 items)              | ‘critical idea’ (9 items)            | 0.8136      |
|                                                        | ‘participation idea’ (8 items)       |             |
| Cognitive-instrumental rationality scale<br>(15 items) |                                      | 0.8330      |
| Moral-practical rationality<br>(12 items)              | ‘moral stage 3’ (2 items)            | 0.7840      |
|                                                        | ‘moral stage 4’ (5 items)            |             |
|                                                        | ‘moral stage 5’ (3 items)            |             |
|                                                        | ‘moral stage 6’ (2 items)            |             |
| Strategic action<br>(20 items)                         | ‘comprehensibility ignore’ (5 items) | 0.8829      |
|                                                        | ‘truth ignore’ (5 items)             |             |
|                                                        | ‘appropriateness ignore’ (5 items)   |             |
|                                                        | ‘sincerity ignore’ (5 items)         |             |
| Communicative action<br>(23 items)                     | ‘comprehensibility’ (6 items)        | 0.8883      |
|                                                        | ‘truth’ (5 items)                    |             |
|                                                        | ‘appropriateness’ (6 items)          |             |
|                                                        | ‘sincerity’ (6 items)                |             |

### 3.4 Data collection

Distribution of the final-version questionnaire was planned, so the total thirteen specialty trainings were arranged for distribution into 4 groups. There were four research assistants who shared responsibility for distribution. The research assistant took a number of the final version questionnaire to places that physicians could be reached. Besides, the research assistant contacted physicians individually in order to give some important research information then asked for voluntary

participation. The final questionnaire contained long several vignettes and many items for assessment so that participants needed spending amount of time. Therefore, the interviewing process in this study was designed to be written replies by participant themselves. Participants could possibly take the questionnaire with them so that they could give their information whenever they had available time. The research assistants had collected the filled-in questionnaires from the appointment places every a few days for 3 months.

All the responded questionnaires were coded by the running number and then keyed in a database program. All data in every response at the process of key in was rechecked before saved.

### **3.5 Data analysis**

All responses were compared to the expected samples regarding specialty courses in aspects of number and percentage. Regarding characteristics of the respondents, three specific ranges of age and gender were summarized in each specialty course in the forms of frequency and percentage. In total, mean and standard deviations were used.

All given scores on the provided items were analyzed with mean and standard deviation. However, the item scores of some negative-direction statements were converted before getting into further processes. Besides, summations of the scores of items that concluded in each scale were proceeding to be the total score. The eight total scores (regarding the medical ideology, the system ideology, the morality ideology, the criticizability value, the cognitive-instrumental rationality, the moral-practical rationality, the strategic action and the communicative action) were basically described by range, mean together with standard deviation. For those scales with subscales, the scores of items that concluded in each subscale were sum to be the subscale scores and were also described by range, mean together with standard deviation.

For analysis of association, the age, gender, and specialty courses were taken into accounts with the eight total scores. Regarding the age and the total scores, Pearson's correlations were applied. For association between the gender and the total score, t-tests were used for testing mean differences between those total scores of male and female. Finally the specialty courses, they were initially categorized into two groups indicating by degree of opportunities to communications regarding end-of-life cares. A moderate-to-high degree of opportunity group included the respondent physicians who trained in Anesthesiology, Ear Nose Throat, General surgery, Medicine, Obstetrics and Gynecology, Pediatrics, and Psychiatry. A low-to-none degree of opportunity group included the respondent physicians who trained in Forensic Medicine, Ophthalmology, Orthopedic surgery, Pathology, Radiology, and Rehabilitation Medicine. After that, the mean differences of the total scores between these two groups were analyzed by t-test. A significant level was indicated at p-value < 0.05.

In order to test the three research hypotheses, the eight total scores were simultaneously proceeding into path analysis and structural equation modeling. This process was accomplished by LISREL 8.80 (student version). The basic assumed variables in path analysis could be categorized into two types--exogenous factors (variables) and endogenous factors. In this study the social ideologies (the medical ideology, the system ideology, the morality ideology and the criticizability value) were assumed to be the exogenous factors. For the endogenous factors, the two rationalities and the two (intentional) actions were assumed. A structural model of multiple relationships that processed first analysis was a model presented in the thesis conceptual frame work. If some analyzed results indicated a 'fit' model, it would refer that this draft model corresponded with the observed data, and then it would say that this draft structure of multiple relationships was valid in the real world. Therefore, fit criteria should be initially concerned. Seven fit indices that were considered for adjustment in this study included chi-square value, chi-square/degree of freedom, goodness of fit (GFI), adjusted goodness of fit (AGFI), root mean square residual (RMSEA), smallest standardized residual, and largest standardized residual. Normally, adjustment of model should be based on those indicated results and more importantly

according to the theories. Besides in the process of path analysis, some relationships in an initial model should be modulated in order to get a new structure of multiple relationships that meets more fit criteria. As a result, multiple attempts of model adjustment should be repeated to possible reach fit model criteria. In this study, three adjustments were taken that meant three adjusted models were revealed. Most of them met some fit criteria. However, the final adjusted model (ADJUST3) mostly met fit criteria with much more significant causal relationships.

Once deriving the fit model, some important analyzed results of the fit model should be considered. Firstly, path coefficients that indicated a couple of direct causal relationship (in-between endogenous factors) are analyzed for every couple. The path coefficients are presented close to a causal relationship line in the figure of analyzed models. Significant causal relationships can be indicated by  $p\text{-value} < 0.05$ . Only the statistical significant causal relationship can imply that this causation and its consequence are valid. Secondly, correlation coefficients indicate a couple of direct causal relationship (in-between exogenous factors). A  $p\text{-value} < 0.05$  also indicates significant relationships. Thirdly, errors of variance (of the endogenous factors) indicate some error of approximations for each endogenous factor. On the contrary, this value can be converted to be a coefficient of determinant by taking this value minus from 1. The coefficient of determinant can refer to how much degree that all the (both direct and indirect) causal factors determine an endogenous factor of the stated value. Therefore, a high value of coefficient of determinant of a factor can imply that high degree of coverage for possible relevant causal relationships that are presenting in the analyzed model to that factor. Moreover, it can reveal indirect causal effects by calculating path coefficients along all of the causal paths toward an interesting factor. Therefore, direct effects, indirect effects, together with total effect toward the two rationalities and the two actions were also in concerns of findings

## **CHAPTER IV**

### **RESULTS**

As stated in Chapter I, this study aimed at studying causal paths of communicative and strategic actions. Based on Habermas' concepts, types of human actions are determined both by social influences as social ideologies and inner influences as rationalities. There are several types of human actions in aspects of a number of paradigms in social sciences. However regarding Habermas, practical human actions can be strategic or communicative actions. Moreover, Habermas suggests that the best human actions should be communicative actions. Therefore, the mentioned two groups of theoretical causes of Habermas' human actions were investigated. As such, social ideologies, rationalities and types of action were measured by the constructed and verified questionnaire as mentioned in chapter III. Consequently, all measured variables were processed in path analysis in order to identify the best model for explaining the occurrence of communicative action in euthanasia settings.

The results of this study therefore are arranged for presentation into 5 parts. Part I is the description of characteristics of the respondents. Part II is the depiction of their social ideologies which are composed of medical ideology, system ideology, morality ideology, and criticizability values. Part III is the description of rationalities which are comprised of cognitive-instrumental rationality and moral-practical rationality. Part IV is the demonstration of physicians' intentional types of actions as related to communication regarding end-of-life care and passive euthanasia. The two types of communication are strategic and communicative actions. Finally, the causal relationships among the measured variables regarding the assumptions of the study and the best model for predicting communicative action are presented in Part V.

#### 4.1 Characteristics of the respondents

The study purposely selected all first-year physicians (residents) who have trained to be specialists in academic year 2009 at King Chulalongkorn Memorial Hospital. There are 13 specialty courses with differences in number of trainees (residents). The numbers of trainees at King Chulalongkorn Memorial Hospital are previously mentioned in chapter III. There were totally 173 physicians (92.51%) who filled out the questionnaire which took several weeks to be accomplished. The trainees in almost all specialty courses, excepting Medicine specialty participated in the study (Table 4.1). For Medicine specialty, the number of trainees participating in the study was 36 out of 50 residents (72%). In the process of Medicine training program, the trainees had to rotate to other hospitals in other provinces. Therefore, there were some difficulties in communicating and inviting them to participate in this study.

**Table 4.1** Frequencies and percentage of respondents by specialty courses

| Specialty Courses       | Trainee Population<br>(N) | Participants |              |
|-------------------------|---------------------------|--------------|--------------|
|                         |                           | (n)          | %            |
| Anesthesiology          | 16                        | 16           | 100.00       |
| Ear Nose Throat         | 6                         | 6            | 100.00       |
| Forensic Medicine       | 2                         | 2            | 100.00       |
| General Surgery         | 25                        | 25           | 100.00       |
| Medicine                | 50                        | 36           | 72.00        |
| Obstetrics-Gynecology   | 10                        | 10           | 100.00       |
| Ophthalmology           | 10                        | 10           | 100.00       |
| Orthopedic Surgery      | 5                         | 5            | 100.00       |
| Pathology               | 4                         | 4            | 100.00       |
| Pediatrics              | 24                        | 24           | 100.00       |
| Psychiatry              | 10                        | 10           | 100.00       |
| Radiology               | 22                        | 22           | 100.00       |
| Rehabilitation Medicine | 3                         | 3            | 100.00       |
| <b>Total</b>            | <b>187</b>                | <b>173</b>   | <b>92.51</b> |

Generally in Thailand, the specialist-trainings are available for general-practice physicians who have already graduated from a medical school with a Thai medical license and have practiced as general-practice physicians for 1-3 years. Therefore, practitioners normally will have their specialist-trainings at approximately the age around 26-28 years old. Corresponding to the study samples, the average age of the first year trainees was 27.08 years (S.D. = 1.08 years): range of the trainees' age was 24-33 years. Most of the trainees' ages (69.36%) were in the range of 27-30 years, and almost all of them were less than 30 years old (Table 4.2).

Consequently in this study, there were 110 females (65.38%) and 63 males (36.42%). Due to recent situations a predominant proportion in the medical career in Thailand, most of specialty courses have higher numbers of female trainees than those of male trainees excepting General surgery, Orthopedic Surgery and Pathology (Table 4.2).

## **4.2 Social ideologies**

Social ideologies were operationally defined as bodies of thoughts or conceptions reflecting the social means and aspirations of individuals, a particular social group (Thai physician group), and cultures. Based on Habermas, social ideologies are representations of social influences on an individual. As physicians, the main body of thoughts is medical concepts or ideologies. On the other hand as a member of the society, other bodies of thoughts are system ideologies and morality ideologies. However, Habermas also indicates special characteristics of individual thought that are eager to think differently, ready to consider all different thoughts deriving from their own ideas and also as a result of communicating with others about what they think. Habermas believes this type of thought sometimes called 'criticizability' might bring about the admiration of social actions called 'communicative actions' (Baxter, 2002).

**Table 4.2** Age and gender of the respondents

| Specialty                    | Range of Age       |                 |              | Female          | Male            | Total           |
|------------------------------|--------------------|-----------------|--------------|-----------------|-----------------|-----------------|
| Courses                      | (numbers in years) |                 |              | %               | %               | %               |
|                              | 24-26              | 27-29           | 30-33        | (n)             | (n)             | (n)             |
| Anesthesiology               | 4                  | 12              | 0            | 10.91 %<br>(12) | 6.35 %<br>(4)   | 9.25 %<br>(16)  |
| Ear Nose<br>Throat           | 1                  | 5               | 0            | 3.64 %<br>(4)   | 3.17 %<br>(2)   | 3.47 %<br>(6)   |
| Forensic<br>Medicine         | 0                  | 2               | 0            | 0.91 %<br>(1)   | 1.59 %<br>(1)   | 1.16 %<br>(2)   |
| General<br>Surgery           | 6                  | 17              | 2            | 5.45 %<br>(6)   | 30.16 %<br>(19) | 14.45 %<br>(25) |
| Medicine                     | 6                  | 30              | 0            | 21.82 %<br>(24) | 19.05 %<br>(12) | 20.81%<br>(36)  |
| Obstetrics-<br>Gynecology    | 2                  | 8               | 0            | 5.45 %<br>(6)   | 6.35 %<br>(4)   | 5.78 %<br>(10)  |
| Ophthalmology                | 2                  | 8               | 0            | 7.28 %<br>(8)   | 3.17 %<br>(2)   | 5.78 %<br>(10)  |
| Orthopedic<br>Surgery        | 0                  | 4               | 1            | 0.00 %<br>(0)   | 7.94 %<br>(5)   | 2.89 %<br>(5)   |
| Pathology                    | 1                  | 2               | 1            | 0.91%<br>(1)    | 4.76 %<br>(3)   | 2.31 %<br>(4)   |
| Pediatrics                   | 1                  | 22              | 1            | 19.09 %<br>(21) | 4.76 %<br>(3)   | 13.87 %<br>(24) |
| Psychiatry                   | 7                  | 2               | 1            | 5.45 %<br>(6)   | 6.35 %<br>(4)   | 5.78 %<br>(10)  |
| Radiology                    | 13                 | 8               | 1            | 16.36 %<br>(18) | 6.35 %<br>(4)   | 12.72 %<br>(22) |
| Rehabilitation<br>Medicine   | 3                  | 0               | 0            | 2.73 %<br>(3)   | 0.00 %<br>(0)   | 1.73 %<br>(3)   |
| Total                        | 46<br>(26.59%)     | 120<br>(69.36%) | 7<br>(4.05%) | 110<br>(63.58%) | 63<br>(36.42%)  | 173<br>(100%)   |
| Mean = 27.08                 |                    |                 |              |                 |                 |                 |
| S.D. = 1.08    Range = 24-33 |                    |                 |              |                 |                 |                 |

**Table 4.3** The medical ideology and its subscales

| Medical ideology                         | Possible score<br>range | The observed scores |       |      |
|------------------------------------------|-------------------------|---------------------|-------|------|
|                                          |                         | Range               | Mean  | S.D. |
| Total score                              | 16-96                   | 34-71               | 56.06 | 7.64 |
| Subscale 1: Reduction<br>(10 items)      | 10-60                   | 22-46               | 35.97 | 4.76 |
| Subscale 2: Controllability<br>(6 items) | 6-36                    | 10-33               | 24.69 | 4.08 |

Focusing on the medical ideology, it was operationally defined as physicians' perception and interpretation in terms of reduction and controllability views. From the total of sixteen items, the instrument composed of contents regarding reduction views (10 items) and controllability views (6 items) was reliably (see chapter III). The range of possible total scores was 16 to 96 (Table 4.3). From the descriptive analysis presented, the respondents responded on the 'controllability' subcomponent in a fashion of high level of controllability (mean-score range = 3.11-5.01) but for the 'reduction view' subcomponent, it was in a fashion of low and moderate levels (mean-score range = 1.82-4.13). Ideas of the 'reduction' (see subscale 1, Table 4.4) that the respondents moderately agreed were 'body as mechanics', presented by the moderate to high scores of item 9 and item 10; especially, the item stated 'Successful treatment requires through understanding of the intricate bodily functions.' (item 9) was responded with the mean score of 4.01 (S.D. = 1.25). The concept of 'body as mechanics' should lead to an idea of organs as mechanical parts that can be removed and replaced by a new part without systemic dysfunction (item 10). The mean score of item 10 was 3.07 (S.D. = 1.24) that was on a moderate level. Regarding the belief of effectiveness in only scientific-based knowledge, the respondents responded on a moderate fashion level. All items of this ideology (items 1-3) were responded in moderate scores; however item 1- Physicians should dispense their treatment according to the textbooks or research findings- showed the highest mean score of 4.13 (S.D = 0.97). For the ideas of 'reduction view in general practices' (items 4-8), the respondents responded on a fashion of low and moderate levels.

**Table 4.4** The mean scores and standard deviations of the medical ideology

| Medical ideology<br>(16 items)               |                                                                                                    | Mean<br>(S.D) |
|----------------------------------------------|----------------------------------------------------------------------------------------------------|---------------|
| <b>Subscale 1: Reduction (10 items)</b>      |                                                                                                    |               |
| 1                                            | Physicians should dispense their treatment according to the textbooks or research findings.        | 4.13 (0.97)   |
| 2                                            | A drug which has its efficacy proven in research will be equally effective in clinical settings    | 3.20 (1.14)   |
| 3                                            | For physicians, knowledge from experience is as important as that from textbooks.*                 | 2.50 (1.20)   |
| 4                                            | Physician's main duty is to treat diseases.                                                        | 3.76 (1.19)   |
| 5                                            | Patient illness results from the complexity of society.*                                           | 3.22 (1.07)   |
| 6                                            | Triumph in medicine is measured by an increase in longevity.                                       | 2.83 (1.30)   |
| 7                                            | Survival is the ultimate goal of treatment even if it means living in a vegetative state.          | 2.77 (1.26)   |
| 8                                            | Physicians must strive to ensure that the patient is satisfied with the treatment.*                | 1.82 (0.77)   |
| 9                                            | Successful treatment requires through understanding of the intricate bodily functions.             | 4.01 (1.25)   |
| 10                                           | Surgical treatment is based upon the assumption that any diseased part can be removed or replaced. | 3.07 (1.24)   |
| <b>Subscale 2: Controllability (6 items)</b> |                                                                                                    |               |
| 11                                           | More patients survive from their illness because of advances in medical technology.                | 5.01 (0.83)   |
| 12                                           | Better health is a result of advances in medical technology.                                       | 4.77 (0.86)   |
| 13                                           | Medical treatment becomes easier with advances in medical technology.                              | 4.58 (1.00)   |
| 14                                           | Sickness would prevail without medical technology.                                                 | 3.99 (1.20)   |
| 15                                           | Illness is controllable.                                                                           | 3.23 (1.20)   |
| 16                                           | All chronic diseases can be controlled through advances in medical science.                        | 3.11 (1.30)   |

**Remark:** \* = reversed statements. All given scores of the reversed statements were converted before calculating means and standard deviations.

In summary, almost all of the items were responded in a fashion of low-to-moderate scores and moderate agreement. In contrast, the lowest score (item 8) that presented in a sentence of 'Physicians must strive to ensure that the patient is satisfied with the treatment' was 1.82 (S.D. = 0.77) (Table 4.4). Turning to 'controllability' (see subscale 2, Table 4.4), ideas of 'faith in technology' were prominently showed (item

11-16) whereas almost all of the item mean scores were in a fashion of high score with moderate agreement. The respondents very much agreed on the items of ‘More patients survive from their illness because of advances in medical technology’ (item 11) and ‘Better health is a result of advances in medical technology.’ (item 12). These item scores were 5.01 (S.D. = 0.83) and 4.77 (S.D. = 0.86) respectively (Table 4.4).

For the system ideology, it operationally refers to the influence of bureaucracy and capitalism that has conducted social organization. The system ideologies are embedded in physicians in three aspects. These are tendencies that physicians think or act in aspects of making formality, producing much productivity and aiming at efficiency. From the total of sixteen items, the instrument that composed of contents regarding ‘making formality’ (6 items), ‘productivity’ (6 items), and ‘aiming at efficiency’ (4 items) were verified. The range of possible total scores was 16 to 96 (Table 4.5). The respondents responded to the system ideology on a fashion of high score level (Table 4.6). Comparing with the medical ideology, the mean score of the system ideology (the mean score = 74.41) was higher than that of the medical ideology (the mean score = 56.06) (Table 4.4 and 4.5). Among the three subscales, the respondents responded on a fashion of the highest score level on ‘making formality’, as well as ‘aiming at efficiency’, but a fashion of the lowest level on ‘productivity’ (Table 4.6).

**Table 4.5** The system ideology and its subscales

| System ideology                            | Possible score range | The observed scores |       |      |
|--------------------------------------------|----------------------|---------------------|-------|------|
|                                            |                      | Range               | Mean  | S.D. |
| Total score                                | 16-96                | 56-90               | 74.41 | 7.11 |
| Subscale 1: Making formality (6 items)     | 6-36                 | 18-35               | 28.48 | 3.25 |
| Subscale 2: Productivity (6 items)         | 6-36                 | 15-34               | 26.26 | 3.49 |
| Subscale 3: Aiming at efficiency (4 items) | 4-24                 | 12-24               | 19.67 | 2.21 |

For the subscale ideologies of ‘making formality’, it seemed that physicians themselves being formal were responded on a higher level. As such, the respondents gave high scores and highly agreed on ‘It is best that physicians should clear about the goal before commencing the treatment.’(item 1), which were the mean score of 5.36 and the standard deviation of 0.66. Moreover, ‘Physicians are obliged to respect the regulations of the hospital.’ (item 3) and ‘It is proper that physicians should strictly follow the clinical practice guideline.’ (item 4) were responded rather in the same fashion (Table 4.6). On the contrary, ‘making processes formal’ seemed to have less agreement and lower responded-scores. The mean scores and the standard deviations belong of ‘A rigid line of management in medical services would ensure a success in patient care.’(item 5) and ‘It is proper that the communication line in the hospital follows the existing hierarchical system (item 6) were 4.30 (S.D.= 1.04) and 4.08 (S.D.=1.13), respectively. However, the belief that it was good in ‘making processes formal’ as systematic arrangement in organization (item 2) was evidently responded in a high responded-mean score and agreement (the mean score = 5.29, standard deviation = 0.81).

It strongly showed that the subscale ideologies of ‘aiming at efficiency’ were on high-score level. Predominantly, most physicians emitted their actions regarding management for efficiency. As such, the mean scores as well as the standard deviations, of ‘Good management enhances effectiveness.’ (item 13) and of ‘Physicians must be conversant with management’ (item 14) were 5.39 (S.D.= 0.71) and 5.23 (S.D.= 0.83), respectively. Besides, the respondents agreed on application of effectiveness to the medical treatments. Obviously, the results showed that the mean score of ‘Physicians must take account of effectiveness of the treatment.’ (item 15) was high as 5.15. However in more practical condition-, ‘The most expensive drug in its class should be used last’, the responded mean score was the lowest as 3.93.

For the ‘productivity’ subscale ideologies, the results showed responses in the moderate-to-high scores. The respondents projected their convictions much more in the necessity of works for a society. As such, the first and the second rank mean scores of this subscale derived from the items like ‘A society will sustain on a

condition that people must work.’ (item 7) and ‘Good health is a prerequisite for work and propensity.’ (item 8) (Table 4.6). However, it was found that the lesser mean scores that were responded in the aspects of division of labors to achieve productivity. For examples, the mean scores of ‘Specialist services ensure that patients receive a good care.’ (item 9), ‘It is most desirable that a person should perform the same task repeatedly to become an expert.’ (item 11), and ‘It is appropriate that medical treatments are classified according to the organ system.’ (item 12) were 4.58, 4.09 and 3.24, consecutively.

**Table 4.6** The mean scores and standard deviations of the system ideology

| System ideology<br>(16 items)                     |                                                                                                    | Mean<br>(S.D.) |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------|
| <b>Subscale 1: Making formality (6 items)</b>     |                                                                                                    |                |
| 1                                                 | It is best that physicians should clear about the goal before commencing the treatment.            | 5.36 (0.66)    |
| 2                                                 | Good organizations, including medicine, are those that operate systematically.                     | 5.29 (0.81)    |
| 3                                                 | Physicians are obliged to respect the regulations of the hospital.                                 | 4.95 (0.84)    |
| 4                                                 | It is proper that physicians should strictly follow the clinical practice guideline.               | 4.52 (0.86)    |
| 5                                                 | A rigid line of management in medical services would ensure a success in patient care.             | 4.30 (1.04)    |
| 6                                                 | It is proper that the communication line in the hospital follows the existing hierarchical system. | 4.08 (1.13)    |
| <b>Subscale 2: Productivity (6 items)</b>         |                                                                                                    |                |
| 7                                                 | A society will sustain on a condition that people must work.                                       | 5.13 (0.95)    |
| 8                                                 | Good health is a prerequisite for work and propensity.                                             | 4.66 (1.05)    |
| 9                                                 | Specialist services ensure that patients receive a good care.                                      | 4.58 (0.88)    |
| 10                                                | The fact that patients can go back to work is a need for the society.                              | 4.56 (1.02)    |
| 11                                                | It is most desirable that a person should perform the same task repeatedly to become an expert.    | 4.09 (1.05)    |
| 12                                                | It is appropriate that medical treatments are classified according to the organ system.            | 3.24 (1.14)    |
| <b>Subscale 3: Aiming at efficiency (4 items)</b> |                                                                                                    |                |
| 13                                                | Good management enhances effectiveness.                                                            | 5.39 (0.71)    |
| 14                                                | Physicians must be conversant with management.                                                     | 5.23 (0.83)    |
| 15                                                | Physicians must take account of effectiveness of the treatment.                                    | 5.15 (0.87)    |
| 16                                                | The most expensive drug in its class should be used last.                                          | 3.93 (1.27)    |

**Table 4.7** The morality ideology

| Morality ideology | Possible score range | The observed scores |       |      |
|-------------------|----------------------|---------------------|-------|------|
|                   |                      | Range               | Mean  | S.D. |
| Total score       | 14-84                | 53-78               | 67.66 | 5.04 |

According to the morality ideology, it refers to collective beliefs, thoughts, and motivations, which underpin practices of social well-beings such as social integration, and humanity. As mentioned earlier, morality ideology items were constructed based on Thai normative practices and traditional instructions. Fourteen items were verified both validity and reliability. The range of possible scores was 14 to 84 (Table 4.7). Despite the lesser items, the total mean score of the morality ideology (mean = 67.66, S.D. = 5.04) was higher than that of the medical ideology (mean = 56.06, S.D. = 7.64) (Table 4.3 and 4.7).

Interestingly, the results regarding morality ideology seemed to reveal in three patterns. There were the fashion of high score with agreement of item 1-9 and the fashion of moderate score of item 10-14 (Table 4.8). Interestingly, the first four highest mean scores (the first pattern) were subjected to the concept of ‘normative beliefs’ in aspect of behaviors to others, in which individuals were socialized in order to have social integration and humanity. As such, the mean scores, as well as the standard deviations, of ‘Respecting others is a must.’(item 1), ‘ Mutual sincerity is a must.’ (item 2), ‘Helping others is good’ (item 3), and ‘We are all independent.’ (item4) were 5.81 (S.D.= 0.42), 5.72 (S.D.= 0.52), 5.62 (S.D.= 0.54), and 5.59 (S.D.= 0.61), respectively. Another fashion of high score with agreement of items 5-9 (the second pattern) was subjected to the concept of ‘normative beliefs’ in aspects of behaviors for own selves. However, these behaviors had indirect effects to social integration and humanity, for examples, ‘Consciousness is essential’ (item 5), ‘Good deeds bring rewards; bad deeds bring sufferings’ (item 6), ‘Abstinence from alcoholic drinking is virtuous.’ (item 7) and ‘To tell a lie is forbidden’ (item 8) (Table 4.8). Finally, the respond pattern of a moderate score level, which were shown in item 10-14 (the third pattern). These ideologies were religious-influenced traditional thoughts that grounded personal ways of life. Remarkably, these ideologies were not behaviors;

but were the intention ideas that initiated behaviors related to social integration and humanity. Moreover, these ideologies were associated with Buddhism instructions since Buddhism has been the major religious doctrine in Thailand. For instance, ‘Avoidance of extreme views or actions is a necessity.’ (item 10) was given the mean score of 4.81 with the standard deviation of 1.01. The lowest mean score of 3.17 was on the item 14- ‘To have more than your due is a sinful’.

**Table 4.8** The mean scores and standard deviations of the morality ideology

| Morality ideology<br>(14 items) |                                                       | Mean (S.D.) |
|---------------------------------|-------------------------------------------------------|-------------|
| 1                               | Respecting others is a must.                          | 5.81 (0.42) |
| 2                               | Mutual sincerity is a must.                           | 5.72 (0.52) |
| 3                               | Helping others is good.                               | 5.62 (0.54) |
| 4                               | We are all independent.                               | 5.59 (0.61) |
| 5                               | Consciousness is essential.                           | 5.58 (0.72) |
| 6                               | Good deeds bring rewards; bad deeds bring sufferings. | 5.52 (0.78) |
| 7                               | Abstinence from alcoholic drinking is virtuous.       | 5.48 (0.74) |
| 8                               | To tell a lie is forbidden.                           | 5.15 (0.98) |
| 9                               | It is imperative to relief suffering of others.       | 5.07 (0.74) |
| 10                              | Avoidance of extreme views or actions is a necessity. | 4.81 (1.01) |
| 11                              | Complete deliverance is never attainable.             | 4.37 (1.46) |
| 12                              | Let life take its natural course.                     | 3.83 (1.22) |
| 13                              | Suffering results from one’s own deeds.               | 3.65 (1.24) |
| 14                              | To have more than your due is a sinful.               | 3.17 (1.24) |

Turning to the forth social ideology-‘criticizability value’, it operationally refers to physicians’ sets of ideas that provide question, alternative ideas and participation in order to have a long discussion. From seventeen items, two subcomponents that were critical ideas (9 items) and participation (8 items) were verified. The range of possible scores was 17 and 102 (Table 4.9). In spite of much more items, the mean score of criticizability value was the lowest mean score (mean score = 65.17, S.D. = 9.06) comparing to those of the system ideology (mean score = 74.41, S.D. = 7.11) and the morality ideology (mean score = 67.66, S.D. = 5.04). The

respondents responded to the overall criticizability value on a fashion of low-to-moderate level; the lowest score was 39, and the highest score was 87 (Table 4.9).

**Table 4.9** The criticizability value and its subscales

| Criticizability value                   | Possible score range | The observed scores |       |      |
|-----------------------------------------|----------------------|---------------------|-------|------|
|                                         |                      | Range               | Mean  | S.D. |
| Total score                             | 17-102               | 39-87               | 65.17 | 9.06 |
| Subscale 1: Critical ideas<br>(9 items) | 9-54                 | 22-47               | 33.15 | 5.16 |
| Subscale 2: Participation<br>(8 items)  | 8-48                 | 17-43               | 31.97 | 5.04 |

Concentrating on the ‘critical idea’ subscale, the responses also showed scoring of ‘critical idea’ on a low-to-moderate level (Table 4.10). For the ‘critical idea’ subcomponent, it measured in two subparts of critical thoughts. On the first subpart, it was associated with self-reflexivity, such as ‘To doubt your own belief is peculiar’ (item 1-reversed statement), ‘The reasons supporting are argument reflects one’s personal conviction are not others.’ (item 2); ‘Scientific reasons are those that must follow.’ (item 4-reversed statement); and ‘Society regulations should not be violated.’ (item 9-reversed statement). Another subpart was subjected to be queries about all knowledge during interactions such as ‘An argument backed by a good reason should be accepted without further questions in any debate.’ (item 5-reversed statement); ‘An argument which falls within the norm of the society should be accepted in any debate without further question.’ (item 7-reversed statement); ‘There should be no further argument when a scientifically proven evidence is given’ (item 8-reversed statement); and the rest of the items in this subscale. The respondents responded on those items regarding ‘self-reflexivity’ (item 1, item 2, and item 4) with higher mean scores than those of ‘queries during interaction’ (item 5, item 7, and item 8) (Table 4.10).

**Table 4.10** The mean scores and standard deviations of the criticizability value

| Criticizability value<br>(17 items)         |                                                                                                                   | Mean<br>(S.D.) |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Subscale 1: Critical ideas (9 items)</b> |                                                                                                                   |                |
| 1                                           | To doubt your own belief is peculiar.                                                                             | 4.30 (1.17)    |
| 2                                           | The reasons supporting are argument that reflect one's personal conviction and not others.*                       | 4.16 (1.38)    |
| 3                                           | The debate should proceed no more with agreement on the best agreed reasons by all.*                              | 4.09 (1.03)    |
| 4                                           | Scientific reasons are those that must follow.                                                                    | 3.82 (1.17)    |
| 5                                           | An argument backed by a good reason should be accepted without further question in any debate.                    | 3.65 (1.25)    |
| 6                                           | An argument that supports neither extreme is applicable in all circumstances.                                     | 3.59 (1.34)    |
| 7                                           | An argument which falls within the norm of the society should be accepted in any debate without further question. | 3.48 (1.22)    |
| 8                                           | There should be no further argument when a scientifically proven evidence is given                                | 3.29 (1.19)    |
| 9                                           | Society regulations should not be violated.                                                                       | 2.74 (1.14)    |
| <b>Subscale 2: Participation (8 items)</b>  |                                                                                                                   |                |
| 10                                          | The aim of any debate is to achieve the best compromise.*                                                         | 5.03 (0.89)    |
| 11                                          | One should not express his own viewpoint if it is different from that of the majority.                            | 4.39 (1.18)    |
| 12                                          | To avoid conflicts, good friends should stick to the same view.                                                   | 4.37 (1.15)    |
| 13                                          | An issue with will generate a lengthy debate should not be raised.                                                | 4.16 (1.28)    |
| 14                                          | Those with limited experience should say last.                                                                    | 4.04 (1.22)    |
| 15                                          | The saying 'speech is silver, silence is gold' should be upheld as a principle of one's performance.              | 3.87 (1.23)    |
| 16                                          | The viewpoints of the experienced tend to be more beneficial.                                                     | 3.07 (1.12)    |
| 17                                          | Those with limited experience should say little.                                                                  | 3.04 (0.75)    |

**Remark:** \* = not reversed statements. All given scores of the reversed statements were converted before calculating means and standard deviations.

In focusing on 'participation' subcomponent, it was measured the ideas that promoted one's feel-free and long interacting debates. The overall responses to this subpart were a pattern of higher mean scores than those of the 'critical idea' subpart. However, the 'participation' response was on a fashion of low-to-moderate

level (Table 4.10). In details, the highest level of response was on item 10- ‘The aim of any debate is to achieve the best compromise.’ That was high mean score as 5.03 with the low standard deviation as 0.89. There were responses with moderate scores in several items implied moderate tendencies to participation in debates: ‘One should not express his own viewpoint if it is different from that of the majority.’ (item 11-reversed statement); ‘To avoid conflicts, good friends should stick to the same view.’(item 12-reversed statement); ‘An issue with will generate a lengthy debate should not be raised.’ (item 13-reversed statement); and ‘Those with limited experience should say last.’ (item 14-reversed statement). Additionally, there were the low-score responses as many as three items (item 15, item 16 and item 17-reversed statement) that were related to low tendencies to speak out some ideas during discussion. Interestingly, these low-score responses were associated with the extent of experience. As such, the mean scores of ‘Those with limited experience should say little.’ (item 17) was the lowest as 3.04; the mean score of ‘The viewpoints of the experienced tend to be more beneficial.’ (item 16) was rather low as 3.07.

Although this study was not aimed at the investigation of the relationships between social ideologies and respondent characteristics (age, gender, and specialty), there were some interesting data concerned. The Pearson’s correlation coefficients between age and the four social ideologies were positive, excepting the criticizability value that had a negative association with the age. However, almost all of relationships between age and social ideologies were statistically insignificant. Only the system ideology had a significant association with age of the respondents (Table 4.11).

**Table 4.11** Correlations between age and the social ideologies

| Social ideologies     | Pearson’s coefficients | p-value |
|-----------------------|------------------------|---------|
| Medical ideology      | 0.143                  | 0.062   |
| System ideology       | 0.252                  | 0.001*  |
| Morality ideology     | 0.005                  | 0.953   |
| Criticizability value | -0.112                 | 0.145   |

**Remark:** \* significant level < 0.05

For gender and each of the ideology, all four social ideologies were tested indicating differences between the scores given by male and female with t-test. The results showed no statistical significance between genders for all of social ideologies (Table 4.12).

**Table 4.12** The mean score of social ideologies categorizing by gender

| Social ideologies     | The mean scores (S.D.) |              | p-value |
|-----------------------|------------------------|--------------|---------|
|                       | Female                 | Male         |         |
|                       | (n=110)                | (n=63)       |         |
| Medical ideology      | 56.47 (7.68)           | 55.17 (7.88) | 0.291   |
| System ideology       | 74.80 (7.16)           | 73.78 (7.19) | 0.368   |
| Morality ideology     | 69.37 (5.19)           | 69.43 (5.24) | 0.946   |
| Criticizability value | 64.33 (8.63)           | 66.35 (9.73) | 0.159   |

**Remark:** Analyzed by t-test

**Table 4.13** Relationships between two groups of specialty and social ideologies

| Social ideologies     | The mean scores (S.D.) |              | p-value |
|-----------------------|------------------------|--------------|---------|
|                       | Group 1                | Group 2      |         |
|                       | (n=127)                | (n=46)       |         |
| Medical ideology      | 56.39 (8.08)           | 54.93 (6.72) | 0.278   |
| System ideology       | 74.41 (7.40)           | 74.48 (6.57) | 0.956   |
| Morality ideology     | 69.53 (4.88)           | 69.02 (6.05) | 0.573   |
| Criticizability value | 64.33 (9.23)           | 67.09 (8.38) | 0.077   |

**Remark:** group 1 = specialties with moderate to high level of end-of-life communication, group 2 = specialties with low level to none of end-of-life communication, Analyzed by t-test

For specialty, two groups of specialties were categorized depending on degree of opportunities to communicate with end-of-life patients as stated in chapter III (part 3.5. data analysis). Analyzed results by t-test showed no statistical

significance of the mean scores between groups that had moderate-to high communication and non-to-low communication for all social ideologies (Table 4.13).

### 4.3 Rationality

Based on Habermas, he claims that human rationalities originally has been constructed in different types according to the spheres of thought (Habermas, 1984). Two main types of rationalities usually mentioned by Habermas are cognitive-instrumental rationality and moral-practical rationality, which are originally derived that from the cognitive and normative spheres of thought respectively. Therefore, cognitive-instrumental rationality refers to physicians' cognitive process in setting purposes based on empirical truth, standard and effectiveness. Additionally, physicians usually set these goals without any communication with others, such as patients, families and other physicians. For moral-practical rationality, it simply refers to physicians' cognitive process based on normative and traditional judgments. Thus, this rationality cannot be judged without circumstances. Therefore, assessment of these two types of rationality was assessed by using a vignette-based scale as stated in chapter III (part 3.2. research instruments).

The findings were shown (Table 4.14) that despite its fewer items there was a tendency of response in aspect of slightly higher scores of the moral-practical-rationality than that of the cognitive-instrumental rationality, as such, the highest observed score of moral-practical rationality (the observed maximum score = 81) was closer to its highest possible score (the possible maximum score = 84) than that of the cognitive-instrumental rationality (the observed maximum score = 89, the possible maximum score = 105). Although the mean score of the cognitive-instrumental rationality had been 64.19 that was higher than that of the moral-practical rationality (the mean score = 55.31), it were due to the more items of cognitive-instrumental rationality. And, it should be noted that the standard deviations of the moral-practical rationality (S.D. = 8.65) was lower than that of the cognitive-instrumental rationality (S.D. = 11.25).

**Table 4.14** The mean scores, standard deviations and range of two types of rationality

| Types of rationality                             | Possible score<br>range | The observed scores |       |       |
|--------------------------------------------------|-------------------------|---------------------|-------|-------|
|                                                  |                         | Range               | Mean  | S.D.  |
| Cognitive-instrumental<br>rationality (15 items) | 15-105                  | 28-89               | 64.19 | 11.25 |
| Moral-practical<br>Rationality (12 items)        | 12- 84                  | 27-81               | 55.31 | 8.65  |

For the cognitive-instrumental rationality, it practically refers to self-interested concerns/values regarding scientific truth, scientific control and systematic control (Baxter, 2002). As such, the cognitive-instrumental rationality was assessed in four components, which were self-interested concerns regarding medical outcomes, standard medical practices, efficiency, and technological control (Table 4.15). Comparing among the four components, the cognitive-instrumental rationality components regarding ‘efficiency’ seemed to be the lowest concerns among the four components due to its fewer mean score than the score at 50<sup>th</sup> percentile. Because the mean scores of ‘standard medical practices’ and ‘technological control’ were much more over the score at 50<sup>th</sup> percentile than that of ‘medical outcomes’. Therefore, these two components were most likely concerned by the respondents (Table 4.15).

Turning to the moral–practical rationality, Kohlberg’ moral reasoning stages were applied as components of the moral–practical rationality (see chapter III, 3.2. research instruments). Since Kohlberg’ moral reasoning stages I and II are related to self-interest values, they are correlated to the cognitive-instrumental rationality (Kohlberg, 1984). Thus, these two stages were excluded from the moral–practical rationality assessment in this study. The findings showed the mean scores of stage 3, stage 5 and stage 6 components were higher than the score at 50<sup>th</sup> percentiles (Table 4.16). Remarkably, the respondents gave the higher mean score on stage 6 component than that of stage 3 component while they similarly contained two items. Therefore, it could possibly interpret that the respondents applied a higher possibility of moral reasoning stage 5 and stage 6 than that of stage 3. On the contrary, the mean score of

stage 4 component was lower than the score at 50<sup>th</sup> percentile. That might be interpreted that the respondents put less value on moral reasoning stage 4.

**Table 4.15** The mean scores, standard deviations and the 50<sup>th</sup>, 75<sup>th</sup> percentiles of cognitive-instrumental rationality components

| Components of Cognitive-instrumental<br>Rationality<br>(15 items) | Mean<br>(S.D.)  | Percen<br>tile<br>50 | Percen<br>tile<br>75 |
|-------------------------------------------------------------------|-----------------|----------------------|----------------------|
| Concerns regarding medical outcomes<br>(9 items)                  | 37.02<br>(7.89) | 37                   | 42                   |
| Concerns regarding standard medical practices<br>(3 items)        | 13.19<br>(3.25) | 13                   | 15                   |
| Concerns regarding efficiency<br>(2 items)                        | 8.90<br>(2.15)  | 9                    | 10                   |
| Concerns regarding technological control<br>(1 item)              | 5.09<br>(1.33)  | 5                    | 6                    |

**Table 4.16** The mean scores, standard deviations, and the 50<sup>th</sup>, 75<sup>th</sup> percentiles of moral-practical rationality regarding Kohlberg moral stage

| Moral-practical rationality<br>(based on Kohlberg' moral reasoning)<br>(12 items) | Mean<br>(S.D.) | Percen<br>tile<br>50 | Percen<br>tile<br>75 |
|-----------------------------------------------------------------------------------|----------------|----------------------|----------------------|
| Stage 3 (2 items)                                                                 | 9.25 (2.81)    | 9                    | 12                   |
| Stage 4 (5 items)                                                                 | 20.81 (4.64)   | 21                   | 24                   |
| Stage 5 (3 items)                                                                 | 14.14 (2.96)   | 14                   | 16                   |
| Stage 6 (2 items)                                                                 | 11.11 (2.38)   | 11                   | 13                   |

Through they were not included in the study objectives, the two types of rationality had been analyzed for some possible association with respondent characteristics (age, gender and specialty). With Pearson's correlation, it was found that there were very low correlation coefficients between age and the cognitive-instrumental rationality (coefficient = 0.006) as well as the moral-practical rationality

(coefficient= 0.023). And, there appeared no statistical significance between age and the cognitive-instrumental rationality as well as the moral-practical rationality (Table 4.17).

**Table 4.17** Correlations between age and the two rationalities

| <b>Rationalities</b>               | <b>Pearson's coefficients</b> | <b>p-value</b> |
|------------------------------------|-------------------------------|----------------|
| Cognitive-instrumental rationality | 0.006                         | 0.939          |
| Moral-practical rationality        | 0.023                         | 0.764          |

For gender and each of the rationality, two types of rationality were tested indicating differences between the scores given by male and female with t-test. The results showed no statistical significance between gender and the two rationalities (Table 4.18).

**Table 4.18** The mean score of two rationalities categorizing by gender

| <b>Rationalities</b>               | <b>The mean scores (S.D.)</b> |                        | <b>p-value</b> |
|------------------------------------|-------------------------------|------------------------|----------------|
|                                    | <b>Female<br/>(n=110)</b>     | <b>Male<br/>(n=63)</b> |                |
| Cognitive-instrumental rationality | 64.65 (9.89)                  | 63.40 (13.34)          | 0.519          |
| Moral-practical rationality        | 55.93 (7.61)                  | 54.24 (10.18)          | 0.254          |

Remark: Analyzed by t-test

For specialty, two groups of specialties were categorized depending on degree of opportunities to communicate with end-of-life patients as stated in chapter III. Analyzed results by t-test showed no statistical significance of the mean scores between groups of moderate-to high communication and non-to-low communication for the two rationalities (Table 4.19).

**Table 4.19** Relationships between two groups of specialty and the two rationalities

| Rationalities                      | The mean scores (S.D.) |                   | p-value |
|------------------------------------|------------------------|-------------------|---------|
|                                    | Group 1<br>(n=127)     | Group 2<br>(n=46) |         |
| Cognitive-instrumental rationality | 64.80 (11.43)          | 62.52 (10.68)     | 0.241   |
| Moral-practical rationality        | 55.54 (8.87)           | 54.67 (8.05)      | 0.561   |

**Remark:** group 1 = specialties with moderate to high level of end-of-life communication, group 2 = specialties with low level to none of end-of-life communication, Analyzed by t-test

#### 4.4 Intentional physicians' actions

Based on the theoretical framework, two observed actions were intentional strategic and communicative actions. Briefly, strategic actions referred to physicians' communications in order to reach self-interest successes. On the contrary, communicative actions referred to physicians' communication in order to reach shared successes. For details of communicative actions, Habermas claims that speakers should intend to communicate with comprehensibility, truth, appropriateness and sincerity (Habermas, 1984). Vignette-based scales including end-of life care trajectories and intentional speeches of choices were designed to assess possibilities to choose these two social actions as discussed in chapter III (part 3.2 research instruments).

The mean score of the strategic action (20 utterances) was 70.10 (S.D. = 14.02); and the mean score of the communicative action (23 utterances) was 81.14 (S.D. = 14.92). Respond patterns of both strategic and communicative actions were quite similar patterns (Table 4.20).

**Table 4.20** The mean scores, standard deviations and range of two types of intentional actions

| Actions                                  | Possible score range | The    | observed | scores |
|------------------------------------------|----------------------|--------|----------|--------|
|                                          |                      | Range  | Mean     | S.D.   |
| Strategic actions<br>(20 utterances)     | 6-120                | 21-100 | 70.10    | 14.02  |
| Communicative actions<br>(23 utterances) | 6-138                | 23-116 | 81.14    | 14.92  |

For details of the communicative actions, there were four presuppositions (validity claims) to become communicative actions (Habermas, 1984). Responses to the four subscales of the communicative actions were in quite similar patterns (Table 4.21). However, there were some slightly striking notices. Among the four validity claims, the ‘sincerity’ seemed to be the least concern by the respondents. As such, the highest observed score of the ‘sincerity’ subscale was rather lower than that of the others. Moreover, the mean score of the ‘sincerity’ subscale was the lowest as 18.36 among the four subscales. Next, the ‘appropriateness’ seemed to be the second least concern in spite of its highest mean score. As focusing on the means, modes and medians among the four subscales, the data showed that these analyzed values tended to be high number of responses on higher scores than the average scores (in other words- modes and medians>means) in the three subscales (comprehensibility, truth, and sincerity). Excepting for the ‘appropriateness’ subscale, it was in a fashion that a high number of responses was on the lower scores than the average and the mid-range scores (in other words- mode<mean and mean<median). Interestingly, ‘Truth’ seemed to be the most concern by the respondents. Though the mean score was 19.81, but it had contained the lowest utterances of choice (only 5 utterances). Furthermore, its standard deviation was 3.90, which was the lowest value among the four validity claims.

Turning to the strategic action, since it was broadly defined as any speech acts for speaker-interest purposes, the strategic action could operationally refer to the speech acts produced by speakers without concerns in aspects of comprehensibility,

truth, appropriateness and sincerity. As a result, the strategic actions should also be categorized into four types of speech acts according to the ignorance of the four concerning aspects (Table 4.22). Among the ignorance, the ‘comprehensibility’ was the first ignorance rank as the highest mean score of the ‘ignored-comprehensibility’ subscale was 19.19 (S.D. = 4.89). The respondents weighted the ‘appropriateness’ as the second rank of ignorance with the mean score of 17.97 (S.D. = 4.09), and a high response on the higher scores than the average score.

**Table 4.21** The range, means, standard deviations, modes and medians of the four validity claims of communicative action

| Validity claims                     | Possible<br>score range | The observed scores |       |      |      |        |
|-------------------------------------|-------------------------|---------------------|-------|------|------|--------|
|                                     |                         | Range               | Mean  | S.D. | Mode | Median |
| Comprehensibility<br>(6 utterances) | 6-36                    | 6-32                | 20.98 | 5.06 | 23   | 21     |
| Truth<br>(5 utterances)             | 5-30                    | 5-28                | 19.81 | 3.90 | 21   | 20     |
| Appropriateness<br>(6 utterances)   | 6-36                    | 6-35                | 21.71 | 4.89 | 21   | 22     |
| Sincerity<br>(6 utterances)         | 6-36                    | 6-30                | 18.36 | 4.63 | 21   | 18     |

**Table 4.22** The range, means, standard deviations, modes and medians of the ignorance of four validity claims of strategic action

| Validity claims                             | Possible<br>score<br>range | The observed scores |       |      |      |        |
|---------------------------------------------|----------------------------|---------------------|-------|------|------|--------|
|                                             |                            | Range               | Mean  | S.D. | Mode | Median |
| Ignored-Comprehensibility<br>(5 utterances) | 5-30                       | 5-30                | 19.19 | 4.89 | 17   | 19     |
| Ignored-Truth<br>(5 utterances)             | 5-30                       | 5-27                | 16.55 | 4.36 | 14   | 16     |
| Ignored-Appropriateness<br>(5 utterances)   | 5-30                       | 5-27                | 17.97 | 4.09 | 17   | 18     |
| Ignored-Sincerity<br>(5 utterances)         | 5-30                       | 5-25                | 16.04 | 3.86 | 15   | 16     |

Interestingly, the two subscales ('truth' and 'appropriateness') showed to have corresponding findings between the communicative actions and the strategic actions. Firstly, the respondents provided higher scores on the 'truth' subscale of communicative actions, while they gave lower scores on that of strategic action. Therefore, the respondents were very much concerned on 'truth' in their communication. Secondly, the response on the 'appropriateness' subscale of the communicative action was in a pattern of high values of responses in the lower scores, which corresponded with a pattern of high number of responses in the higher scores of this subscale of the strategic action. It might be concluded that 'appropriateness' was the least concern in communication by the respondents.

As previously stated the associations between respondents' characteristics (age, gender and specialty) and the strategic actions as well as communicative actions were not included the study purposes. However, these associations were analyzed. The Pearson's coefficients applied to the relationships between age and both strategic and communicative actions were in the negative values and there was no statistical significance (Table 4.23).

**Table 4.23** The associations between the two intentional actions and age

| <b>Actions</b>       | <b>Pearson's coefficient</b> | <b>p-value</b> |
|----------------------|------------------------------|----------------|
| Strategic action     | -0.022                       | 0.770          |
| Communicative action | -0.028                       | 0.719          |

For gender correlations, two intentional actions were tested to indicate differences between those scores given by male and female with t-test. The results showed no statistical significance between gender and the strategic action as well as the communicative action (Table 4.24).

**Table 4.24** The mean scores of two intentional actions categorizing by gender

| Actions              | The mean scores (S.D.) |                | p-value |
|----------------------|------------------------|----------------|---------|
|                      | Female<br>(n=110)      | Male<br>(n=63) |         |
| Strategic action     | 70.84 (13.32)          | 68.81 (15.19)  | 0.379   |
| Communicative action | 82.06 (12.75)          | 79.54 (18.11)  | 0.331   |

Remark: Analyzed by t-test

For specialty, two groups of specialties were categorized depending on degree of opportunities to communicate with end-of-life patients as stated in chapter III. Analyzed results by t-test showed higher mean scores of strategic action by the respondents indicating Group 2 than that of the respondents indicating Group 1 with statistical significance (p-value = 0.022). Similarly, there was a higher mean score of the communicative action in Group 2 than that of Group 1 with statistical significance (p-value = 0.029) (Table 4.25).

**Table 4.25** Relationships between two groups of specialty and the two intentional actions

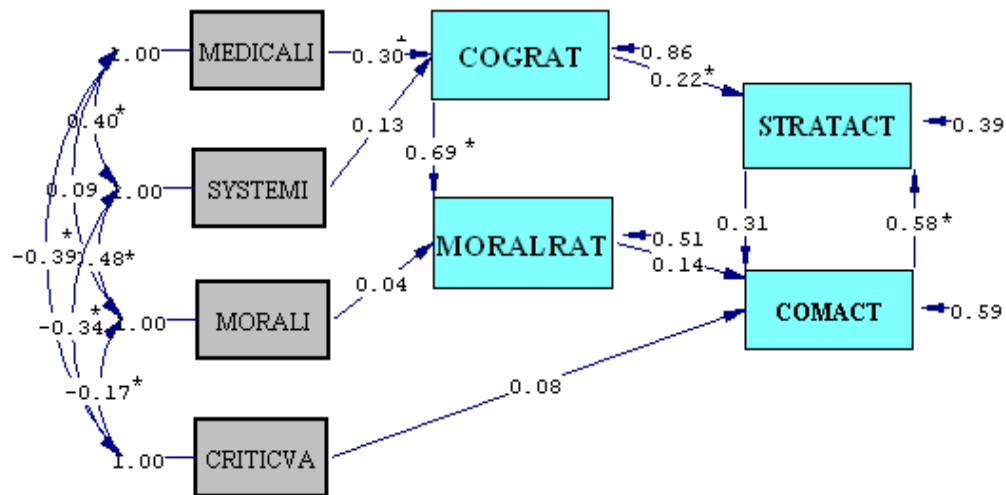
| Actions              | The mean scores (S.D.) |                   | p-value |
|----------------------|------------------------|-------------------|---------|
|                      | Group 1<br>(n=127)     | Group 2<br>(n=46) |         |
| Strategic action     | 68.62 (13.84)          | 74.17 (13.85)     | 0.022*  |
| Communicative action | 79.65 (14.78)          | 85.28 (14.70)     | 0.029*  |

**Remark:** group 1 = specialties with moderate to high level of end-of-life communication, group 2 = specialties with low level to none of end-of-life communication, Significant level < 0.05, Analyzed by t-test

#### **4.5 The causal path of the communicative action regarding euthanasia**

Habermas claims that causal relationships among social ideologies, rationalities and types of communication have existed as described as the conceptual framework in chapter I. The model of these relationships was examined with path analysis (LISREL student version 8.80). The findings showed some statistical significant causal relationships, such as the influences from the medical ideology to the cognitive-instrumental rationality (path coefficient  $\text{medicali-cograt} = 0.30$ ); the cognitive-instrumental rationality to the strategic action (path coefficient  $\text{cograt-stratact} = 0.19$ ); the cognitive-instrumental rationality to the moral-practical rationality (path coefficient  $\text{cograt-moralrat} = 0.69$ ) and the communicative action to the strategic action (path coefficient  $\text{comact-stratact} = 0.70$ ) (Figure 4.1). However, the indices that indicated fitted model were values that could be summarized that this overall theoretical model was not fitted with the observed data. The results indicating the initial model not being fit were Normal weighted least squares chi-square was 25.40 (if over 3 indicated not fit); Root mean square error of approximation (RMSEA) was 0.075 (if over 0.05 indicated not fit), and also other values did not meet the fit criteria (Table 4.26).

The first adjustment was performed by adding a causal relationship from the system ideology to the moral-practical rationality. The first-time adjusted model (called ADJUST1) gained two more significant statistical causal relationships that were the causal relationship from the system ideology to the moral-practical rationality with a path coefficient  $\text{systemi-moralrat}$  of 0.25 and the causal relationship from the strategic action to the communicative action with a path coefficient  $\text{stratact-comact}$  of 0.31 (Figure 4.2). These changes brought about more fitted indices. As such, the RMSEA was 0.000; the normal weighted least squares chi-square was 8.38. Together with other indices (Table 4.26), all of them indicated the ADJUST1 model fitted with the observed data.

**Figure 4.1** Causal relationships of the (theoretical) initial model

Chi-Square=25.40, df=13, P-value=0.02044, RMSEA=0.075

**Remark:** Path coefficients were in terms of standardized solutions. \* = p-value < 0.05

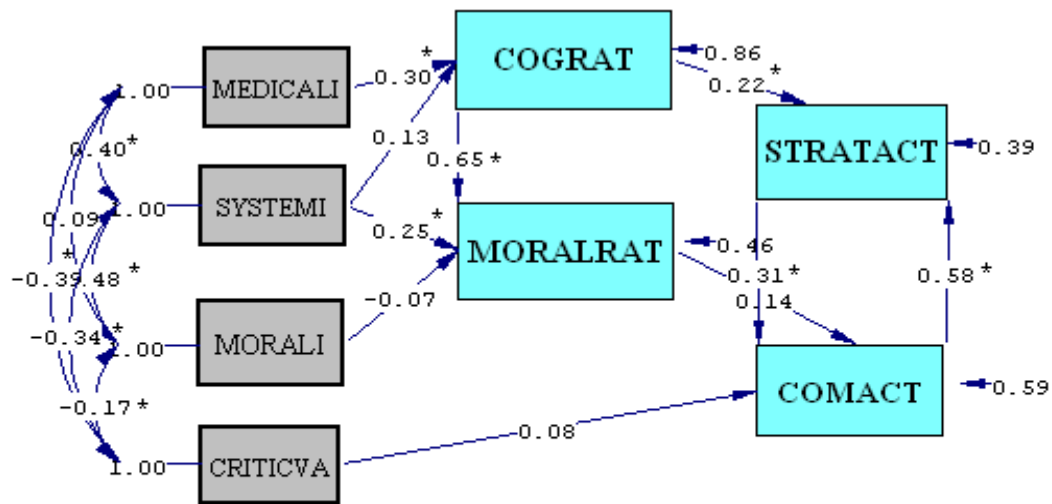
MEDICALI = medical ideology      SYSTEMI = system ideology

MORALI = moral ideology      CRITICVA = critical value

COGRAT = cognitive-instrumental rationality

MORALRAT = moral-practical rationality

STRATACT = strategic action      COMACT = communicative action

**Figure 4.2** Causal relationships of the ADJUST1 model

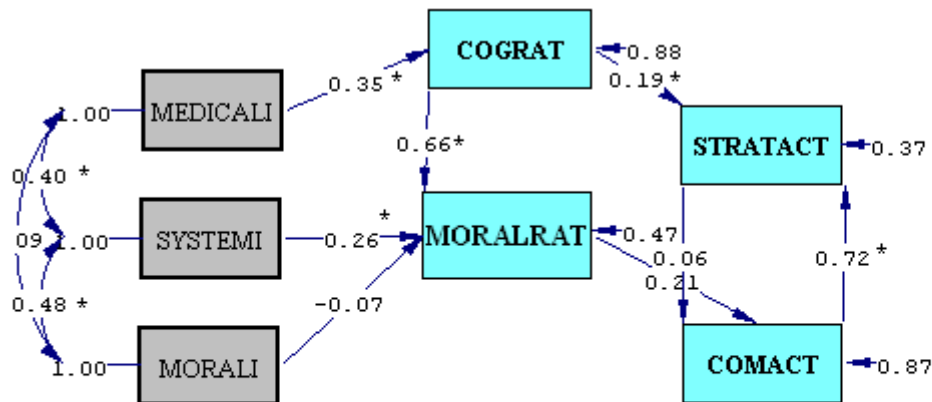
Chi-Square=8.38, df=12, P-value=0.75467, RMSEA=0.000

**Remark:** As stated in Figure 4.1

Although there had been much more statistical significant causal relationships and could obtain a fitted model after the first adjustment, the causal relationship from the criticizability value to the communicative action was still not statistical significant. However, Habermas is convinced that the criticizability value was an important aspect influencing the communicative action. Therefore, the second adjustment was performed by withdrawing the causal relationship between the criticizability value and the communicative action in order to observe some possible changes. Another analysis showed in the second adjusted model (called ADJUST2). The fit indices were still obtained (Table 4.26). Remarkably, coefficient of determination ( $R^2$ ) for the communicative action was lowered from 0.41 (of the initial model and ADJUST1) to 0.13 (of ADJUST2) (Table 4.27). Moreover, the significant causal relationship from the strategic action to the communicative action in the ADJUST1 (path coefficient  $\text{stratact-comact} = 0.31$ ) model became insignificant causal relationship (path coefficient  $\text{stratact-comact} = 0.06$ ) in ADJUST2 (Figure 4.2 and 4.3). These findings might be implied that the criticizability value was related to the

communicative action and should not be excluded. Therefore, the ADJUST2 model might not be the appropriate model in spite of its completeness of fit criteria.

**Figure 4.3** Causal relationships of the ADJUST2 model



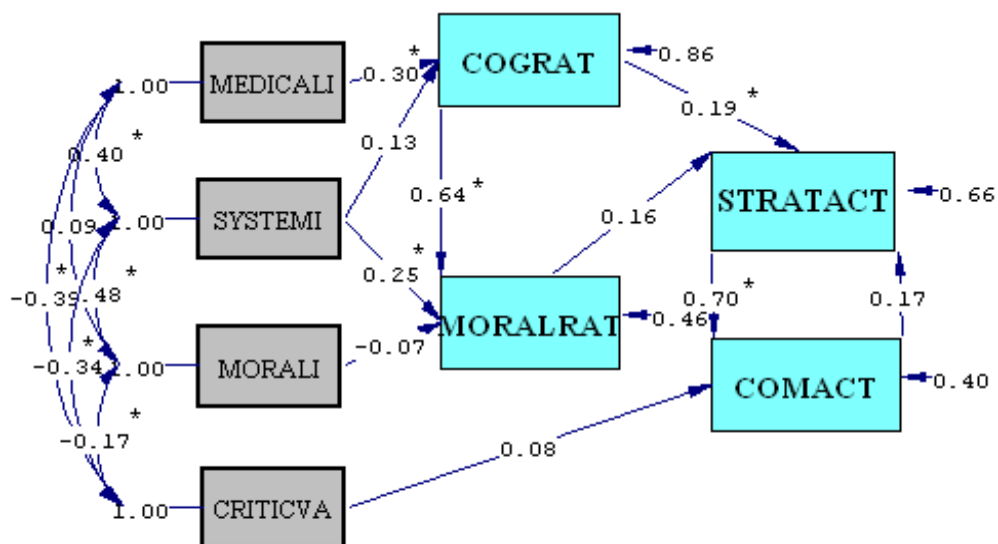
Chi-Square=11.61, df=10, P-value=0.31200, RMSEA=0.031

**Remark:** As stated in Figure 4.1

Then, the third adjustment was performed by changing a causal relationship from the moral-practical rationality to the strategic action (instead of the communicative action) because there was low path coefficients with statistical insignificance between the moral-practical rationality to the communicative action (path coefficients = 0.14 of the initial model and ADJUST1, = 0.21 of ADJUST2); and it was possible that the moral-practical rationality might have causal relationship with the strategic action. Another reason supporting this adjustment was that the causal relationship from the communicative action to the strategic action might be against the matter of theory of communicative action. Since the theory stated as if once a person has admired and performed communicative actions (in other words having a high moral stage), it had been unlikely that he or she would return to apply a lower moral stage like strategic actions (Habermas, 1984). As a result, the findings of the third adjustment was a model called ADJUST3 (Figure 4.4). All fitted indexes were satisfactory (Table 4.26). The adjustment of causal relationship from the moral-practical rationality to the strategic action did not cause statistical significance (path

coefficient  $\text{moralrat-stratact} = 0.16$ ). However, the consequence of adjustment caused no statistically significant causal relationship from the communicative action to the strategic action. On the contrary, there was significant causal relationship from the strategic action to the communicative action with a high path coefficient of 0.70 instead (Figure 4.4). Overall significant causal relationships (path coefficients) in ADJUST1 and ADJUST2 still maintained statistical significance with a little change in values of path coefficients.

**Figure 4.4** Causal relationships of the ADJUST3 model



Chi-Square=6.75, df=12, P-value=0.87355, RMSEA=0.000

**Remark:** As stated in Figure 4.1

Considering the best model, the observed data and fit indices among the initial model and the three adjusted models were illustrated (Table 4.26). ADJUST1, ADJUST2, and ADJUST3, excepting for the initial model, completed all fit criteria. Therefore, significant relationships and coefficients of determinant along the path should be concerned and were compared (Table 4.27). The most causal significant relationships were found in ADJUST 1 (11 significant causal relationships).

**Table 4.26** The four models: fit index criteria, the analyzed values and conclusions

| Indices                           | Criteria<br>values | Initial model |            | ADJUST1 |            | ADJUST2 |            | ADJUST3 |            |
|-----------------------------------|--------------------|---------------|------------|---------|------------|---------|------------|---------|------------|
|                                   |                    | values        | conclusion | values  | conclusion | values  | conclusion | values  | conclusion |
| Chi-square                        | p>0.05             | p=0.02        | Not fit    | p=0.75  | Fit        | p=0.31  | Fit        | p=0.87  | Fit        |
| Chi-square/df                     | <3.00              | 1.95          | Fit        | 0.69    | Fit        | 1.15    | Fit        | 0.56    | Fit        |
| Goodness of Fit (GFI)             | >0.90              | 0.96          | Fit        | 0.99    | Fit        | 0.98    | Fit        | 0.99    | Fit        |
| Adjusted Goodness of fit (AGFI)   | >0.80              | 0.90          | Fit        | 0.96    | Fit        | 0.95    | Fit        | 0.97    | Fit        |
| Root Mean Square Residual (RMSEA) | <0.05              | 0.075         | Not fit    | 0.000   | Fit        | 0.031   | Fit        | 0.000   | Fit        |
| Smallest standardized residual    | <-2                | -1.03         | Fit        | -1.24   | Fit        | -1.56   | Fit        | -0.09   | Fit        |
| Largest standardized residual     | <2                 | 3.99          | Not fit    | 1.40    | Fit        | 1.79    | Fit        | 0.09    | Fit        |

Each coefficient of determinant indicating that cognitive-instrumental rationality as well as moral-practical rationality was rather similar values either in the initial model, ADJUST1, ADJUST2, or ADJUST3. But for the strategic and communicative actions, some different values of coefficients of determinant indicating strategic action or communicative action were found. As such, the coefficient of determinant indicating communicative action in ADJUST2 was the lowest value ( $R^2 = 0.13$ ). As previously stated ADJUST2 might not be related to the theoretical substance. Thus, ADJUST2 should be ruled out of concern. Comparing between ADJUST1 and ADJUST3, there were differences in opposite degree of determinant regarding strategic action and

communicative action, in which ADJUST1 had high coefficient of determinant indicating strategic action; on the contrary ADJUST3 had high coefficient of determinant indicating communicative action. Based on theories, there should not have causal relationship from the communicative action to the strategic action. Therefore, the appropriate model should be the ADJUST3 model. The coefficient of determination of the communicative action of ADJUST3 was 0.60, which was the highest value among all four models (Table 4.27).

**Table 4.27** The four models: significant causal relationships and coefficients of determinant indicating the two rationalities and actions

|                                     | Initial<br>model | ADJUST1 | ADJUST2 | ADJUST3 |
|-------------------------------------|------------------|---------|---------|---------|
| Number of significant relationships | 9                | 11      | 7       | 10      |
| Coefficients of determinant         |                  |         |         |         |
| -cognitive-instrumental rationality | 0.14             | 0.14    | 0.12    | 0.14    |
| -moral-practical rationality        | 0.49             | 0.54    | 0.53    | 0.54    |
| -strategic action                   | 0.61             | 0.61    | 0.63    | 0.34    |
| -communicative action               | 0.41             | 0.41    | 0.13    | 0.60    |

Based on the ADJUST3 model, the correlations of the social ideologies were investigated. The medical ideology was statistical significant correlated to the system ideology (correlation coefficient  $\text{medicali-systemi} = 0.40$ ) and the criticizability value (correlation coefficient  $\text{medicali-criticva} = -0.39$ ), but not significant for the morality ideology (correlation coefficient  $\text{medicali-morali} = 0.09$ ). The system ideology had statistically significant relationships with all the others. Moreover, the highest positive coefficient belonged to the correlation between the system ideology and the morality ideology (correlation coefficient  $\text{systemi-morali} = 0.48$ ). Interestingly, the criticizability value was significant correlated with all the other in the negative directions. The correlation between the criticizability value and the medical ideology was the highest negative coefficient (coefficient = -0.39) (Table 4.28).

**Table 4.28** Correlation matrix of the three ideologies together with the criticizability value

|                       | Medical ideology | System ideology | Morality ideology | Criticizability value |
|-----------------------|------------------|-----------------|-------------------|-----------------------|
| Medical ideology      | 1.00             |                 |                   |                       |
| System ideology       | 0.40*            | 1.00            |                   |                       |
| Morality ideology     | 0.09             | 0.48*           | 1.00              |                       |
| Criticizability value | -0.39*           | -0.34*          | -0.17*            | 1.00                  |

**Remark:** Values were correlation coefficients. \* =significance at p-value <0.05

From path analysis, some causal relationships in the ADJUST3 model were revealed their statistical significances in terms of direct and indirect effects. These findings were arranged for presentation according to research assumptions. The first assumption was to elucidate causal relationships from exogenous factors; involving three social ideologies, as well as the criticizability value, to the two types of rationality-cognitive-instrumental rationality and moral-practical rationality-. The second assumption was to reveal the influences of the rationality, especially cognitive-instrumental rationality upon the strategic action. Finally, the third assumption was to investigate causal pathways of the communicative action.

Initially, how the social ideologies as exogenous factors influenced the two rationalities. Regarding the cognitive-instrumental rationality, there were only two direct effects (Table 4.29). The medical ideology, but not together with the theory-based system ideology, had significantly direct effect on the cognitive-instrumental rationality (Table 4.29). Unlike the cognitive-instrumental rationality, the moral-practical rationality had both direct and indirect effects (Table 4.30). The system ideology was significant direct effect to the moral-practical rationality (direct path coefficient  $\text{systemi-moralrat} = 0.25$ ) instead of the theory-based cognitive-instrumental rationality. The medical ideology was statistically significant indirect effect to the moral-practical rationality (indirect path coefficient  $\text{medicali-cograt-moralrat} = 0.3 \times 0.64 = 0.19$ ). Contrasting to the theory, the morality ideology was not significant related to the moral-practical rationality; additionally, this relationship was in a negative

direction (direct path coefficient  $\text{morali-moralrat} = -0.07$ ). Interestingly, the cognitive-instrumental rationality as an endogenous factor directly and statistically influenced to the moral-practical rationality (direct path coefficient  $\text{cograt-moralrat} = 0.65$ ) (Table 4.30).

**Table 4.29** Possible causal factors and types of influence of the cognitive-instrumental rationality based on the ADJUST 3 model

|                 | Medical ideology | System ideology |
|-----------------|------------------|-----------------|
| Direct effect   | 0.30*            | 0.13            |
| Indirect effect | -                | -               |
| Total effect    | 0.30*            | 0.13            |

**Remark:** Values were path coefficients in terms of standardized solution.

\* = significance at p-value <0.05

**Table 4.30** Possible causal factors and types of influence of the moral-practical rationality based on the ADJUST 3 model

|                 | Medical ideology | System ideology | Morality ideology | Cognitive-instrumental rationality |
|-----------------|------------------|-----------------|-------------------|------------------------------------|
| Direct effect   | -                | 0.25*           | -0.07             | 0.65*                              |
| Indirect effect | 0.19*            | 0.09            | -                 | -                                  |
| Total effect    | 0.19*            | 0.34*           | -0.07             | 0.65*                              |

**Remark:** As stated below Table 4.29

Turning to the strategic action, there were influences from the rationalities as endogenous factors and the exogenous social ideologies. As the theories stated, the main rationality that influenced to the strategic action was the cognitive-instrumental rationality, in which these influences had been revealed by the statistical significances for both direct (direct path coefficient  $\text{cograt-stratact} = 0.19$ ) and indirect (indirect path coefficient  $\text{cograt-moralrat-stratact} = 0.14$ ) to have effects on the strategic action (Table 4.31). Regarding the moral-practical rationality, there is vague claim that it is related to the communicative action. As previously stated, an adjustment of causal

relationship from the moral-practical rationality to the strategic action caused the ADJUST3 model closer to the theoretical substance. However, the observed causal relationship either direct or indirect effect from the moral-practical rationality to the strategic action was not statistical significance (Table 4.31). For the influences of the social ideologies, there were two statistical significant indirect effects, which were from the medical ideology and the system ideology (Table 4.31).

**Table 4.31** Possible causal factors and types of influence of the strategic action

|                    | Medical<br>ideology | System<br>ideology | Morality<br>ideology | Criticiz<br>ability<br>values | Cognitive-<br>instrumental<br>rationality | Moral-<br>practical<br>rationality | Com<br>muni<br>cative<br>action |
|--------------------|---------------------|--------------------|----------------------|-------------------------------|-------------------------------------------|------------------------------------|---------------------------------|
| Direct<br>effect   | -                   | -                  | -                    | -0.04                         | 0.19*                                     | 0.16                               | 0.18                            |
| Indirect<br>effect | 0.10*               | 0.09*              | -0.01                | 0.06                          | 0.14*                                     | 0.02                               | 0.02                            |
| Total<br>effect    | 0.10*               | 0.09*              | -0.01                | 0.02                          | 0.33*                                     | 0.18                               | 0.20                            |

**Remark:** As stated below Table 4.29

Focusing on the communicative action, the theories have stated that it may happen by complexity of all rationalities together with the criticizability value. Remarkably, the final adjusted model (ADJUST3) was fitted under the significant causal relationship from the strategic action to the communicative action. This causal relationship was a direct effect with a high coefficient (direct path coefficient  $\text{stratact-comact} = 0.70$ ). The two rationalities then became indirect causal relationships to the communicative action, which was in contrast to the theory. Moreover, the cognitive-instrumental rationality, not the moral-practical rationality, had statistical significant influenced to the communicative action (sum of indirect path coefficient  $\text{cograt-stratact-comact}$ , and indirect path coefficient  $\text{cograt-moralrat-stratact-comact} = 0.23$ ) (Table 4.32). Interestingly, the criticizability value that was a theory-based influence to the communicative action had a direct effect but no statistical significance. Same as previously stated results, the two social ideologies that were the medical and the

system ideologies had statistically significant indirect causal relationships to the communicative action (Table 4.32).

**Table 4.32** Possible causal factors and types of influence of the communicative action based on the ADJUST 3 model

|                    | <b>Medical<br/>ideology</b> | <b>System<br/>ideology</b> | <b>Morality<br/>ideology</b> | <b>Criticiz<br/>ability<br/>values</b> | <b>Cognitive-<br/>instrumental<br/>rationality</b> | <b>Moral-<br/>practical<br/>rationality</b> | <b>Stra-<br/>tegic<br/>action</b> |
|--------------------|-----------------------------|----------------------------|------------------------------|----------------------------------------|----------------------------------------------------|---------------------------------------------|-----------------------------------|
| Direct<br>effect   | -                           | -                          | -                            | 0.08                                   | -                                                  | -                                           | 0.70*                             |
| Indirect<br>effect | 0.07*                       | 0.06*                      | -0.01                        | 0.01                                   | 0.23*                                              | 0.12                                        | 0.10                              |
| Total<br>effect    | 0.07*                       | 0.06*                      | -0.01                        | 0.09                                   | 0.23*                                              | 0.12                                        | 0.80*                             |

**Remark:** As stated below Table 4.29

## **CHAPTER V**

### **DISCUSSION**

Regarding a number of Habermas's theories, they describe how societies have changed, and from the changes how social members can solve the problems in the societies in modern lives. Initially, he describes that social member, a part of a society, have been occupied by three human interests that eventually form human knowledge. The three human interests are work, interpersonal interaction and emancipation interests (Habermas, 1984). Firstly, the work interest is associated with techniques and purposive actions, in which Habermas has claimed that individual work knowledge has been recently dominated by science and technology. Secondly, the interpersonal interaction is related to interactions concerning norms or values for maintaining social integration. Lastly, the emancipation interest is associated with freedom from constraints; this interest is an important presupposition for having communicative action in societies.

In modernity, Habermas has viewed that social members have been interacting with systems, another part of society. He has also claimed that a modern society should be influenced by science and technology. Regarding scientific-technology domination, he expands this domination illustrating that it not only in the component of work interests, but also through system arrangement for works (Baxter, 2002). In brief, 'colonization of life world' is a term that Habermas frequently uses to explain a social process of valuing formality due to its success in formal system arrangement, which invades to individual rational thinking. As a consequence, life worlds or individuals' thoughts gradually become what should be called 'denial subjectivity' and aiming toward instrumental success (Nussanbaum, 2006). However, it should be noted that valuing formality is not the only value admired by all members in societies. On the other hand, social disintegration or social crisis may also occur

because of differences in contrasting reasons among the social members (Habermas, 1984).

In the essence of Habermas theories, he has tried to demonstrate necessary conditions that an individual can freely give his/her reasons and have opportunities for social discussion in order to avoid ‘colonization of life world’. As a result, communicative action has been termed and claimed by Habermas that it might be a solution of social conflicts, especially conflicts generating from ‘colonization of life world’ (Habermas, 1984).

Consequently, details of the finding discussion in this chapter were divided into three parts. Part I is the description and discussion concerning to ‘colonization of life worlds’ concepts. In part II, there are discussions regarding physicians’ actions in the end-of-life care settings based on the observed findings. Finally, part III is a discussion of possible occurrence of communicative actions in Thai-cultured end-of-life care settings.

## **5.1 ‘Colonization of life world’**

According to critical theories, mediators of human knowledge are focusing on ideologies. For example, ‘false consciousness’ as being an exploited ideology was mentioned by Karl Marx in the early modern society (Marx, 1845). Moreover based on the earlier social theorists of Frankfurt school, ‘scientific ideology’ was criticized as if it were an exploited ideology that have led societies to admire a conception of positivism (Disco, 1979). In addition to criticizing positivism, Habermas adds his ideas of ‘colonization of life world’ with the concept of ‘scientific ideology’ (Habermas, 1984). Therefore, Habermas consists that the main ideologies influencing the modern lives have been ‘scientific ideology’ and ‘system ideology’. However, he also adds up the concept of human interests so that the other route of ideologies, especially ‘morality ideology’, is considered to play significant roles during the period of social changes.

Thus, the three main ideologies in every-day practices of physicians were investigated in this study. Firstly, the medical ideology that was associated with medical knowledge and was also influenced by science and technology. Secondly, the system ideology that should be claimed its involvement in formal-rational thinking of 'life worlds' (the study physicians). Finally, the morality ideology that represents physicians' knowledge based on norms and values as being social members. All of these ideologies were treated as external factors in the structural model for analyzing by path analysis. In path analysis, the external factors could be referred to those independent variables; in other words, they are causative factors. However, partial correlations among these three ideologies were programmed to analyze simultaneously so that these analyses could reveal some relationships among these external factors.

As revealed in the previous chapter, three interesting findings regarding these ideologies were found. Firstly, the system ideology was given the highest score by physicians than the other two ideologies (Table 4.3, Table 4.5, and Table 4.7). Secondly, a significant relationship was found between the system ideology and the medical ideology (Table 4.28). Moreover lastly, it also showed no relationship between the system and the morality ideologies because there was a low correlation coefficient with no statistical significance (Table 4.28). These evidences implied that separation of the cognitive (work-related) sphere and the normative (morality-related) sphere exists. Furthermore, the system ideology that significantly involved with both medical and morality ideologies might be an intermediate factor of these two ideologies. Thus, these results might be a support for an existence of Habermas's essential claim-'colonization of life world'.

For 'colonization of life world', some statistical results (correlation coefficients in Table 4.28) might revealed that invasions of the system ideology to the morality ideology was found additional to the medical ideology, which was not an expectation. More supportive evidence was that the partial correlation between the system ideology and the morality ideology was higher than that of the correlation between the system ideology and the medical ideology (Table 4.28). Furthermore, it should be noticed that a high-score responded pattern in items 1-9 of the morality

ideology scale (Table 4.8) was consistent, and contents in these items were also associated with norms conducting behaviors. In deeply viewing, these norms conducting behaviors acted as if they were social rules. Contrastingly, a moderate-score responded pattern was found in items 10-14 (Table 4.8); and their contents seemed to be regarding personal actions that might not directly effect to interpersonal relationships. Therefore, the high score pattern found in the item contents regarding norms conducting behaviors implied some systematic arrangement of social members ideas regarding social integrations. As a result, these evidences inclined to support that 'colonization of life world' by the system in physicians' thought exist. Moreover, this colonization also involved with the morality sphere.

Nevertheless, Habermas focuses that 'colonization of life world' should be influenced by the system in only the cognitive sphere of thoughts or the work interest. As previously mentioned, science and technology is highly related to modern lives' work interests. Habermas combines science/technology with system ideologies, the so called 'technocratic ideology'. The study findings confirmed an existence of relationships between system and work interests. For example, the significant correlation coefficient between the medical ideology and the system ideology was found (Table 4.28). Interestingly, (medical ideology) items in the 'controllability' subscale were responded in such a similar range of scores to three subscales of the system ideology were (Table 4.4 and Table 4.6). Therefore, it might be concluded that 'controllability' was a shared value of the system and the medical ideologies. Corresponding to literature reviews in chapter II, it states that formality in systems should initially be influenced from a value named 'controllability' of science and technology (Ritzer, 1996). However, it should be possible that the relationship might have a reciprocal effect. Moreover, it could also be proposed that 'colonization of life world' should have a path from the system to physicians' thought regarding medical controls.

The last support evidence of 'colonization of life world' on the ideological level was the significant association between the age and the system ideology ( $r^2 = 0.252$ ,  $p\text{-value} = 0.001$ ) (Table 4.11). It could simply be explained that individuals

might seemingly be more aware of their social beings in more advancing age. This awareness might be influenced from systematization.

In sum of colonization on ideologies, there were supporting evidences that the system dominated physicians' thoughts beginning by invasions through their ideas. Based on the concept 'spheres of thought', the cognitive sphere has been colonized in a lower degree than the theories stated; but the normative sphere of thought seemed to be already colonized in a higher degree. Thus, consequences of a high degree involvement of normative sphere of thought should be aware of, because it may cause serious loss of human moral instincts. In details, the cognitive sphere of thought was invaded by the system in the aspect of 'controllability', whereas, the normative sphere of thought was invaded by the systematic appropriate interpersonal interactions.

Concerning 'Theoretical assumption 1' (Medical ideology together with system ideology is related to cognitive-instrumental rationality; Morality ideology is related to moral-practical rationality), Habermas believes that social factors in terms of ideology influenced social members' actions. However, he concerns very much in human capabilities of thinking, therefore he proposed that an individual have his/her own reasons for taking actions. Like Weber did, Habermas also proposed types of human rationality, but in a different approach (Habermas, 1984). Habermas' rationality is approached based on human interests related to three spheres of thought. Cognitive-instrumental rationality is one of the main Habermas-defined rationalities. Scientific-related works are claimed to be included in the cognitive sphere and associated with 'cognitive-instrumental rationality' (Habermas, 1970). He also views that all matters of being systems are influenced by scientific ideas. Therefore, he concludes scientific knowledge together with valuing systemization will bring about an individual process of thought limited in only by the cognitive sphere of thoughts (memory and imitation). In other words, he means that scientific knowledge together with system ideologies causes 'cognitive-instrumental rationality'.

Furthermore, Habermas defines another type of human rationality the so called 'moral-practical rationality'. This type of rationality is claimed to be related to

the normative sphere of thought, including norms, values, together with laws in some later reviews (Habermas, 1984). Habermas views all these matters of every-day interactions are substances of individual learning beyond objective views, and there will produce practical reasons as 'moral-practical rationality'. In other words, Habermas states that 'moral-practical rationality' is linked to morals and norms.

Interestingly, the study findings revealed only a few theoretical confirmations; however for non-confirms were still close to what Habermas' postulates. For those confirmations, it showed that the medical ideology was related to the cognitive-instrumental rationality, and that relationship was a direct causal effect proven with a statistical significance (Figure 4.4, Table 4.29). For some deviations, the system ideology was not a direct causal relationship to the cognitive-instrumental rationality. On the contrary, the system ideology was related to the moral-practical rationality with a significant direct effect (Table 4.30). Moreover, the morality ideology that theoretically supposed to be related to the moral-practical rationality was found to have insignificant reversed relationship with the moral-practical rationality. Additionally, it was found that the strongest direct causal relationship to the moral-practical rationality was the cognitive-instrumental rationality (Table 4.30, Figure 4.4).

It was not surprising that 'colonization of life world' was found transforming into the forms of cognitive-instrumental rationality as it was stated by the theories. However, some interesting findings regarding the cognitive-instrumental rationality should be discussed as the followings. It was found that two components of the most concerns were the reasons regarding standard medical practices and the reasons regarding technological control. The other two components that were reasons regarding medical outcomes and efficiency seemed to be less concerns. Based on Weber's approach, these evidences might indicate that physicians were interested in means of action more than results of actions despite the invasion of the system (Weber, 1978). As the systems in modernity have been dominated by economical concerns, therefore, systemic arrangement in the forms of 'administration' has been introduced into individuals then guiding their concerns to seek desirable ends regarding efficiency (Ritzer, 1996). In addition to 'end', applications of appropriate

‘means’ (or actions) should be concerned in order to achieve expected goal as well (Ritzer, 1996). In this study, physicians showed their concerns much more in ‘means’ (standard medical practice and technological control) than those of ‘end’ (medical outcomes and efficiency). It might be explained that the process of colonization has been incomplete in case of the study physicians’ ages. More system colonization, such as concerns beyond a patient like public health administration, might need time-available or further systemic education. On the contrary, it might be explained that the ‘controllability’ value in the forms of systematic control could successfully control physicians to practices within medical standards.

In contrast to the theories, ‘colonization of life world’ by the system had significant effect on physicians’ moral-practical rationality instead of the cognitive-instrumental rationality. In case of clear understandings, it should be initially discussed developments of individual moral reasons.

Regarding details of the moral-practical rationality, assessment in this study was based on Kohlberg’s moral stages. As an individual has learned interpersonal interactions regarding morals since he/she was a child. Furthermore, he/she could develop his/her moral thinking into higher stages when he/she has grown up. Kohlberg proved these developments and classified as moral stages of reasoning (Kohlberg, 1984). Therefore in this case, assessment of moral-practical rationality should not evaluate only at whether physicians had moral-practical rationality or not, but should also evaluate in aspects of how far they develop their moral reasons.

Interestingly, there was a comment that the second Kohlberg moral stage (pre-conventional stage) can be compatible with those instrumental reasons, especially the cognitive-instrumental rationality (Kohlberg, 1984). This pre-conventional stage is claimed that it is normally developed before becoming adults (Kohlberg, 1984). Some findings in this study, in spite of not primary objectives, might support this claim. Since the Pearson coefficient between the age and the cognitive-instrumental rationality was very low (Table 4.17), this might confirm that the cognitive-

instrumental rationality has already been developed in physicians' thoughts before the study was taken.

For the sequential moral stages (Habermas, 1984), the conventional stage that includes moral stage 3 and 4 development of personal reasons concerning other persons. For instance, a concern that it is good for respecting social rules, laws, standards, and so on, and it should be interpreted that the thoughts are beyond just self-concerns. Lastly, the post-conventional stage (including moral stage 5 and 6) is defined as personal reasons beyond one-self and social constructions. The fifth stage refers to reasons regarding admirations of respecting social rules in aspects of liberty, welfare and human rights. The sixth stage refers to reasons in aspects of universal justice and autonomy. As a consequence, the conventional and post-conventional stages are practically related to aspects of interpersonal interactions. Therefore, the assessment of moral-practical rationality in this study included Kohlberg moral stages 3, 4, 5 and 6.

The findings showed that the physicians gave higher scores in moral reasoning regarding stage 6 (concerns universal principles of justices and autonomy respects) than that of stage 3, 4, and 5. And the least given scores were found for the moral stage 4 (Table 4.16). These findings might initiate some ideas against the previous results that system colonization involved moral-practical rationality. If the physicians were colonized by the system ideologies, they should much more agree on reasons regarding the moral stage 4. However with a higher given score of moral stage 6, it could not find that it caused communicative action (Figure 4.4). Besides, it should be wonder why the significant causal relationship from the system ideology to the moral-practical rationality.

Focusing on the most interesting finding, the insignificant negative-value path coefficient from the morality ideology to the moral-practical rationality was revealed. These two findings might lead to a postulate that the assessed moral-practical rationality was not the theoretical stated moral-practical rationality. As the moral-practical rationality should occur from gaining experiences of interpersonal

relationships that interacted with the self in the normative sphere of thought, thus, the theory-based or original moral reasoning should be included only the moral reasons from real interpersonal interactions (Ritzer, 1996). Corresponding to the significant causal relationship from the system ideology to the moral-practical rationality, it made more confidence to say that the assessed moral-practical rationality might be system-induced moral-practical rationality.

The postulate of system-induced moral-practical rationality seemed to be in accordance with educating medical ethics. As the medical ethics to be taught have been set in discrete and universal aspects of ‘patient autonomy’, ‘beneficence’, ‘non-maleficence’, and social responsibility (Lertsithichai, 2004), therefore, it would be possible that physicians have learned these medical ethics by cognitive functions. In details of ‘beneficence’ and ‘non-maleficence’, the physicians tend to weight ‘benefits on physical illness’ and ‘do no harm on physical health’ more than real interests of patients. Therefore, such of their reasons might be the cognitive-instrumental rationality. For respecting autonomy, it would be possible that physicians recognized that patients could have choices and make their own decisions. However, these choices were limited in a scope of physician-interested medical concerns. As a result, negotiations from patients could not be occurred. Therefore without real interpersonal interactions, moral reasoning might not be developed to be a higher stage.

For conclusion of the theoretical assumption<sup>1</sup> (Medical ideology together with system ideology are related to cognitive-instrumental rationality; Morality ideology is related to moral-practical rationality), this study showed that ‘colonization of life world’ invaded physicians’ thoughts initially on the ideological level, in which the findings were found involvement of the system to both of the cognitive and normative spheres of thought. Moreover regarding technocratic ideologies, it had direct significant causal paths from both of ideologies to both of rationalities. As such, the medical ideology was a causal predisposition of the cognitive-instrumental rationality. Specifically, the medical ideologies induced physicians’ reasons much more in aspects of standard medical practices and technical control. Interestingly, the system ideology had a causal effect on the moral-practical rationality instead of

cognitive-instrumental rationality as the theory stated. This relationship might mainly come from standardized medical education regarding medical ethics. Besides, physicians' moral-practical rationality seemed to be system-induced moral-practical rationality, in which might be from educating medical ethics predominately via physicians' cognitive functions.

Focusing on 'Theoretical assumption 2' (Cognitive-instrumental rationality is directly and mainly related to strategic actions.), the study results showed to be congruent with the theories stated as the path coefficient from cognitive-instrumental rationality to the strategic action verified by a statistical significance (Table 4.31). In details, a strategic action operationally refers to physicians' communication predominately under their empirical knowledge. Actually, physicians have to work under empirical medical knowledge. Therefore, every assessment items regarding medical knowledge application would be selected by all of the physicians. As a result, the strategic action should be assessed in the aspect of probability in actions. As the theories stated, significant characteristics of communicative action are those claims for comprehensibility, truth, appropriateness, and sincerity. However, it should be assumed that the strategic action would incompletely have these four characteristics. Therefore, this study was designed to assess physicians' ignorance of these four validity claims hidden in their speech acts. The more ignorance meant the more strategic action application. From the study, it was found 'comprehensibility' and 'appropriateness' was the two most ignorant validity claims (Table 4.22).

For 'comprehensibility', it simply refers to speaking out with understandable words. There have been many investigations that revealed the physicians most likely to communicate with their patients by using technical terms (Scambler, 2005). Some reasons proposed for using technical terms by physicians as follows. Firstly, it was due to fixed formats of medical interviewing so that patients might have less probability to reveal their expressions. Some hermeneutic investigations supported this reason with a comment that physicians usually deemphasized patients' opinion and moved the dialogue back to a technical track (Waitzkin, 1991). It should also be noticed that formats of medical interviewing might

be influenced from ‘colonization of life world’ by the system mediating to medical knowledge. Secondly, it might be that physicians conducted patients to follow their goals or expectation (Graham, 1981). These physician goals or expectation usually come from physician interests that have been proved to be associated with medical standard practices. This explanation seemed to be supported by the relationships between the cognitive-instrumental rationality and the strategic action, and these would be corresponding to the results previously mentioned.

For ‘appropriateness’, it simply refers to sharing presuppositions of the speakers and the listeners so that conversations meet least arguments. There have been some critical reviews that physicians usually apply medical treatments with ignorance of social contexts. Some critics stated that it is due to a mainstream ideological assumption embedded in physicians, and that is about what ideal patients should behave (Waitzkin, 1991). For example, physicians assume that patients know how to behave for good health; and patients willingly follow physicians’ suggestion. Therefore, physicians are not aware that some particular conditions possibly can be unmatched by their medical suggestion. In correspondence with the study’s results, the obvious findings revealed ‘appropriateness’ was the second most ignorance. Besides, this study demonstrated connections from ideologies and rationality as follows. Firstly, the medical ideology in aspect of ‘reduction’ can produce physicians’ concerns only in terms of the physical health regardless of the composite of other components, such as mental, social, and spiritual health. As such, physicians’ thoughts tended to scope at the physical health and believe no significance of other healthy components. Therefore, only physical health discussion tends to play an important role in the physician-patient communications. Secondly, the cognitive-instrumental rationality that influenced by mainly medical ideology as shown in previous discussions brought about physicians’ decisions focusing on standard medical practices. This phenomenon might lead physicians to an ignorance of medical outcomes, and it could be assumed that less or no discussion about patients’ conditions after treatments.

In summary, cognitive-instrumental rationality is directly and mainly related to strategic actions. Evidently, the cognitive-instrumental rationality mainly

deteriorated physician concerns of ‘comprehensibility’ and ‘appropriateness’. Moreover, links between the medical ideology, as well as the system ideology and the strategic action had been revealed. ‘colonization of life world’ by the system clearly showed that there was a complexity of ‘controllability’, ‘formality’, ‘reduction’, and physician-interested standard medical practices. Based on the findings and previous hermeneutic investigations, physicians’ practices might be predominately strategic actions in the forms of the medical interviewing with fix formats, unawareness of incomprehensible words, following self-interest values, and ignoring discussions regarding social contexts.

## **5.2 Presuppositions and communicative actions**

Regarding Habermas’ theories, it is claimed ‘criticizability value’ is necessary for communicative action (Baxter, 2002). As being a critical theory, Habermas’ ideas agree that the most effective way to gain freedom from social construction is critical mind. Based on many social theories, criticism refers to the process in which one should initiate an idea or other ideas additional to the previous ideas on something. In practices, one should try to repeatedly rethink in the opposite ways in one’s previous knowledge (Raapana, 2010). It should also be noted that some Buddhist ways are associated with critical ideas, such as Kalamasutta (Payutto, 2003). Since Habermas focuses social actions on interpersonal communications, he extends criticism to further cover other possibilities to add more to one’s ability of criticism, for instance, interpersonal long arguments or discussion. In order to have long discussion, there should have freely openness together with different ideas. As a result, ‘criticizability’ was defined as composed by two components: one’s internal ability of critics (‘critical ideas’) and one’s willingness to both providing and accepting criticism (‘participation ideas’) (Habermas, 1984). Interestingly, the second mentioned component should be probably assessed since it comes from individual instincts. In the late works of Habermas, his views also supports that the second mentioned component (‘participation ideas’) might be related to morals (Habermas, 1995). However for the ability concerning critics, there have been evidences of success in promotions of one’s ability of criticism by teaching (Nagata, 2004). Thus, all of these evidences might

confirm the component of 'critical ideas' should be related to social constructions. Consequently, 'criticizability' seemed to be a combination of one's influence upon both pure inner thoughts and social-embedded thoughts. Nevertheless, the 'criticizability' in this study was called 'criticizability value' and it was designed to be an external factor.

The assessment of the 'criticizability value' derived from two components as previously mentioned. However, one's willingness to both providing and accepting critics was adjusted into values of participation in long argumentation (Habermas, 1984). Almost all of item contents were designed in negative direction because these simulated conditions in aspect of positive meaning might be interpreted as non-sense conditions, which might disturb informants' assessments. The initial findings were very interesting, and should be discussed. Firstly, negative correlated coefficients between the criticizability value and the three ideologies were found. They were found high correlation coefficients between the criticizability value and the medical ideology (coefficient = -0.39); together with the criticizability value and the system ideology (coefficient = -0.34). Secondly, all of these mentioned relationships were statistical significances (Table 4.28). These findings might confirm that the assessment of 'criticizability value' was rather valid since itself partly meant opposite ideas. Thirdly, the given scores for the both components (critical ideas and participation ideas) were low-to moderate scores; and the 'critical ideas' component had slightly lower scores than that of the 'participation ideas' component (Table 4.10). These findings might imply that an obstacle for physicians' having long discussion was more predominate of lacking critical ideas than that of participation ideas. The remarkable evidences for supporting 'colonization of life world' by the system was disclosure since two least scores given by the physicians for two items were 'Society regulations should not be violated' and 'There should be no further argument when scientifically-proven evidence is given'. The mechanism of colonization of life world' by the system to the criticizability value might be related to the involvement of the system on the normative sphere so that physicians were less interested in Buddhist principles as stated in previous discussions. Lesser beliefs in Buddhist instructions might cause less mental development, which should be interfered for the development of critical

thinking (Janvipadiloak, 2007). However, this mechanism should further be elucidated.

The criticizability value was found more relationship with being external factors than internal factors, as the physicians seemed to have the participation ideas more than the critical ideas (Table 4.10). Moreover in the assessment of the participation ideas, it was found that the physicians to score the lowest on the item-- 'Those with limited experience should say little'. That might reveal that an important obstacle for the occurrence of criticizability value, especially participation in discussion, was a social concern of lesser in self knowledge. Despite Habermas together with Kohlberg who have stated that individual willingness of interpersonal communication by senses of equality was associated with participations in discussion and a higher moral stage (Reid, 1977), but the study results had indicated that the criticizability value as an external factor, in other words- social factor, brought about the models fit (Figure 4.1, 4.2, and 4.4). These might be confirmed that the criticiability value despite of a higher moral stage could be actually developed under social interactions. In other words, morals might not be pure instincts.

The necessity of 'criticizability value' for communicative action was investigated by using a path analysis. The results showed that the criticizability value had insignificant causal relationships with the communicative action in all four models (Figures 4.1, 4.2, 4.3 and 4.4). On the contrary, Habermas strongly claims that the criticizability value should be associated with the communicative action (Habermas, 1984). It should be noted that these findings seemed to be not corresponding to the significant matters of the communicative action theory. In order to acquire better understanding, this issue will be further explained after the discussion of the communicative action.

Focusing firstly on the communicative action, four validity claims were planned to assess as previously stated in discussion regarding strategic action. Among the physicians' concerns of the four validity claims, 'sincerity' seemed to be scored

the lowest. The ‘appropriateness’ and ‘comprehensibility’ were to score higher consecutively, whereas ‘truth’ showed to be scored the highest (Table 4.21).

For the ‘truth’ finding, it would be very interesting because this result corresponded to normal everyday practices. Since generally in most physicians’ duties, the physicians had to interact with patients and talked with them about illnesses under evidence-based knowledge and medical ethics; therefore, the physicians normally inform all the medical truths to their patients. Thus, it was not surprised that the ‘truth’ validity was the most concern by the physicians.

The second most concern-‘comprehensibility’-, could be explained that the physicians had to make their patients to understand about causes of the illness, natures of the diseases, treatments and consequences of the illness in order to get a good cooperation from their patients. Therefore if no intention to use strategies, the physicians usually realized necessity of ‘comprehensibility’ (Scambler, 2001).

For the ‘appropriateness’, it refers to physicians’ loss of realizing social contexts (Wiggins, 1986). Besides, this issue has been corrected for many years in aspects of end-of-life care communications (Waitzkin, 1972). The finding was found associated with what most past researches have stated, since it was found to be the third priority of physicians’ concerns. Together with the findings of strategic actions, they were seemed that the ‘appropriateness’ was not associated with physicians’ intentions to use strategies, in other words, physicians usually pay little attention to patients’ social contexts.

For the ‘sincerity’, it refers to speakers’ utterances that make the hearers believable and let the hearers criticize (Habermas, 1984). For ‘the believable’, it should be assessed in those patients who interacted with the physicians, in which this study could not designed to evaluate as discussed in chapter III. Thus, the study assessment could evaluate only possibilities that the physicians let their patients criticize their utterances as referring to ‘sincerity’. It should be noted that the study ‘sincerity’ was sincerity for participating in long communication, not sincerity for

cares and treatments. Strikingly, the findings were found that the physicians provided less opportunity to let patients criticize their utterances despite that they had some degree of the participation idea. These findings were very interesting because it could wonder that how validity of physicians' communicative acts without sincerity of communication. Moreover, it should be further investigated why physicians had the participation idea but they less accepted being criticized by others.

In conclusion of these remarkable findings, there were three study results that were not corresponding to the theories. Firstly, the criticizability value was found insignificant causal relationship with the communicative action. Secondly, the assessed communicative action showed that physicians communicated with less concern in social contexts. Finally, the assessed communicative action showed the tendencies that physicians communicated without sincerity (of communication). These remarkable findings altogether brought about two postulates. The first postulate was the assessed communicative action might not be the same one as the theories stated, and the second postulate was some faults in measurement.

There were several explanations that the assessed communicative action might not be the theory-based communicative action. Firstly, 'sincerity' is associated with moral consciousness, especially sense of equality (Habermas, 1995). If it based on the theories, the moral-practical rationality should be a causal effect to communicative action. Though several attempts in adjusting models were done as presented the initial model, the ADJUST1, and the ADJUST2, but all the analyzed models showed very low path coefficients (range of path coefficients: 0.06-0.14) with statistic insignificance from the moral-practical rationality to the communicative action (Figures 4.1-4.3). Focusing on the details, the findings showed that the physicians gave higher scores on the sixth moral stage in which this moral stage covered reasons regarding universal justice. Thus, why these low path coefficients did occur? As results stated in previous discussions, the moral-practical rationality was traced that it had been influenced by medical ethical education, which was a form of the system conduction. Although the final adjusted model (ADJUST3) had to switch the causal relationship from the moral-practical rationality to the strategic action, the

derived path coefficient (from moral-practical rationality to strategic action) was found a higher value (Figure 4.4) indicating a higher causal relationship than those of the previous mentioned models (from moral-practical rationality to communicative action) (Figures 4.1, 4.2, and 4.3). It should be noted that these mentioned path coefficients were quite low values and no statistical significance. Therefore, all of these proposes might confirm that the assessed moral-practical rationality was not associated with the communicative action.

Secondly, Habermas later states that a communicative action is a set of very complicated components (Habermas, 1995). One of presuppositions for the communicative action is a higher morality, which should be called 'Transcendental morality', which could be compatible with the Kohlberg-Habermas moral stage 8 (Power, 1981). This moral stage was described as an individual was willing to accept some different opinions, realizing equality, and being eager to communicate with others. Especially, the 8<sup>th</sup> moral stage equality means equality in real practices, which might not be the same as the theoretical equality concept. 'Transcendental morality' might be transformed to 'sincerity' as Habermas suggested as a validity claim. Based on these theories, the explanations for the results why the moral-practical rationality was not much correlated to the communicative action could be that the assessed moral-practical rationality was limited to the 6<sup>th</sup> moral stage. Therefore regarding the results, it could possibly be that physicians to score the lowest on 'sincerity' might be from their moral development less than the 8<sup>th</sup> moral stage. As a result, it is impossible that physicians in this study could produce communicative actions.

The third explanation regarding real circumstances, it could be claimed that the real practices of equality might refer to making equality for all of stakeholders in particular circumstances. Many attempts had been studies in order to adjust the real practices of equality into a sensible process. An interesting process was proposed with five steps for practicing of equality debates, in which the process required an important activity that should be dynamic interpersonal interactions (Meisenbach, 2006). As previously known, the interaction processes would bring about reciprocally developing a higher morality under communicative actions (Habermas, 1995).

Therefore, communicative action could occur only in the interacting situations. The evaluations of communicative action concerning only the validity claims, not including real interactions, might be an important limit in this study.

Finally, since the communicative action is commented as an ideal complexity (Johnson, 1991). It should focus on dialogues as conversation analysis in order to assess the communicative action (Engestrom, 1995). In accordance with all the previous investigations; many of them are in the forms of hermeneutic studies (Waitzkin, 1972; Barry, 2001). Since the causal relationship framework was impossible to obviously reveal without numerical data, the study design had to be subjected to a quantitative study. However in next investigations, the communicative action might be assessed under real interactions between patients and physicians by using some assisted instruments, such as video recorder.

In sum of the first postulate, it was due to some limitation of this study; therefore, the assessed communicative action could potentially not be the theory-based communicative action. The main reasons were that the findings revealed lack of sincerity (of communication). However, the results did not imply that physicians did not desire to or could not produce the communicative actions because one of the important predisposing factors for occurrence of communicative action should be interpersonal interactions. With design of the study, this predisposing factor was limited.

If the assessed communicative action might not be theory-stated communicative action; thereafter, what would it be? Based on Habermas, he categorized two types of action (speech acts) as the strategic and the communicative action. In the actual lives, there should be a dynamic continuum of these two speech acts, and it might mean that an individual could choose to apply either strategic actions or communicative actions in any events and periods of time. Besides, he/she might also choose both actions in the same event. Habermas does not stress these dynamic. However, the four analyzed models (Figure 4.1-4.4) revealed that reciprocal effects between the strategic action and the communicative action existed. Therefore, it was a

potential that switches in between both actions might dynamically occur on the level of intentional action.

For strategic actions, Habermas categorizes the actions into open strategic action and concealed strategic action (Habermas, 1984). The open strategic action is related to paternalistic physician-patient relationship, which was found to be a common pattern in the past. An example of open strategic action speech act was 'I'm the doctors, I know the best', in which this study did not include the open strategic action in the assessment. Focusing on the concealed one, the concealed strategic actions should also be associated with asymmetrical power relationships, categorized into unconscious deception and conscious deception (Scambler, 2001). The conscious-deception strategic action is simply meant intentional speech acts of manipulation. For the unconscious-deception strategic actions, Habermas calls 'systematically distorted communication' which is related to 'colonization of life worlds'. Data from hermeneutic studies revealed some existing circumstances at the medical encounters, which were analyzed by the concept of 'colonization of life worlds'. It was found that two reflections of competing voices that were 'voice of life world' and 'voice of medicine'. The 'voice of medicine' usually dominates the 'voice of life world' in aspects of interruptions, using technical terms, and also dissolving patients' self-understandings (Mishler, 1984). For example, some part of a conversation between an obstetrician and a pregnant patient was illustrated as follows (Graham, 1981).

Physician: If you'd been ready I would have started you off today. You see on the ultrasound it's not growing as well as it was, and on the water tests the oestriols are falling-it's not bad. But you should come in and have some water test, get some rest, and then we can start you off sometime next week probably, when you're already.

Patient: If my husband wanted to come and talk to you about inducing me, can I make an appointment for him?

Physician: I don't think anything your husband said would affect our decision one way or the other way.

Patient: No, but he would like to talk to you.

Physician: Yes, well he can talk to whoever's on duty, but there's nothing he can say that will affect us: it's a medical question.

Patient: No, I understand that.

Physician: If we explained to everyone, and everyone's husband, we'd spend all our time explaining. I think you've got to assume if you come here for medical attention that we make all decisions. In fact I think you should come in

today, but I've already browbeaten into saying Sunday, which is another forty-eight hours.

Regarding the dialogue sample, it showed the obstetrician applied a technical term-‘the oestriols’, denied meeting the patient’s husband (social context), and manipulated the patient to adopt his/her suggestion. Interestingly, it also revealed that the speech acts were mixed up between manipulation and systematic distortion. As such, it seemed to be very difficult to clearly differentiate real practical situations into the conscious or unconscious concealed deceptions as did by the theories. These hermeneutic investigations might possibly confirm switches in between two types of concealed strategic action that might dynamically occur.

Therefore, it could possibly be that two physicians’ intentional speech acts in this study were revealed the intentional concealed strategic speech acts including unconscious and conscious subtypes instead of the intentional strategic action and the intentional communicative action, respectively (Figure 4.4). In addition to the past hermeneutic investigation as previously stated, some results from this study also support this proposal. Firstly, several evidences showed that the physicians have colonized by the system both on the ideology and the rationality levels. Besides, physicians’ moral-practical rationality also was colonized by the system with the medical ethics as previously discussed. As a result of colonization, the physicians had hardly applied the communicative action. Secondly, there were high path coefficients in the forms of reciprocal effects between the assessed intentional strategic action and the assessed intentional communicative action (Figure 4.4). Thus, these high correlations should be more make-sense relationships in-between the unconscious and conscious concealed strategic actions instead of the intentional strategic action and the intentional communicative action. Thirdly, the study showed several evidences against the theories- the moral-practical rationality did not have a significant causal relationship with the intentional communicative action; the criticizability value was found insignificant causal relationship with the intentional communicative action. Consequently, if proposing that the assessed communicative action were the intentional unconscious concealed (systemic-distorted) strategic action, it would be more reasonable. Furthermore by this propose, it would be more reasonable to explain

why physicians had much degree of participation ideas but had less concern in being criticized that it caused by the system-induced concepts. For an example of system-induced efficiency, physicians prefer to spend time with efficiency so they tried to avoid unnecessary long conversations with their patients because physicians might think it should be more appropriate in treating a higher number of patients than discussing too long for a few patients. 'Discussion too long' might come from physician interests in only medical contexts. Thus, what physicians did could be interpreted by their patients as no 'sincerity' (of communication). The last supported finding was that significant differences of both the intentional strategic actions and the assessed intentional communicative actions between the two groups of specialty-trained physicians, in which a group of specialty with low to none possibility of end-of-life communication gave higher scores for both of these intentional actions than that of high end-of-life communication group (Table 4.25). It is most likely that the more physician-patient interactions might induce the more communication with sincerity, in which these interactions could be occurred in physicians who had higher opportunities to communicate regarding end-of-life cares. In sum, all the above mentioned evidences seemed to support that the assessed intentional communicative action was most likely systemic-distorted concealed strategic action.

For the second postulate--some faults of measurement, there had naturally been some limitations in which this study were assessments of speech acts including strategic and communicative actions. These two speech acts needed evaluations in the real interactions as theories stated. But with the design of study as previously discussed, these constructs had to be changed into the intentional speech acts and assessed only by numerical data from physicians' thoughts. Based on Habermas, differentiation between strategic and communicative speech acts could accomplish by assessment claims of validity of speech acts both those speakers and hearers. However, the assessments of these intentional speech acts were set to evaluate the four validity claims (see chapter III, 3.2. research instruments) and it initially sounded appropriate. As considering the results, it was found some queries such whether the communicative action should be altogether composed of all the four validity claims or not; the four validity claims should be balance-weighted or not. Unfortunately, there

has been no theory back up for these issues. Moreover, no numerical study regarding assessment of communicative action was done, and also the past hermeneutic studies could reveal only strategic action in the medical settings. Nevertheless concerning the congruence of the results, it could be possible that this study tool for assessment of intentional communicative action was valid, through it seemed to be deviated because most physicians have been colonized by the medical systems. It might be that physicians who have not been colonized would give the maximum scores for all four validity components. If so, all causal relationships analyzed by the data regarding non-colonization would be changed from this study models. Besides, this tool might be such a fine scale that could differentiate two types of intentional concealed strategic, and reveal the striking finding that physicians basically tended to communicate with strategic speech acts.

In brief, several evidence-based supports induced ideas that the analyzed model in this study actually revealed only a causal pathway of physicians' systematic distorted communication instead of the communicative actions. As such, the assessed criticizability value that was unsurprisingly found that no significant causal relationship with the unconscious concealed strategic actions (the assessed communicative action). Thus, the study results were not against the essential matter of Habermas' theories. In other words, 'theoretical assumption 3' (criticizability value and moral-practical rationality should be mainly and directly related to 'communicative actions' and cognitive-instrumental rationality that might be indirectly related to 'communicative actions') could not be demonstrated in this study. Importantly, the physicians had been colonized by the system so that they basically tended to communicate with strategic speech acts regarding end-of-life-care communications. Secondly, 'sincerity' was supposed to be the individual main attribute, in which degree of 'sincerity' could cause differences in communications between the concealed strategic actions and the communicative actions. Finally, physicians normally switched their communications in between manipulated (conscious) and systemic-distorted (unconscious) concealed strategic speech acts, in which these switches might depend on interpersonal interactions. By this way, the physicians intended to communicate without comprehensibility for patient

manipulation. On the contrary, they provided less opportunities of being criticized without awareness due to system-induced their actions.

### **5.3 Possibility communicative actions for end-of-life care in Thai-cultured settings**

Through this study could not reveal causal paths of the communicative action, some other important details were found that they might be related to lead to have communicative actions in Thai-cultured end-of-life care settings. Discussions according to the study results, Habermas theories and some accumulated knowledge in reference to decolonization were presented as follows.

First of all, the subject regarding emancipation should be discussed. Habermas views that every person naturally seeks for freedom. However, he means the freedom from social constructions and claims that the way to deconstruction is individual freedom of discussion, which it partially needs critical ideas (Habermas, 1984). Besides, Habermas expands his ideas beyond the subjective world to the social world, in which he claims without deliberating participation, the social freedom for discussion will not be possible happen. The criticizability especially in aspect of equal participation, it serves an important means of self-development, self-realization, in which more participation would lead individuals to have more tolerance of difference, more sensitivity of reciprocity, and better ability in engaging moral discourse and judgments (Warren, 1995). Remarkably, these study findings were found that the physicians had inadequate criticizability values in both of the critical ideas and the participation ideas. It might be that ‘colonization of life world’ influenced physicians’ thoughts to follow medical guidelines without questioning. Besides, it was possible that Thai traditional norms, such as ‘respects for some respecting persons’ like parents, teachers, and physicians, led to unequal power relationships while a lay person was dealing with these respecting persons. Therefore with unequal power relationships, the physicians pay little attentions to participate in communication. On the contrary, patients might be embedded that it is inappropriate to be questioning whatever the physicians told them. Nevertheless regarding the explanations, it was proved that

inadequate criticizability value among the physicians was an obstacle for the communicative actions.

As previous discussion, the negative correlation coefficients of the criticizability value were found with the medical, the system and the morality ideologies. These findings implied that the more the physicians learned about medical knowledge, the less the physicians had critical or participation ideas. Thus, physicians' communicative acts hardly occurred. Habermas proposed that opening public actions and participation, like civil society, self-help groups, and et al. should be held in order to promote the criticizability value (Habermas, 1974). In this case, numbers of patient/family-physician meetings regarding end-of-life care were set up and investigated in the western countries (Curtis, 1997; Upadya, 2002; Tulsky, 1995). However, almost all of the investigation results were criticized that they provided better understanding of patient satisfaction, but poorer of advance-care plan and physician understanding of patient preferences (Curtis, 2004). Moreover, a previous investigation also found that physicians' the top selected item regarding barriers of end-of-life care communication was 'There is too little time during our appointments to discuss everything we should.' On the contrary, patients' the top selected item was 'I would rather concentrate on staying alive than talk about death' (Knauff, 2005). These two samples revealed the lack of the participation ideas in the patient/family-physician meetings for both perspectives of physicians and patients. As a result, it might reflect that the Habermas-stated open-group discussions could not promote the criticizability value in the settings of end-of-life care.

Since the theories stated that the criticizability value would conduct the communicative acts (Baxter, 2002), it is necessary to develop individual criticizability value. The theory-stated method of promoting the criticizability was proved to be ineffective as previously discussed whether the criticizability value could be promoted and by how? Regarding the observed results, 'colonization of life world' was also influenced at the root of thoughts or ideologies. Besides, this study was found that the ideology of 'controllability' predominated in physicians' thoughts and was also linked to every sphere of thoughts as previously stated. As such, the ideology of

‘controllability’ should be analyzed. As Habermas has ever synthesized its relationships with the rationality and actions, therefore this issue was analyzed in details; the ‘controllability’ should be highly probably related to ‘attempts to have certainty’. Therefore, the more controllability might reciprocally be the more certainty should be. Like Weber’s view, calculability, predictability, and efficiency are yields of formal organization (Ritzer, 1996). Consequently, it was possible that ‘colonization of life world’ abstractly would refer to the process of ignorance of the truth or uncertainty in human beings.

It is known that Thai culture has been underpinned by Buddhist philosophy. One of the Buddhist philosophical concepts regarding nature of life is ‘The three characteristics of existence’ in which the first statement is realization of changes or uncertainty (Anicca, อนิจจัง) (Prayutto, 2004). It means all nature is subjected to change. These changes possibly cause individual sufferings. In the case of attachment, it would bring more sufferings to oneself in which these conditions are the second statement called Dukkha (ทุกข์). Thirdly, Anatta (อนัตตา) refers to a concept that there is no lasting essence, and only illusion of the existence of a self seems to be a way for realizing of the non-everlasting and self-created thoughts (Prayutto, 2004). As previously elucidated, the ‘controllability’ seems to be the contrary idea against ‘the three characteristics of existence’, especially Anicca. Realizing and following ‘the three characteristics of existence’, one would be free from sense of controllability, inappropriate making efforts for controlling, and adherence to the non-everlasting and self-created thoughts (Prayutto, 2004). In the case of colonization, balancing of ‘controllability’ and ‘the absolute reality of uncertainty’ might be prerequisites for the occurrence of critical ideas since making balances should provide other perspectives for an individual so that he/she would not give much value on either perspective. Regarding many studies, values have been showed to be related to individual reasoning, actions and behaviors (Raz, 1999). Also suggested in the same manner, the perceived behavior control and self-efficacy that are constructs in the theory planned behaviors and the self-efficiency theory respectively might be associated with controllability in behaviors (Heckhausen, 1991). Consequently, if one gives much more value on ‘controllability’, one might push oneself to pursue in some efforts that

are related to controlling in order to meet what one's expectation. The process of thoughts in 'pushing efforts' is also reciprocally associated with sense of ego and self-created thoughts that are underpinned with social construction, as a result of this process lead one to be related to sense of Dukkha (Prayutto, 2004). Interestingly, this study revealed some evidence supporting these ideas that the physicians had less realization in Anicca as they gave a low score on the item- 'Let life take its natural course.' (Table 4.8) As well as Dukkha, the physicians gave a rather low score on the item- 'Suffering results from one's own deeds.' (Table 4.8) These results might also reflect high senses of ego in the physicians. Therefore for developing the criticizability, physicians' reflexive thoughts regarding 'the three characteristics of existence' should be promoted.

As in previous discussions regarding the participation ideas, lack of physicians' participation ideas was demonstrated both in this study and previous investigations. Habermas states that the participation ideas might be associated with higher moral stage equivalent to communicative rationality, and it was highly related to communicative actions (Habermas, 1984; Power, 1981). He has claimed that interpersonal interactions would cause communicative rationality. However, it might not be true in a case of life world-colonized situations, since he claims that interpersonal communication, or called 'discourse', should be in the forms of multi-directional, analyzed argumentation until reaching mutual understanding and consensus. Then, the process of argumentation would bring about communicative rationality (Habermas, 1984). Like win-win decision makings, it might be that all individuals at the debates have a high degree of cognitive-instrumental rationality; therefore, they easily agree to a decision that corresponds with their self-interests. Then, this process might not lead the physicians to a higher morality, including communicative rationality (Rienstra, 2006). As a result, high moral reasoning might not solely come from interpersonal communication, but also from discourses with sincerity.

In Buddhist philosophy, self-reliance, self-development and conducts of high moral standards should be encouraged so that one could be led to self-liberation

(Chaturapit, 2006). Moreover, the Buddhist principles involve keeping the mind in the natural state so that an individual can produce powerful unbiased thoughts. Notably, an important Buddhist instruction for rationality that is highly related and more complicated than those of the western critical thinking is ‘Yonisomanasikara’ which means in English like reasoned attention, systemic attention, analytical thinking, critical reflection, causation thinking in terms of specific conditionality, and problem solving (Janvipadiloak, 2007). However, ‘Yonisomanasikara’ always needs ‘Panna’ (ปัญญา) or wisdom during the process of critical thinking (Prayutto, 2004). Thus, ‘Panna’ should be promoted in order to produce good thoughts and actions.

Interestingly the distinction of the given scores (Table 4.8), these revealed that the morality ideologies regarding Buddhist instruction could be separated from the morality ideologies of normative beliefs. These findings confirmed not only the existence of colonization but also the less attention of ‘Panna’. ‘Panna’ will be developed through a mental cultivating process. This process initially needs faiths, especially meditation in Buddhist instruction (Chaturapit, 2006), or any religious disciplines. As such, the physicians should have opportunity to develop ‘Panna’. If so, the physicians will have a higher moral reasoning stage and, then can communicate with their patients with a sublime state.

The sublime-state communications may correspond with speech acts that meet the Habermas’ four validity claims. Naturally, it may be communications with boundless state (Nyanaponika, 1994). For instance, in the loving-kindness mind state (‘Metta’, เมตตา), a person practically conducts a communication without discrimination, adoption in differences and readiness to help, and these may bring about opportunities for a long understandable communication between the physicians and their patients. For the compassion mind state (‘Karuna’, กรุณา), a person practically conducts willingness in helping to the best of his/her ability, listens for the cries for helping them. Expectedly these may bring about thoroughly investigation regarding the interested issues in both causes and solutions. The compassion communication may be related to validity claims in aspect of ‘truth’ and ‘appropriateness’. The other two

mind states that are the sympathetic joy ('mudita', มุทิตา) and the equanimity ('upekkha', อุเบกขา) lead to validity claims regarding 'sincerity' and 'comprehensibility'. However, all of these sublime states should also be a combination in nature with 'Punna' (Prayutto, 2004). Consequently, the sublime state communication should be promoted in an individual physician with the hope to get the best benefit of debating on the four validities of reaching consensus.

Generally the Buddhist way of sublime-state communication will give values to mental process of an individual physician; on the contrary regarding Habermas' communicative action, he may use values for reconstructing some kinds of social conditions. Habermas views that 'ideal speech situation' is necessary for the occurrence of communicative actions (Habermas, 1984). Introducing to practices, 'the ideal speech situation' can refer to provisions of empirically verifiable criteria that guarantee to make everybody's argument be heard, for example, the inclusion of all participants, the rules to give reasons if challenged, and the claims that each member has the rights to learn. These competences should be necessary in fully participating in the dialogues. Besides, it means making sure that all members have the same rights; for instance, nobody should be suppressed or blackmailed after the dialogues (Weber, 1991). As such, the ideal speech situation seems to be a condition associated with equal power relationships among communicators. Therefore, Habermas proposed that some social conditions should balance power relationships and promote personal rights, political democracy, and social movements (Habermas, 1984). However, some other conditions may not provide the balance power relationships; for example, a right is not the given power by the state but from the inner sense of all equality as human beings. Therefore, all social contracts are led to partial involvements. In better situations for the occurrence of communication actions, Habermas adopts these ideas and also adds transformation of social education as being a mean for decolonization and provision of communicative actions (Fleming, 2002). Nevertheless, all the proposed interventions seemed to be superficial manipulations. The manipulated interventions signify subjectivity of individuals, but in fact they are conducted with the objectified processes through the social world or a new replaced system. Unlike the Buddhist perspectives, emancipation means self-liberation or freedom from all causes

of suffering. This concept seems to be broader than freedom from social-constructed ego of Habermas' concepts. A new social-constructed condition might satisfy all involvements; however, it is still be colonized by systems. For enhancing the communicative action, mind cultivation should be promoted in physicians by using the all systems in the society

In summary, the communicative action is a complexity of multi-dimensional relationship in spite of Habermas has tried to isolate it as predispositions, which are 'criticizability value' and 'communicative rationality'. Focusing in details, these predispositions seem to be related to the Buddhist doctrines that are more familiar with Thai culture. Thus, it is appropriate to incorporate the Buddhist ways into physicians' minds. Another reason for approaching by Buddhist principles is that the communicative action are very hard to process because construction equality of power in medical encounter contexts is usually difficult to be reached. Development physicians' inner senses, such as 'metta' and compassion, may be an alternative solve for inequality power relationships between physicians and patients. Remarkably, as the findings in this study that previously discussed could not reveal physicians' intentional communicative actions, therefore, it should be inappropriate to predominantly enhance the communicative actions. Focusing on the Buddhist ways, they altogether encourage self-reliance, self-development resulting in high moral standards so that finally one may reach self-liberation equivalent to Habermas' emancipation. But actually, the Buddhist ways of emancipation unlike those of Habermas have broader and more profound concepts, for example, 'the three characteristics of existence', 'Yonisomanasikara', and 'the sublime states of minds. These Buddhist ways need deep understanding by 'Panna'. As a result, the physicians should have opportunities to enhance 'Panna' in line medical knowledge in order to achieve the state of de-colonization.

Notably, this part of discussion was aimed to point some findings of relationships of Thai culture knowledge like Buddhist doctrines and the western theories like Habermas theories. The supported reason is that some customary doctrines may be more facilitated to applications than those unfamiliar doctrines.

Therefore, it should be noted that other religious principles can also be brought about to apply for occurrence of communicative action. For more comprehensibility, all of the relationships between religious doctrines and system decolonization should be further studied.

## **CHAPTER VI**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 Summary of study backgrounds and methodology**

The concepts of euthanasia have been rising as the results of medically technology advancement, and now becoming a social issued dilemma in modern societies. Like other social conflicts, euthanasia conflict should be due to different thoughts or beliefs among individual involve, such as end-of-life patients and their relatives, including physicians. Based on some social theories, these euthanasia social conflicts should be solved by some kinds of communication. Besides, there have been many investigations regarding unpleasant communications of physicians; however the studies are assessed by their patients. These evidences correspond to Habermas' theories regarding 'colonization of life world' concepts. It states that an individual had been dominated by the system (science, technology, and systemization); consequently, he/she has a specific speech act called 'strategic action' (strategic speech act). Nevertheless, the main characteristic of strategic speech act is the distortion of communication itself so that this type of speech act tends to cause unpleasant communications and unable to solve any conflicts.

Therefore, Habermas' theories may be applied to the euthanasia conflicts in the medical settings. The heart of Habermas theories is proposing another specific type of communication called 'communicative action' in resolving social conflict. However in Habermas' idea, the 'communicative action' (communicative speech act) is a complex relationship among values or morals, thoughts or reasons, speaking out (utterances), and conditions. Thus, it needs to trace for the roots of the communicative action in order that communicative actions can be built up and promoted.

The primary aim of this study was to explore the causal paths of communicative and strategic actions of Thai physicians regarding passive euthanasia,

and the causal path analysis was also guided by the Habermas' theories. Based on basic theoretical descriptions of human action, there should be causal relationships from social ideologies and rationalities before actions. For the actions, Habermas stresses speech acts since they predominate over all proceeding actions, especially actions that need cooperation with other persons. Besides based on 'colonization of life world' concepts, the predominated type of speech act is strategic speech act be caused by a specific type of rationality called 'cognitive-instrumental rationality'. Together with the concepts of communicative action, communicative speech acts, a mixed in general interactions, of several types of rationalities, especially one of them called 'moral-practical rationality'. Furthermore, Habermas views that there are different roots of these two specific types of rationality as described in details in chapter I and II.

Therefore, three theoretical assumptions were set. The first was the related ideologies leading to the rationalities-- scientific ideology in aspect of medical ideology, as well as system ideology--, were assumed to be related to the cognitive-instrumental rationality. Additionally, ideologies regarding norms and morals in term of 'morality ideology' were assumed to be related to the moral-practical rationality. The second assumption was that the cognitive-instrumental rationality was assumed to be both direct and indirect causes of the strategic action. Finally, the communicative action was assumed to be a direct consequence of the moral-practical rationality deriving from a special type of ideology called 'criticizability value', and the communicative action should also be an indirect consequence of the cognitive-instrumental rationality. By using this model and after analyzing all relationships of these three assumptions, the results should show causal paths of communicative and strategic actions.

For a better understanding, it should be noted that there were eight theoretical constructs (medical ideology, system ideology, morality ideology, criticizability value, cognitive-instrumental rationality, moral-practical rationality, strategic action and communicative action) in this study. Almost all of them (excepting strategic and communicative actions) were theoretical defined in aspects of

personal inner thoughts. For the actions, they were theoretical defined in aspects of overt communicative behaviors regarding conditions of interpersonal interactions. However if these two actions would be assessed thoroughly from patient-physician communications or with scenarios of physicians-patient acts, a number of conditions of interpersonal interactions, such as varieties in aspects of patients themselves, types of illnesses, situations and so on, were needed to be concerned and these might be significant confounding factors. Therefore, these two actions had been operationally defined as intentional speech acts. As a result, all of the eight constructs had been derived from the same nature of physicians' thoughts.

This study was designed to be a quantitative approach since accurate exploring multiple causal relationships needed statistical analyses. Besides, all assumed causal relationships could be conceptualized altogether as a structural model. Therefore to serve the primary aim, it needed advance statistics, like structural equation model. However, both the operation definitions and the quantitative design might bring about some limitations. Remarkably, the theoretical scope of social actions had to be reduced into a scope of personal impending actions.

After MU ethic committee approval, the study was conducted at King Chulalongkorn Memorial Hospital. The study group of sample was all general practice physicians who were in the first-year specialty training at King Chulalongkorn Memorial Hospital in the academic year 2009. Collecting data was accomplished with a self-administrative questionnaire purposively constructed for this study. The questionnaire was composed of four parts, containing eight scales (each scale for each construct) and demographic information questions. There were differences in characteristics (form of contents and type of scaling) of the scales according to the nature of the constructs. The final version of the eight scales was verified with content validity and reliability by alpha of Cronbach, which were previously stated in details in chapter III.

Continuous data were basically analyzed in the forms of the central tendency, especially means and standard deviations. Numerical and categorical data

were analyzed in the forms of frequency distributions. The relationships among the eight constructs were analyzed by using the linear structural relationships program (LISREL student version 8.8).

## **6.2 Summary of the results and discussion**

Due to theoretical complicated relationships of several presuppositions for communicative and strategic actions, there were many remarkable overlapped findings. In order to provide more understandings, the finding summary, as well as its discussion, should be arranged in the forms of sequences regarding each presupposition or relationship then followed by discussion of the findings and concepts underlying. Six topics of results/discussions regarding presuppositions and their relationships were presented as follows.

### **6.2.1 The three basic ideologies of the physicians**

According to the medical ideology findings, the composed ideology regarding ‘controllability’ was more embedded in physicians’ thoughts than the composed ideology regarding ‘reduction’. For the system ideology, the physicians were underpinned with the ‘making formality’ ideology in the highest degree of the two sub-concepts- aiming at ‘efficiency’ and ‘productivity’ ideologies. The system ideology had a significant positive correlation with the medical ideology, in which there were similar patterns of the given scores presenting the two composed ideologies- ‘making formality’ and ‘controllability’. Interestingly regarding the morality ideology, the four highest given scores were subjected to be items regarding normative behaviors in interpersonal relationships; on the other hand, the low-to-moderate scored fashions were found in items related to Buddhist principles; however, a significant correlation coefficient between the system ideology and the morality ideology was higher than that of the system ideology and the medical ideology. Besides, there was no significant correlation found between the medical ideology and the morality ideology.

Regarding the concept named ‘colonization of life world’, the findings revealed and supported that ‘colonization of life world’ might begin at the ideology

level. Despite the fact that ‘controllability’ ideology might reciprocally cause the ‘making formality’, it could be claimed that involvement of systems on many ideas still existed. Importantly, the ideas as related to morality were evidently involved with the systems in the aspect of normative beliefs. Therefore, other moral-related beliefs seemed to be less aware in physicians’ thoughts. As such, these findings could reveal colonization covering on the ideological level as well, although the ideological colonization was not stated in the theories.

### **6.2.2 The two basic rationalities and their relationships**

Focusing on the cognitive-instrumental rationality, vignette-based decisions regarding standard medical practices and technical control were the two most concerns of the physicians. The other two vignette-based decisions, which were regarding medical outcomes and efficiency, seemed to be goal-oriented decisions. For the moral-practical rationality, vignette-based decisions regarding Kohlberg moral reasoning stages 3, 4, 5 and 6 were applied, and found that the physicians showed to have the moral reasoning stage 5 and 6 than the other two stages. For their relationships, it was found a significant causal relationship routing from the cognitive-instrumental rationality to the moral-practical rationality.

These findings revealed that the physicians had a broader range of moral reasoning in which Kohlberg stated that moral reasoning would gradually be developed depending on experience of interactions. Therefore, the initial rationality is self-interested reasoning or a form of cognitive-instrumental rationality. In other words according to Kohlberg, the cognitive-instrumental rationality would be a base for developing higher moral stage or the moral-practical rationality. Thus, these findings were corresponding to the theory of moral reasoning.

### **6.2.3 Relationships between the ideologies and the rationalities**

The findings found a significant causal relationship from the medical ideology to the cognitive-instrumental rationality as the theories stated. However, it was found that the system ideology significantly caused the moral-practical rationality instead of the cognitive-instrumental rationality as the theories claimed. For the morality ideology, there appeared no significant causal relationship with the moral-practical rationality; on the contrary, its path coefficient was in a negative direction.

These findings might support the ‘colonization of life world’ concepts. It was very interesting that the system ideology viewed by Habermas as a matter of objectivity like the scientific ideology, should affect only the objectivity-related rationality as the cognitive-instrumental rationality, but actually it affected the intersubjectivity-related rationality, like moral-practical rationality. Therefore, it might be assumed that separation by viewing of objectivity, subjectivity or inter-subjectivity as stated in the ‘sphere of thought’ concept proved to be invalid. Besides, it revealed that the system could cause systemic morality and the traditional morals that had no further involving the occurrence of moral-practical rationality. In real practices, medical educations regarding ethics have been transformed into the system ideology to cause physicians’ systemic moral-practical rationality. As a result, whether the physicians apply their cognitive-instrumental rationality or moral-practical rationality, all the action results of decisions should be the influence of all the systems.

#### **6.2.4 The two basic intentional actions concerning communication**

The findings found that the two actions--strategic and communicative actions-- were different in degrees of ‘validity claim’ concerns. As such, the strategic action revealed the two most ignorance-‘comprehensibility’ and ‘appropriateness’ among the four ‘validity claims’. For the communicative action, it was found that the two least concerns were ‘sincerity’ and ‘appropriateness’. On the contrary, the most concern was ‘truth’. The strategic action and the communicative action were highly correlated, and the best fitted model revealed a significant causal relationship from the strategic action to the communicative action.

Strikingly, some findings seemed to have less congruence with the substance of Habermas theories, such as a least concern in ‘sincerity’ in the assessed communicative actions. Since lacking of ‘sincerity’ in communication, in common senses it should not precede to a long of even or any long argumentation. Moreover, another least concern in ‘appropriateness’ or broad concerns in social contexts should also not bring about a consensus solution. Therefore, it might be explained that the assessed communicative action was not as the ideal communicative action stated by Habermas. According to Habermas theories, strategic actions can be crudely categorized in to open and concealed strategic actions. Then, the concealed strategic

actions are divided into conscious (manipulated) and unconscious concealed strategic actions. The unconscious concealed strategic action or systemic distorted communication is the form of communication producing by the systems. Then, a person is systematically embedded these forms of utterances so that he/she recognizes these forms of utterances that are appropriate for speaking out. For example in communications regarding end-of-life care, physicians have been taught to communicate with evidence-based truths, recognizing patients' contexts, and comprehensible conversations. However, the sincerity in communication could not be completely formed by systemization. Therefore, it was possible that the assessed communicative action was a systematic-distorted strategic action. Besides, the sincerity in communication might be a sensitive indicator for communicative action.

#### **6.2.5 Relationships of the two basic intentional actions with rationalities and the criticizability value**

The cognitive-instrumental rationality had a significant causal effect on the assessed strategic action, and this was corresponding to the theories. On the contrary, the moral-practical rationality was found to have an insignificant causal effect upon the assessed strategic actions instead of being the assessed communicative action as theories stated. Besides, the criticizability value that should be a causal effect on the communicative action was found to have the value with a very low path coefficient concerning the assessed communicative action. In details of the criticizability value assessment, both components-criticism and participation ideas- were given low scores by the physicians. Interestingly, it was found that there were three negative significant correlation coefficients from the criticizability value to the three ideologies.

It was obvious that the concepts of strategic action by Habermas was proved in both the causal paths from the medical ideology to the cognitive-instrumental rationality and then to the strategic action. However, the occurrence of strategic action did not solely come from the cognitive-instrumental rationality, but from the moral-practical rationality as well. As end-of-life-care settings are related to interpersonal interactions, all the decision makings always need practical reasons like the moral-practical rationality adding on cognitive reasons grounded by biomedical theories. This might be interpreted that the assessed strategic action was not an open

strategic action. Focusing on the criticizability value, some findings corresponded to the theories since the criticizability value was one of deconstructed thoughts; therefore, it was possible to see these negative correlation coefficients, and proved that the validity of assessment. On the contrary, the criticizability value was stated as one of important factors for the occurrence of communicative actions, but some findings showed rejection on the relationships. These might be explained that no relationship existed as theories stated; and the assessed communicative action was actually not the communicative action. According to the findings on the communicative and the strategic actions, it was another confirmed result that the assessed communicative action became another type of concealed strategic action.

#### **6.2.6 The causal paths of strategic action and communicative action regarding end-of-life-care communication.**

In the analyses, some causal paths of the study structural model were changed in order to meet full-filled criteria of being a fit model. As such, a causal path from the system ideology existed; a causal path from the moral-practical rationality to the strategic action existed, instead of to the communicative action, and a reciprocal causal path also showed from the strategic action to the communicative action. Interestingly, the coefficients of determination for the strategic action and the communicative action were satisfying values as 0.34 and 0.60 respectively.

The findings revealed that causal relationships from the ideologies to the rationalities then from the rationalities to the intentional actions existed as the critical theories stated. Besides, the scientific ideology influenced on individual actions in mediating of cognitive-instrumental rationality as theorists of Frankfurt school stated that they analyzed as if individual rationalities could be isolated from one another and without any relationships. However, it should be seemed that the cognitive-instrumental rationality dominantly influenced upon other rationalities, and this was more corresponding to the theories of moral development. With system colonization, physicians' moral-practical rationality seemed to be developed under medical education regarding ethics so that it became perhaps another form of moral-practical rationality. Based on Habermas, the moral-practical rationality should be gained from interpersonal interaction. Without moral learning by interactions, physicians' moral-

practical rationality that was assessed might be a form of system-induced moral-practical rationality in which the physicians knew what they should do regarding high stages of moral reasons, but they might not be willing to pursue the moral-practical reasons. Therefore, a causal path from the moral-practical rationality to the strategic action was founded in this study, and it could be explained by the system-induced moral-practical rationality.

As previously mentioned, the assessed communicative action was most likely to be a type of concealed strategic action. This assumption would be much more corresponding to the concepts of system-induced moral-practical rationality since this rationality should not produce sincerity. As a result, it could be stated that the fit-model findings in this study was the causal model of strategic action regarding end-of-life-care communication among currently Thai physicians (who were trained to morally communicate with their patients).

## **6.3 Recommendations**

Some interesting findings that did not correspond to the original theories might be from limitations of the study or disclosure of unrevealed relationships. Therefore, some notices that needed more investigations were summarized as the followings.

### **6.3.1 Alternative development of communicative action for resisting ‘colonization of life world’**

Eventually, Habermas was looking for decolonization by the system. He hoped that the interaction process of communicative action could bring about the decolonization. However, this study might prove that the physicians were colonized so that they had not recognized the communicative action. Then, how the interaction process of communicative action could occur, and how decolonization could be accomplished. As such, Habermas proposed a concept of public sphere in order to initiate interaction processes of communicative action, in which this concept could be considered as a preparation of social conditionings for communicative actions. If deeply focusing, this concept was sound like making a new system that potentially

colonized life worlds to replace the old system, for examples, enhancement of equal power relationships by empowering patients in the forms of self-help groups (scrambler, 2001). Thus, Habermas' resolutions still seemed to have applications but in needed partial systematization.

From the results that a pattern of high given scores of the subscale 'controllability' and a pattern of low given scores of some morality-ideology items corresponding to Buddhist principles, it should be reassured that these results were from a reverse perspectives between the 'controllability' idea and Buddhist principles. According to the results concerning the sense of 'controllability' could cause strategic actions; therefore, it could be proposed that some opposite perspectives, such as three nature of existence, might reduce the occurrence of strategic actions. Moreover, the theory-stated criticizability value might be interpreted to a certain extent, as equivalents to, some Buddhist ways like 'Yonisomanasikara'. Furthermore, Buddhist ways has mainly mentioned about freedom of mind from all constrains, which seem to be equivalent to Habermas' inspiration of individual freedom from social constructions. Thus, the communicative actions are ways for freedom and cooperation regarding to Habermas. However, Buddhist ways are for absolute freedom by mind cultivations, and the freedom from Buddhist ways seems to have broader meaning. Therefore, it is most likely that applications of Buddhist ways could also bring about the freedom from social constructions like the communicative actions could. Consequently in further practical implementation, Buddhist concepts might be valuable in modifying of Habermas' theories.

It would be very interesting that implementation in other perspectives-like empowering deconstruction from the inner, such as mind cultivation in medical education, could bring about communicative actions or other forms of conflicts resolutions. Therefore, it needs more future investigations regarding relationships between Habermas's constructs, such as the criticizability value, communicative rationality, also moral-practical rationality, and the Buddhist principles like 'Yonisomanasikara', the sublime state of mind, and the eight-fold paths. In addition,

consequences of applying these Buddhist principles in aspects of social deconstruction, and reducing strategic action should be studied.

However, this study investigated thoughts of the physicians who were influenced by Thai culture. As the main religious in Thai culture is Buddhism, therefore, the mentioned findings were revealed predominate associations with the Buddhist principles. Nevertheless, it is possible that other religious principles could also lead to occurrence of communicative action, and these should be valuable in further investigations.

### **6.3.2 Awareness of system colonization through ideology and rationality**

The results showed that systematization invaded to the roots of actions, which were the morality ideology and the medical ideology. Based on Habermas, it was not surprised that the systems were related to the medical knowledge. On the contrary, it was under expectation by the theories for invading through morality system. However, this could be explained by methods of moral education that have been implemented in the forms of cognitive learning. Therefore, it should have some implementation and investigation regarding other forms of moral education. Besides, it would be interesting that embedment or renewal some ideologies that caused communicative actions, such as valuing more in non-material matters like self-reflection and flexibility, would bring about decolonization of scientific systems.

Interestingly, this study revealed that the state of physicians' high moral stage of reasoning and a causal relationship from the assessed moral-practical rationality to the strategic actions, and these were not supported by the theories of Habermas, as well as Kohlberg. Besides, this study also revealed that the system ideology significantly influenced on physicians' moral-practical rationalities, but the morality ideology insignificantly influenced upon the assessed moral-practical rationality. Based on the theories, the moral-practical rationality would be learned by interpersonal interactions as normative-based moral-practical rationalities. Therefore, it implied that the assessed moral-practical rationality has been involved by the

systems so that it might be transformed to be system-induced moral-practical rationality.

Therefore, it is interesting to clarify that the system-induced moral-practical rationality does exist; does the theoretical-based moral-practical rationality still exist? And how could the two rationalities be differentiated? Besides, it would be very interesting to know what kinds of physicians' system-induced moral practical rationality really developed from.

### **6.3.3 Assessment of communicative actions**

It is known that the communicative action practically occurs among interpersonal argumentation. Therefore, this study intended to assess physicians' intentional communicative speech acts in which was based on the assumption that the intentional communicative speech acts could initiate the communicative speech acts at the interpersonal transaction. However, the findings as previously discussed enhanced the ideas that most of the physicians' intentional speech acts were strategic speech acts in which these ideas had been supported by the concepts regarding colonization of life world. As such, the intentional communicative speech acts might not be assessed in order to represent for the communicative actions.

Based on theories and findings, the communicative action might rather be a complicate complexity of relationships among ideologies, rationalities and actions than anyone has ever expected. A suggestion for exploring individual presupposition ideas of communicative action is a proven for 'a potential thought for communicative speech act' in which it supposed that this 'potential thought' needs deconstruction the theory-stated presupposition constructs for communicative action, such as moral-practical rationality, cognitive-instrumental rationality, and criticizability value; and it also needs exploration for other presuppositions that directly and highly-related to communicative action, for examples- equality, flexibility, compassion, and wisdom. Based on findings in this study, the sensitive indicator for communicative action possibly was sincerity of communication. Therefore, all the supposed components of related thoughts should initially be investigated for associations with the sincerity of

communication perhaps by factor analysis. Then, these ‘potential thought for communicative action’ could be applied.

In order to reveal the ‘potential thought for communicative action’, it needs other study designs. Firstly forms of assessment, this study was designed all investigations of the theory constructs via only the cognitive function. The affective function that should be involved in these theoretical thoughts was not included in the study assessments. Secondly regarding the vignettes, it seemed to give long-term details of illness course, in which these could not be completely recognized by physicians (possibly due to subjects of time-available and work rotations) in the real practices as physicians gathered from reading the vignettes. As a result, this point might confound the results of assessment. For solving these two issues, forms of assessment should be adjusted to be a live assessment in real patient-physician interactions. For examples, direct observation interactions between physicians and patients through some instruments, such as video recorders might be recommended.

Furthermore, assessment of communicative action should be included senses of coordination. It might be designed to assess by having common goals of cares or revealing the same goals in both physicians and patients in simultaneous circumstances. Therefore, it needs assessment thoughts in patients accompanied with physicians’ thoughts.

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## **APPENDICIES**

## APPENDIX A

### THE QUESTIONNAIRE

**แบบสอบถาม เหตุผลและวิธีการสื่อสารร้ายของแพทย์ทั่วไปในการดูแลผู้ป่วยระยะสุดท้าย**

**วัตถุประสงค์** เพื่อศึกษาความคิดเห็น วิธีการสื่อสารร้ายแก่ผู้ป่วยระยะสุดท้ายและญาติ อันจะเป็นประโยชน์ต่อการพัฒนาการเรียนการสอนการดูแลผู้ป่วยในระยะสุดท้ายต่อไป

**แบบสอบถามประกอบด้วย 4 ส่วน**

- ส่วนที่ 1**      ส่วนข้อมูลส่วนตัว
- ส่วนที่ 2**      ส่วนเหตุผลประกอบการตัดสินใจ
- ส่วนที่ 3**      ส่วนความคิดเห็นทั่วไป
- ส่วนที่ 4**      ส่วนวิธีการสื่อสาร

**แบบสอบถาม ส่วนที่ 1**

กรุณากรอกข้อมูลส่วนตัว ในช่องว่างที่กำหนดให้

อายุ.....ปี                      เพศ .....

แพทย์ประจำบ้านสาขา.....

## แบบสอบถาม ส่วนที่ 2

กรุณาให้ความเห็น ในสถานการณ์สมมติ ของผู้ป่วยระยะสุดท้ายชื่อ ‘สมร’ และ ‘แสง’ โดยขอให้แสดง  
ความเห็น ว่า ท่านเห็นด้วยมากหรือน้อย กับความคิดเห็นที่ขีดเส้นใต้ในแต่ละข้อ  
โดยวงกลมตัวเลขที่เห็นด้วย มากที่สุด คือ 7 คะแนน หรือลดหลั่นกัน จนน้อยที่สุด คือ 1 คะแนน

สถานการณ์สมมติ 1

สมร ผู้หญิงวัยทำงานอายุประมาณ 35 ปี ทำงานเป็นพนักงานบริการที่บริษัทเอกชนแห่งหนึ่ง  
เงินเดือนประมาณ 20000 บาทต่อเดือน สมรแต่งงานและมีลูกชายหนึ่งคนอายุประมาณ 10 ขวบ สมรแยกทาง  
กับสามีเมื่อ 5 ปีก่อน สมรอยู่บ้านเทวส์เฮาส์ที่กำลังผ่อน อยู่กับ มารดาที่สูงอายุ เงินเดือนของสมรไม่เพียงพอ  
ค่าใช้จ่ายในครอบครัวที่มีคนอาศัยอยู่ถึงสามคน ดังนั้นวันอาทิตย์ สมรจึงหารายได้พิเศษด้วยการขายของ ซึ่งทำ  
ให้มีรายได้มากขึ้นต่อเดือนประมาณ 2000-3000 บาท

สมร มีอาการท้องอืดและเบื่ออาหาร สมรยังคงทำงานได้ แต่สมรรู้สึกตัวอ่อนล้าเหมือนคนไม่  
มีแรง สมาริในการทำงานลดลง ความสนใจในครอบครัวน้อยลง มารดาของสมรสังเกตเห็นอาการผิดปกติ จึง  
กระตุ้นให้สมรไปพบแพทย์ หลังจากแพทย์ตรวจวินิจฉัยหลายวิธีจนได้ข้อสรุปว่า รังไข่ข้างขวาโตขึ้น มีน้ำในช่อง  
ท้อง นรีแพทย์สงสัยว่าอาจเป็นก้อนเนื้อร้าย ระยะลุกลาม ระหว่างรอผลการวินิจฉัย สมรหาความรู้ทางการแพทย์  
จากแหล่งต่าง ๆ จึงจินตนาการไปต่างๆ นานา สมรเชื่อว่าตนเองคงเป็นโรคร้ายที่รักษาไม่หาย

## แบบสอบถาม ส่วนที่ 2

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>ต่อมาหลังจากได้ข้อสรุปวินิจฉัย นรีแพทย์แจ้งผลการวินิจฉัยว่า เป็นเนื้องอกที่รังไข่ แนะนำวิธีการรักษาด้วยการผ่าตัด สมรชักถามแพทย์ว่า เป็นเนื้องร้ายหรือไม่ แพทย์แจ้งสมรว่า ยังไม่ทราบ แต่การผ่าตัดจะบอกได้ชัดเจนว่าเป็นเนื้องร้ายหรือไม่ สมรแจ้งกับแพทย์ว่า ไม่อยากผ่าตัด เพราะกลัวการผ่าตัด แพทย์บอกว่า ไม่ต้องกลัวเพราะการผ่าตัดเป็นวิธีการรักษาที่ได้ผลดี โดยพบว่าเมื่ออัตราการรอดชีวิต 5 ปีถึงร้อยละ 70 (1), นอกจากนี้ด้วยเทคโนโลยีที่ดีในปัจจุบัน การผ่าตัดถือได้ว่าเป็นทางเลือกที่ปลอดภัย (2), สมรกล่าวถึง ความเจ็บปวดจากการผ่าตัดด้วยเคยมีประสบการณ์เชิงลบที่เคยเห็นญาติทุกข์ทรมานมากจากการความปวดหลังผ่าตัด แพทย์พยายามให้ข้อมูลเกี่ยวกับการปวดแผลว่าไม่น่าต้องกังวล เพราะปัจจุบันมีเครื่องมือให้ยาแก้ปวดที่ให้ยาได้ต่อเนื่อง ซึ่งมีการศึกษาแล้วว่ามีประสิทธิภาพในการระงับปวดได้ดี (3) สมรถามแพทย์ว่า มีวิธีการอื่นที่นอกเหนือจากการผ่าตัดหรือไม่ แพทย์ตอบว่า การผ่าตัดเป็นวิธีที่ดีที่สุด เพราะนอกจากจะช่วยลดอาการท้องอืดแล้ว ยังช่วยบอกว่าเป็นเนื้องร้ายหรือไม่ จะได้ทราบว่า จะรักษาอย่างไรต่อไป (4)</p> <p>สมรถามแพทย์ต่อว่า มีผู้ป่วยแบบเดียวกันกับเธอหรือไม่ ทำการรักษาอย่างไร และผลการรักษาเป็นอย่างไร แพทย์ให้ข้อมูลกับสมรว่า สมรไม่ควรกังวล เพราะวิธีการรักษาทางการแพทย์เป็นวิธีที่ศึกษาแล้วว่า ได้ผลดีต่อผู้ป่วย จึงบัญญัติเป็นมาตรฐาน ผู้ป่วยทุกรายที่เป็นแบบเดียวกันนี้จะได้รับการรักษาตามมาตรฐานเดียวกัน (5) แพทย์รู้สึกที่สมรกังวลกับการผ่าตัดมาก แพทย์จึงบอกกับสมรว่า การผ่าตัดเป็นวิธีที่ดีที่สุด แต่ให้สมรลองกลับไปคิดดูก่อน และตัดสินใจเอง (6)</p> | <p>ความเห็นข้อที่ (1)</p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p>ความเห็นข้อที่ (2)</p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p>ความเห็นข้อที่ (3)</p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p>ความเห็นข้อที่ (4)</p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p>ความเห็นข้อที่ (5)</p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p>ความเห็นข้อที่ (6)</p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> |
| <p>สมรกลับบ้าน คิดทบทวนไปมาหลายครั้ง สอบถามเพื่อน ญาติที่รู้จัก หาข้อมูลต่างๆ เพิ่มเติม ในที่สุด สมรแน่ใจว่าตนเองเป็นมะเร็ง สมรรู้ว่าผู้ป่วยมะเร็งมักต้องรักษาด้วยเคมีบำบัด หรือฉายแสงซึ่งคงทุกข์ทรมานพอสมควร สมรหันไปรักษาแบบชีวจิตไปก่อน และพยายามข่มใจด้วยธรรมะ และพยายามทำใจไม่ให้คิดถึงโรคร้าย หันมามองปัญหาเรื่องการเงิน และครอบครัวที่ต้องดูแล เนื่องจากสมรเป็นผู้หาเลี้ยงดูครอบครัว สมรคิดว่าเป็นช่วงเวลาสุดท้ายที่จะเก็บออมเงินให้มากที่สุดเพื่อมารดาและลูก สมรจึงตัดสินใจยังไม่ไปโรงพยาบาล มารดาของสมรเป็นห่วงและพร่ำบอกให้ลูกสาวไปรักษาเพราะอาจรักษาหาย ป้า (พี่สาวพ่อ) ของสมรทราบข่าวและเข้าใจผิดจึงมาต่อว่ามารดาของสมรว่า มารดาสมรเห็นแก่ตัวไม่ยอมให้ลูกไปรักษา เพราะจะได้ดูแลตน มารดาของสมรไม่สบายใจมากเกรงว่าจะถูกพี่สาวสามีต่อว่า จึงพูดขอรับรองอย่างหนักให้สมรไปรับการรักษา</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## แบบสอบถาม ส่วนที่ 2

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| <p>อย่างไรก็ตามสมรยืนยันงานความคิดเดิมของตน สมรรู้ตัวว่าวันหนึ่งสมรต้องป่วยหนักมากจนต้องไปโรงพยาบาล และรู้ว่าคงเสียชีวิตแน่นอน สมรได้รับทราบว่ามีพระราชบัญญัติสุขภาพ ที่บัญญัติว่า “บุคคลมีสิทธิแสดงความจำนงเกี่ยวกับวิธีการรักษาพยาบาลหรือปฏิเสธการรักษาที่เป็นไปเพื่อการยืดชีวิตในวาระสุดท้ายในชีวิตของตนเอง เพื่อการตายอย่างสงบและมีศักดิ์ศรีของความเป็นมนุษย์” สมรจึงใคร่ครวญการแสดงเจตนาไม่รับการรักษาที่อาจไม่จำเป็นและเป็นไปเพื่อการยืดการเสียชีวิตไว้ และได้พูดคุยกับเพื่อนสนิทที่ทำงานถึงเจตนารมณ์นี้ เมื่อวาระสุดท้ายมาถึง ด้วยสมรคิดว่า ไม่อยากให้มารดาต้องแบกรับค่าใช้จ่ายในการรักษาที่ไม่ได้ทำให้ตนรอดชีวิตได้ (7)</p> | <p>ความเห็นข้อที่ (7)</p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> |
| <p>8 เดือน ต่อมา อาการของสมรทรุดหนักลง ฝ่ายผอมไปผิดตา แต่สมรยังคงกัดฟันทนทำงานและวันหนึ่งขณะทำงาน สมรเป็นลมหมดสติ เพื่อนสนิทของสมร เข้าใจดีถึงเจตนารมณ์ของสมร แต่คิดว่าถึงจะขัดต่อความต้องการของสมร แต่เป็นเรื่องที่ใครก็ตามที่ประสบก็ต้องช่วยนำสมรส่งโรงพยาบาล อีกใจหนึ่งก็คิดว่าตนเองคงเป็นเพื่อนที่ไม่ดีต่อสมรเพราะคงทำให้สมรลำบากใจ ในที่สุดเพื่อนสนิทก็นำสมรส่งโรงพยาบาล แพทย์ที่ห้องฉุกเฉินรักษามาระถูกเงินเฉพาะหน้าด้วยการใส่ท่อช่วยหายใจและเครื่องช่วยหายใจ รวมทั้งตรวจวินิจฉัยเพิ่มเติมตาม guideline และรับสมรเข้าพักรักษาตัวในโรงพยาบาล</p>                                                                               | <p>ความเห็นข้อที่ (8)</p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> |
| <p>นรีแพทย์ที่รับปรึกษามาดูอาการสมร และวินิจฉัยว่า เนื้องอกชนิดร้ายในรังไข่แตกเข้าช่องท้อง จำเป็นต้องผ่าตัดด่วนเพื่อช่วยชีวิตสมร เพื่อนสนิทสมรแจ้งให้แพทย์ทราบถึงเจตนารมณ์ของสมร นรีแพทย์ท่านนั้น เห็นว่าหากทำผ่าตัดโดยไม่ได้รับอนุญาต ตนอาจถูกฟ้องร้องได้ จึงปรึกษานรีแพทย์ท่านอื่นๆ เพื่อขอความคิดเห็น นรีแพทย์ท่านที่สองเห็นว่าควรผ่าตัดเป็นการช่วยชีวิต หากผ่าตัดสมรจะมีโอกาสจะรอดชีวิตมาก ซึ่งสมรน่าจะได้ประโยชน์ ส่วนด้านเสียประโยชน์ยังมองไม่เห็น (8) นรีแพทย์ท่านที่สามเห็นว่าด้วยจรรยาแพทย์ต้องทำผ่าตัด (9)</p>                                                                                                            | <p>ความเห็นข้อที่ (9)</p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> |
| <p>ในที่สุดสมร ได้รับการผ่าตัดฉุกเฉิน การผ่าตัดเป็นด้วยความยากลำบาก เนื่องจากก้อนเนื้อร้ายใหญ่มากและติดกับอวัยวะภายในหลายอย่าง ทำให้เสียเลือดถึง 4000 มล. ใช้เวลาผ่าตัดนานประมาณ 8 ชั่วโมง และเกิดภาวะแทรกซ้อนจากผ่าตัด คือ ท่อนำไข่สวามะชิกขาดข้างขวา ลำไส้ใหญ่ถูกตัดออกไปบางส่วน และเปิดลำไส้ไว้ที่หน้าท้อง หลังผ่าตัดสมรต้องพักรักษาตัวอยู่ใน ICU ภาวะแทรกซ้อนที่เกิดขึ้นคือ ไตวาย ประกอบกับภาวะขาดสารอาหาร ทำให้สมรต้องได้รับการช่วยหายใจ และยากระตุ้นหัวใจอย่างต่อเนื่อง</p>                                                                                                                                                   |                                                                                  |

## แบบสอบถาม ส่วนที่ 2

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| <p>วันถัดมา สมรเริ่มรู้สึกตัว แต่ไม่สามารถพูดออกเสียงได้เนื่องจากมีท่อช่วยหายใจอยู่ในคอ มารดาและเพื่อนสนิทพยายามให้สมรสื่อสารด้วยการเขียนและภาษาท่าทาง ได้ความว่าสมรบนหิวน้ำมากและปวดแผล แพทย์ผู้ดูแลอธิบายเหตุการณ์ในห้องผ่าตัด อาการและการรักษาสำหรับสมรให้มารดาและเพื่อนสนิทและคาดว่าสมรน่าจะแข็งแรงพอที่จะหายใจได้เองในอีก 2-3 วัน</p> <p>อีกวันถัดมา สมรมีอาการไข้สูง จากปอดติดเชื้อ แต่สมรยังรู้สึกตัวและมีสติสลับสัญญาณชีพพยายามสื่อสารกับเพื่อนสนิทถึงเรื่องเจตนารมย์ไม่ได้รับการรักษา เพราะสมรรู้ว่าเธอคงเสียชีวิตในไม่ช้า และเธอไม่ต้องการให้ยืดการเสียชีวิตของเธอออกไป เพราะเธอเป็นห่วงมารดาที่ต้องเสียเวลาและเสียค่าใช้จ่ายในการดูแล เธอจึงอยากให้แพทย์ทำตามเจตนารมย์ของเธอคือหยุดการรักษาประทั้งชีวิต เพื่อนสนิทของสมรแจ้งให้แพทย์ทราบอีกครั้งเกี่ยวกับเจตนารมย์ของสมร แพทย์ให้ความเห็นว่าอาการของสมรหากพิจารณาในประเด็นการรักษาแล้วยังเห็นโอกาสที่สมรจะได้กลับบ้าน จึงยังไม่ควรหยุดการรักษาแบบประคับประคองนี้ (10)</p> | <p><u>ความเห็นข้อที่ (10)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> |
| <p>สัปดาห์ต่อมา หลังจากแพทย์ให้การรักษาด้วยยาปฏิชีวนะ อาการปอดติดเชื้อของสมรดีขึ้น สมรยังคงต้องได้รับการช่วยหายใจ และยากกระตุ้นหัวใจอยู่ในระดับสูง ภาวะติดเชื้อที่ผ่านมาส่งผลให้ไตของสมรทำงานไม่ดี ปัสสาวะออกน้อยมากจนแทบไม่ออกเลย ระดับกรดในเลือดสูงขึ้น แพทย์ผู้ดูแลร่วมกับอายุรแพทย์ระบบไต เห็นว่าสมรควรต้องได้รับการฟอกไต (hemodialysis) แพทย์อธิบายให้มารดาและเพื่อนสนิทของสมรทราบถึงความเห็นแพทย์ดังกล่าว รวมทั้งแสดงความกังวลเกี่ยวกับค่าใช้จ่ายที่สูงมากสำหรับการฟอกไต เพื่อนสนิทของสมรกล่าวว่า สมรทำงานบริษัทเอกชน มีเพียงประกันสังคม ซึ่งค่าใช้จ่ายส่วนเกินสมรคงต้องรับผิดชอบเอง แพทย์เห็นว่าการฟอกไตทำให้สมรหายป่วยอยากให้เริ่มรักษาเลย (11)</p>                                                                                                                                                                                                                                                                          | <p><u>ความเห็นข้อที่ (11)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> |
| <p>เพื่อนสนิทของสมรเห็นว่าสมรควรต้องได้รับรู้และออกความคิดเห็นและขอให้แพทย์ถามความเห็นสมร อายุรแพทย์ระบบไตกล่าวว่ากับสมรว่า <u>โอกาสรอดของคุณ (สมร) มีบ้าง ไตอาจฟื้นกลับมาสู่สภาวะปกติได้ มีประกันสังคมแล้วก็ไม่</u><br/><u>น่ามีปัญหาต้งนั้นควรทำการรักษาฟอกไต(12) แต่แพทย์เจ้าของไข้ ยังลังเล และคิดว่าสมรมีสิทธิที่จะไม่รับการรักษาตามเจตนารมย์ แต่นรีแพทย์อีกท่านให้</u><br/><u>ความเห็นว่าเป็นหน้าที่ของแพทย์ต้องรักษาผู้ป่วย ดังนั้นสมรควรได้รับการฟอกไต (13)</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p><u>ความเห็นข้อที่ (12)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p><u>ความเห็นข้อที่ (13)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> |

## แบบสอบถาม ส่วนที่ 2

อีกสัปดาห์ต่อมา อาการของสมรเริ่มทรุดลงอีก ปอดเริ่มทำงานผิดปกติ ทำให้แพทย์ต้องปรับเป็น ควบคุมการช่วยหายใจอย่างเต็มที่ อย่างไรก็ตามออกซิเจนในเลือดแดงของสมรค่อนข้างต่ำ ความรู้สึกตัวของสมร เริ่มลดลง แพทย์เห็นว่าอาการของสมรน่าจะแย่ลงอีก ซึ่งทำให้ไม่สามารถถอดท่อช่วยหายใจได้ตามที่เคยคาดไว้ ด้วยความกังวลต่อภาวะแทรกซ้อนจากท่อช่วยหายใจ แพทย์จึงแจ้งให้มารดาของสมรทราบว่า สมรควรได้รับการ เจาะคอซึ่งคือการเจาะคอเพื่อใส่ท่อในหลอดลม มารดาของสมรไม่อยากให้ทำ เพราะเกรงว่าอวัยวะของสมรจะไม่ สมประกอบ แพทย์ให้ความเห็นว่า ถึงแม้จะมีโอกาสที่สมรจะดีขึ้นน้อยลง แต่ควรให้โอกาส

วันถัดมา อาการของสมรแย่ลงกระทันหัน ขณะที่มารดาและ เพื่อนมาเยี่ยมเธอ สมรมีอาการแขน ขาเกร็ง หัวใจเต้นผิดจังหวะ พยาบาลแจ้งให้ทราบว่า สมรอาการไม่ดี ขอให้ญาติออกจากเตียงก่อน เพื่อแพทย์จะได้ทำการรักษา สักครู่หนึ่งถัดมา หัวใจสมรเต้นผิดจังหวะชนิดอัน ตราย แพทย์จึงใช้เครื่องกระตุ้นหัวใจไฟฟ้า และเริ่ม ช่วยกู้ชีวิต อีกสักครู่ แพทย์สามารถช่วยได้ หัวใจกลับมาเต้นปกติ แต่แพทย์ต้องเพิ่มยากระตุ้นหัวใจในปริมาณที่ มากหัวใจของสมรจึงทำงานอยู่ได้

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| แพทย์เจ้าของไข้ แจ้งให้มารดาและเพื่อนสนิท ทราบว่าอาการของสมรไม่ดีเลย สมร ไม่รู้สึกตัวและไม่แน่ใจว่าจะรู้สึกตัวเมื่อไหร่ต้องรอดูอาการ อาจจะมีชีวิตอยู่ได้อีกไม่นาน และอาจเกิดเหตุการณ์เมื่อครั้งนี้อีกได้ ขอให้ญาติเริ่มทำใจ เพื่อนสนิทของสมร ไม่ค่อยเห็นด้วยที่จะทรมานสมรต่อไป จึงขอร้องให้แพทย์หยุดการรักษาที่ประทังชีวิต แพทย์ปฏิเสธอย่างสุภาพ <u>ด้วยเห็นว่าหากทำเช่นนั้นตนเองเสมือนเป็นคนฆ่า สมรซึ่งผิดศีลธรรม</u> (14) | ความเห็นข้อที่ (14)<br>ท่านเห็นด้วยมากน้อยเพียงใด<br>1 2 3 4 5 6 7 |
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### สถานการณ์สมมติ 2

แสง เป็นชายวัยเกษียณ อายุประมาณ 70 ปี อาศัยอยู่ชานเมืองกรุงเทพ ภายหลังเกษียณแสง อยู่ บ้านปลูกผักทำสวนเล็กๆ ในบ้าน แสงอยู่บ้านคนเดียว เนื่องจากภรรยาเสียชีวิตแล้ว ลูกชายคนเล็กทำงานอยู่ กรุงเทพ วันสุดสัปดาห์จึงจะกลับไปหาแสงได้โดยไปประมาณเดือนละครั้ง เมื่อวัยทำงาน แสงมีสุขภาพแข็งแรงดี ไม่เคยเจ็บไข้ได้ป่วย แสงดื่มเหล้าเป็นปกติทุกวันประมาณ 1 แก้วน้ำ โดยแสงเชื่อว่าเหล้าเป็นยา ภายหลังเกษียณ แสงมีเวลาว่างมากขึ้น จึงมีโอกาสดื่มเหล้ามากขึ้น

หลายปีก่อน แสงเริ่มรู้สึกวุ่นวายตนเองอ่อนเพลียลง น้ำหนักตัวมากขึ้น ท้องโตขึ้น และบวม แสงคิดว่า เพราะตนเองอายุมากขึ้น จึงไม่ได้ไปพบแพทย์ และแสงคิดวุ่นวายๆ ลูกชายมาเยี่ยมจึงขอให้เวลาอยู่บ้านกับลูก ดึกๆไปโรงพยาบาล จริงๆ แล้วแสงรู้สึกเหงา เพราะอยู่ บ้านคนเดียวมานาน เพื่อนๆ แถวบ้าน ที่เคยมาพบปะ สماعกันก็เริ่มเจ็บป่วยและเสียชีวิตไป แสงเข้าใจถึงวัฏจักรธรรมชาติ เกิด แก่ เจ็บ ตาย ดี

วันก่อน แสงอ่อนเพลียมากขึ้น รู้สึกไม่สบายมาก หายใจหอบ จึงขอตัวกลับจากกลุ่มเพื่อนบ้านที่ คุยกันอยู่ เพื่อนบ้านสังเกตเห็นอาการ ของแสงเข้าใจว่า แสงป่วยหนักแน่ หลังจากแสงขอตัวกลับบ้านไม่นาน เพื่อนบ้านจึงแวะเข้าไปเยี่ยมดูอาการ พบว่าแสงนอนอยู่หายใจเร็ว เพื่อนบ้านพยายามเรียก แต่แสงไม่รู้สึกตัว

เพื่อนบ้านจึงช่วยกันนำตัวแสงส่งโรงพยาบาลที่แสงขึ้นทะเบียนหลักประกันถ้วนหน้าไว้ (30 บาท) และแจ้งให้ลูกชายคนเล็กของแสงทราบ

แสงได้รับการวินิจฉัยจากแพทย์ว่ามีอาการหมดสติจากภาวะตับวาย (hepatic coma) ได้รับการรักษาด้วยการใส่ท่อช่วยหายใจและช่วยหายใจด้วยเครื่องช่วยหายใจ รวมทั้งรักษาด้วยยาอื่น ๆ 2-3 วันถัดมาอาการของแสงเริ่มดีขึ้น แสงเริ่มรู้สึกตัว แพทย์ลดการช่วยหายใจ เพื่อดูว่าแสงหายใจเองไหวหรือไม่ ซึ่งแพทย์เห็นว่าแสงยังหายใจเองไม่ไหวเป็นเพราะท้องที่โตจากมีน้ำในช่องท้อง แพทย์จึงตัดสินใจเจาะท้องเพื่อนำน้ำในช่องท้องออก วันต่อมาแพทย์จึงถอดท่อช่วยหายใจให้แสง ถึงแม้แสงจะหายใจได้เอง แต่แสงยังคงต้องพักรักษาตัวอยู่โรงพยาบาล แสงยังคงได้รับการกระตุ้นหัวใจเพิ่มความดันโลหิต ยาขับปัสสาวะและยาอื่นๆ แพทย์ต้องจำกัดอาหารบางประเภทเพื่อไม่ให้อาการของแสงเลวลง แสงไม่สุขสบายนอกจากอาการทางกาย แล้วแสงยังคิดถึงลูกอยากให้ออกมาเยี่ยม

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| <p>แสงพักรักษาตัวในโรงพยาบาลมา 1 สัปดาห์ แสงเหนื่อยเป็นพัก ๆ เมื่อท้องของแสงโตขึ้น แสงต้องได้รับการเจาะท้องเพื่อนำน้ำในช่องท้องออกวันเว้นวัน ซึ่งทำให้แสงเจ็บปวด แสงเบื่ออาหารของโรงพยาบาล แสงเบื่อสภาพที่ถูกจำกัดอยู่ในเตียง แสงรู้ว่าการเจ็บป่วยครั้งนี้คงจะนำไปสู่การเสียชีวิตแสงอยากกลับบ้าน แสงบอกแพทย์เจ้าของไข้ ว่าอยากกลับบ้าน แพทย์เห็นใจแสงแต่แพทย์ให้กำลังใจแสงด้วยเหตุผลว่า การรักษาจะทำให้อาการดีขึ้นและได้กลับบ้าน (15) แสงขอให้แพทย์ไม่เจาะท้องท้อง เพราะท้องของแสงระบมเนื่องจากได้รับการเจาะท้องมาหลายครั้ง แพทย์เจ้าของไข้ให้เหตุผลกับแสงว่า การเจาะท้องทำให้แสงหายใจสะดวกขึ้น แต่ถ้าแสงไม่ต้องการ แพทย์ก็จะไม่ทำ แพทย์อาวุโสกล่าวเตือนแพทย์เจ้าของไข้ว่าควรต้องทำการเจาะท้องแสง โดยให้เหตุผลว่าผู้ป่วยอาจไม่รู้ว่าจะเกิดอันตรายอย่างไรหากไม่รักษา แต่แพทย์รู้และมีหน้าที่รักษา ต้องทำตามหน้าที่ (16)</p> | <p><u>ความเห็นข้อที่ (15)</u><br/>ท่านเห็นด้วยมากน้อยเพียงใด<br/>1 2 3 4 5 6 7</p> <p><u>ความเห็นข้อที่ (16)</u><br/>ท่านเห็นด้วยมากน้อยเพียงใด<br/>1 2 3 4 5 6 7</p> <p><u>ความเห็นข้อที่ (17)</u><br/>ท่านเห็นด้วยมากน้อยเพียงใด<br/>1 2 3 4 5 6 7</p> |
| <p>2 วันต่อมา อายุรแพทย์หัวใจมาเยี่ยมแสง เห็นว่าหัวใจของแสงทำงานผิดปกติ และเห็นว่า การเจาะเอาน้ำในช่องท้องออกน่าจะช่วยให้หัวใจทำงานดีขึ้น อายุรแพทย์หัวใจจึงแนะนำให้แสงยอมรับการเจาะท้อง โดยให้เหตุผลกับแสงว่า <u>การเจาะท้องนำน้ำในช่องท้องออกจะช่วยไม่ให้แสงเสียชีวิตจากหัวใจล้มเหลว</u> (17) แสงไม่ยอม ในขณะที่นั้นลูกชายมาเยี่ยมแสงพอดี ลูกชายขอร้องให้แสงยอมรับการรักษา โดยให้เหตุผลว่าแสงจะหายและกลับบ้านได้ (18) แสงเห็นลูกชายมาเยี่ยมก็ดีใจ ถึงแม้ตนเองจะไม่อยากให้ทำ แต่ยอมให้แพทย์เจาะท้องเพราะจะเอาใจลูกชาย แสงบอกลูกชายให้พาแสงกลับบ้าน แสงรู้ตัวว่าตนใกล้จะตายแต่อยากตายที่บ้าน</p>                                                                                                                                                                                                                           | <p><u>ความเห็นข้อที่ (18)</u><br/>ท่านเห็นด้วยมากน้อยเพียงใด<br/>1 2 3 4 5 6 7</p>                                                                                                                                                                       |

## แบบสอบถาม ส่วนที่ 2

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| <p>แพทย์เจ้าของไข้มาเยี่ยมและบอกกับแสงและลูกชายแสงว่า แพทย์จำเป็นต้องใส่สายในเส้นเลือดดำและสายปัสสาวะเพื่อการดูแลอย่างใกล้ชิด แต่แสงไม่ยอม แต่แพทย์ให้เหตุผลว่า <u>การทำหัตถการดังกล่าวทำให้แพทย์ดูแลรักษาได้ดีขึ้น อาการแสงน่าจะดีขึ้น และแสงจะได้กลับบ้านได้เร็วขึ้น</u> (19) ส่วนลูกชายของแสงยังคิดทบทวนอยู่ว่าควรจะให้บิดาได้รับการรักษาต่อ หรือนำบิดากลับบ้านตามที่บิดาต้องการ</p> <p>วันต่อมา แสงหายใจเร็วขึ้นมาก ปัสสาวะไม่ออก แพทย์ตัดสินใจใส่ท่อช่วยหายใจและใช้เครื่องช่วยหายใจอีกครั้ง โดยที่แสงปฏิเสธ แต่แพทย์ให้เหตุผลกับแสงว่า <u>ใครก็ตามที่เห็นคนกำลังจะเสียชีวิตอยู่ต่อหน้า ก็คงต้องช่วยเหลือ</u> (20)</p> <p>วันต่อมา แสงอาการดีขึ้น จากการได้รับการช่วยหายใจ แสงมีแรงขึ้น จึงดึงท่อช่วยหายใจออกเอง แพทย์และพยาบาลเวรรีบเข้ามาช่วยเพราะเกรงว่าแสงจะหายใจเองไม่ไหว แสงบอกกับแพทย์ว่า ตนเองยังสบายดี ไม่อยากรับการรักษา แพทย์เฝ้าบอกกับแสงว่าเนื่องจากแสงจำเป็นต้องใช้เครื่องช่วยหายใจ แพทย์จะใส่ท่อช่วยหายใจอีกครั้ง ในที่สุดแสงก็ได้รับการใส่ท่อช่วยหายใจและช่วยหายใจด้วยเครื่องช่วยหายใจ โดยแพทย์ต้องให้ยากลดความรู้สึกตัวอย่างต่อเนื่อง เพื่อให้แสงไม่ด้านการรักษา แพทย์อาวุโสท่านหนึ่งให้ความเห็นว่าแพทย์ไม่ควรทำการรักษาเช่นนี้ เพราะต้องคำนึงสิทธิของผู้ป่วยที่มีสิทธิปฏิเสธการรักษา (21) แต่อายุรแพทย์หัวใจให้ความเห็นว่า ถ้าไม่กระทำเช่นนั้น แพทย์เวรอาจถูกฟ้องร้องได้ แพทย์อาวุโสแนะนำให้แพทย์เจ้าของไข้ <u>ให้ข้อมูลความเป็นไปของอาการกับลูกชายของแสง</u> เพราะเป็นหน้าที่ของแพทย์ (22) อย่างไรก็ตาม แพทย์เจ้าของไข้ได้เชิญลูกชายของแสงมาพูดคุยถึงอาการของแสงด้วยคิดว่ากรปรึกษาหารือกันจะช่วยแก้ไขปัญหานี้ได้ (23) แพทย์เจ้าของไข้กล่าวกับลูกชายของแสงว่า ตนเข้าใจสถานการณ์นี้ดีว่าลูกชายของแสงคิดอย่างไร คุณ (ลูกชายแสง) อาจคิดว่าตนอาจเป็นลูกที่ไม่ดี หากนำบิดากลับบ้าน (24) แต่ถ้าไม่ทำ <u>อีกใจหนึ่งก็รู้สึกไม่ถูกต้องที่ไม่เคารพความต้องการของบิดา</u> (25) แต่อย่างไรก็ตาม แพทย์เจ้าของไข้บอกว่า ยังมีความหวังอยู่มากที่อาการของแสงจะดีขึ้น และกลับบ้านได้ แพทย์อยากให้รักษาต่อ</p> | <p><u>ความเห็นข้อที่ (19)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p><u>ความเห็นข้อที่ (20)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p><u>ความเห็นข้อที่ (21)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p><u>ความเห็นข้อที่ (22)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p><u>ความเห็นข้อที่ (23)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p><u>ความเห็นข้อที่ (24)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p><u>ความเห็นข้อที่ (25)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> |
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## แบบสอบถาม ส่วนที่ 2

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>วันต่อมาอาการของแสงทชุดลงมากจากภาวะแทรกซ้อนปอดบวม ไตวาย และติดเชื้อในเลือด แสงพอรู้สึกตัว ถึงแม้อาการหนัก แต่ดูเหมือนแสงพยายามจะตื่นต่อสู้กับการรักษา แพทย์เจ้าของไข้แจ้งให้ลูกชายแสงทราบว่าโอกาสรอดมีน้อยมาก นอกจากนี้แพทย์ก็กล่าวว่า หัวใจของแสงอาจหยุดเต้นลงเมื่อไหร่ก็ได้</p> <p>เนื่องจากมีสภาวะสารต่าง ๆ ในเลือดไม่สมดุลย์ แพทย์คิดว่า ไม่ควรช่วยกระตุ้นหัวใจหากหัวใจของแสงหยุดเต้น เพราะถึงช่วยขึ้นมาได้ในที่สุดแสงก็คงเสียชีวิตอีกในเวลาอีกไม่นาน (26) ลูกชายของแสงเข้าใจดี แต่อยากให้แพทย์ช่วยกู้ชีวิต ด้วยการให้พี่ชายที่กำลังเดินทางมาจากต่างประเทศได้เยี่ยมบิดาก่อนเสียชีวิต ซึ่งแพทย์เจ้าของไข้รับปากว่าจะทำให้ดีที่สุด (27)</p> | <p><u>ความเห็นข้อที่ (26)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> <p><u>ความเห็นข้อที่ (27)</u></p> <p>ท่านเห็นด้วยมากน้อยเพียงใด</p> <p>1 2 3 4 5 6 7</p> |
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## แบบสอบถาม ส่วนที่ 3

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| <p><b>พิจารณาข้อความแต่ละข้อว่า ท่านเห็นด้วยมากน้อยเพียงใด</b></p> <p><b>โดย ให้คะแนน 6 สำหรับข้อความที่เห็นด้วยมากที่สุด และลดหลั่นกันลงมา (5, 4, 3, 2) จนถึงคะแนน 1 สำหรับข้อความที่เห็นด้วยน้อยที่สุด</b></p> <p><b>ทำเครื่องหมาย X ในช่องทางด้านซ้ายมือ</b></p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| ข้อที่ | ข้อความ                                                                                          | 6 | 5 | 4 | 3 | 2 | 1 |
|--------|--------------------------------------------------------------------------------------------------|---|---|---|---|---|---|
| 1      | ทำดีได้ดี ทำชั่วได้ชั่ว                                                                          |   |   |   |   |   |   |
| 2      | การพูดแสดงเหตุผลเป็นการพูดเหตุผลที่เราเชื่อเช่นนั้น                                              |   |   |   |   |   |   |
| 3      | ผลการรักษาของยาที่ผ่านการวิจัยมาแล้วว่าได้ผล ย่อมรักษาสผู้ป่วยได้ผล<br>ผล ตามรายงานการวิจัยนั้นๆ |   |   |   |   |   |   |
| 4      | สังคมจะดำรงอยู่ได้ บุคคลในสังคมต้องทำงาน                                                         |   |   |   |   |   |   |
| 5      | องค์กรที่ีรวมทั้งองค์กรแพทย์ คือองค์กรที่มีการจัดการเป็นระบบ                                     |   |   |   |   |   |   |
| 6      | หน้าที่หลักของแพทย์คือการรักษาโรค                                                                |   |   |   |   |   |   |
| 7      | การรักษาให้ผู้ป่วยมีชีวิตรอด แม้จะเคลื่อนไหวไม่ได้ ยังดีกว่าตาย                                  |   |   |   |   |   |   |
| 8      | แพทย์ต้องเรียนรู้เรื่องการบริหารจัดการ                                                           |   |   |   |   |   |   |
| 9      | การเคารพผู้อื่นเป็นสิ่งจำเป็น                                                                    |   |   |   |   |   |   |
| 10     | โรคเรื้อรังจะถูกควบคุมให้หมดด้วยความเจริญก้าวหน้าทางการแพทย์                                     |   |   |   |   |   |   |
| 11     | หากเข้าใจกลไกการทำงานของร่างกายอย่างถ่องแท้ จะรักษาโรคได้                                        |   |   |   |   |   |   |

## แบบสอบถาม ส่วนที่ 3

| ข้อ<br>ที่ | ข้อความ                                                                                  | 6 | 5 | 4 | 3 | 2 | 1 |
|------------|------------------------------------------------------------------------------------------|---|---|---|---|---|---|
| 12         | กฎระเบียบของสังคม เป็นเหตุผลที่ไม่ควรจะฝ่าฝืน                                            |   |   |   |   |   |   |
| 13         | ผลสำเร็จของการแพทย์ คือการทำให้ช่วงชีวิตของคนยาวขึ้น                                     |   |   |   |   |   |   |
| 14         | สุขภาพดี ทำงานได้ มีเงินใช้                                                              |   |   |   |   |   |   |
| 15         | ผู้ที่มีประสบการณ์น้อยควรแสดงความคิดเห็นน้อย                                             |   |   |   |   |   |   |
| 16         | เหตุผลทางวิทยาศาสตร์เป็นเหตุผลที่ต้องปฏิบัติตาม                                          |   |   |   |   |   |   |
| 17         | โรคภัยไข้เจ็บเป็นสิ่งที่ควบคุมได้                                                        |   |   |   |   |   |   |
| 18         | การที่บุคคลทำงานอย่างเต็มที่จนชำนาญ เป็นสิ่งที่ดี                                        |   |   |   |   |   |   |
| 19         | ระลึกไว้ตัว เป็นสิ่งสำคัญ                                                                |   |   |   |   |   |   |
| 20         | ที่ประชุมควรหยุดถกเหตุผลต่อ เมื่อทุกคนเห็นว่าเหตุผลนั้นเป็นเหตุผลที่ดีที่สุด             |   |   |   |   |   |   |
| 21         | การรักษาด้วยการผ่าตัด มีแนวคิดที่ว่าส่วนไหนไม่ดีหรือเกิน สามารถตัดทิ้งหรือเปลี่ยนใหม่ได้ |   |   |   |   |   |   |
| 22         | ความทุกข์ทรมานเป็นผลจากการกระทำของตนเอง                                                  |   |   |   |   |   |   |
| 23         | ชีวิตต้องปล่อยไปตามธรรมชาติ                                                              |   |   |   |   |   |   |
| 24         | ผู้ป่วยรอดชีวิตมากขึ้นจากความก้าวหน้าของเทคโนโลยีทางการแพทย์                             |   |   |   |   |   |   |
| 25         | การมีแพทย์ผู้เชี่ยวชาญตามระบบ ช่วยให้ผู้ป่วยได้รับการรักษาที่ดี                          |   |   |   |   |   |   |
| 26         | การช่วยให้ผู้อื่นพ้นทุกข์ เป็นสิ่งจำเป็น                                                 |   |   |   |   |   |   |
| 27         | เทคโนโลยีทางการแพทย์ ช่วยให้มนุษย์มีสุขภาพดีขึ้น                                         |   |   |   |   |   |   |
| 28         | ในการอภิปราย เหตุผลที่เห็นว่าเป็นเหตุเป็นผลดี ให้ยอมรับเหตุผลนั้นโดยไม่โต้เถียง          |   |   |   |   |   |   |
| 29         | เป็นการดีอยู่แล้วที่การติดต่อสื่อสารในโรงพยาบาลเป็นแบบทางการ                             |   |   |   |   |   |   |
| 30         | ในกลุ่มยาประเภทเดียวกัน ยาที่มีราคาแพงกว่าควรเลือกใช้ทีหลัง                              |   |   |   |   |   |   |
| 31         | ความเจ็บป่วยของผู้ป่วย เป็นเหตุมาจากความซับซ้อนของสังคม                                  |   |   |   |   |   |   |
| 32         | เหตุผลที่เป็นกลาง สามารถใช้ได้ทุกสถานการณ์                                               |   |   |   |   |   |   |
| 33         | การไม่ดื่มสุรา เป็นสิ่งที่ดี                                                             |   |   |   |   |   |   |
| 34         | วัตถุประสงค์ของการถกเหตุผล คือเพื่อให้ได้ข้อตกลงที่ดีที่สุด                              |   |   |   |   |   |   |
| 35         | ได้มากกว่าที่ควร เป็นบาป                                                                 |   |   |   |   |   |   |
| 36         | การคิดแย้งต่อความรู้ของตนเองว่าอาจไม่จริง เป็นสิ่งประหลาด                                |   |   |   |   |   |   |
| 37         | หากขาดเทคโนโลยีทางการแพทย์ มนุษย์จะเจ็บป่วยมากขึ้น                                       |   |   |   |   |   |   |
| 38         | เป็นการถูกต้องแล้วที่แพทย์แบ่งการรักษาตามระบบอวัยวะ                                      |   |   |   |   |   |   |
| 39         | ความจริงใจต่อกันเป็นสิ่งจำเป็น                                                           |   |   |   |   |   |   |

## แบบสอบถาม ส่วนที่ 3

| ข้อ<br>ที่ | ข้อความ                                                                                 | 6 | 5 | 4 | 3 | 2 | 1 |
|------------|-----------------------------------------------------------------------------------------|---|---|---|---|---|---|
| 40         | แพทย์จำเป็นต้องปฏิบัติตามกฎระเบียบของโรงพยาบาล                                          |   |   |   |   |   |   |
| 41         | หากแสดงความเห็นแล้ว จะเกิดการถกประเด็นกันยาว ก็ไม่ควรพูด                                |   |   |   |   |   |   |
| 42         | ความหลุดพ้นไม่มีจริง                                                                    |   |   |   |   |   |   |
| 43         | แพทย์ต้องคำนึงถึงประสิทธิภาพการรักษา                                                    |   |   |   |   |   |   |
| 44         | เป็นสิ่งที่ดีที่แพทย์ตั้งเป้าหมายก่อนทำการรักษา                                         |   |   |   |   |   |   |
| 45         | ที่ประชุมควรหยุดถกเหตุผลต่อ เมื่อเหตุผลนั้นเป็นเหตุผลที่เข้ากับบรรทัดฐานของสังคม        |   |   |   |   |   |   |
| 46         | การจัดระบบบริการทางการแพทย์ให้เป็นรูปแบบทางการ ทำให้กระบวนการดูแลผู้ป่วยประสบความสำเร็จ |   |   |   |   |   |   |
| 47         | การที่ผู้เจ็บป่วยกลับไปทำงานได้ เป็นสิ่งที่จำเป็นสำหรับสังคม                            |   |   |   |   |   |   |
| 48         | คำพังเพย “พูดไปสองไพเบี้ย นิ่งเสียตำลึงทอง” ควรยึดถือเป็นหลักปฏิบัติ                    |   |   |   |   |   |   |
| 49         | พูดไปไม่ควรทำ                                                                           |   |   |   |   |   |   |
| 50         | แพทย์ควรให้การดูแลรักษาผู้ป่วย ตามที่ตำราหรืองานวิจัย                                   |   |   |   |   |   |   |
| 51         | การรักษาโรคง่ายขึ้น เพราะความก้าวหน้าของเทคโนโลยีทางการแพทย์                            |   |   |   |   |   |   |
| 52         | ผู้ที่มีประสบการณ์น้อยกว่า ควรแสดงความคิดเห็นที่หลัง                                    |   |   |   |   |   |   |
| 53         | เป็นสิ่งที่ดีที่แพทย์เคร่งครัดต่อแนวทางปฏิบัติทางคลินิก (clinical practice guideline)   |   |   |   |   |   |   |
| 54         | คนเราต้องฟังพากันและกัน                                                                 |   |   |   |   |   |   |
| 55         | ไม่ควรแสดงความเห็นที่แตกต่าง เมื่อมีความเห็นไม่ตรงกับคนส่วนใหญ่ในกลุ่ม                  |   |   |   |   |   |   |
| 56         | การเดินสายกลายเป็นสิ่งจำเป็น                                                            |   |   |   |   |   |   |
| 57         | เพื่อไม่ให้ขัดคอกับเพื่อนรัก เพื่อนควรแสดงความคิดเห็นแบบค่อยตามกัน                      |   |   |   |   |   |   |
| 58         | การบริหารจัดการที่ดี เป็นการเพิ่มประสิทธิภาพ                                            |   |   |   |   |   |   |
| 59         | ที่ประชุมควรหยุดถกเหตุผลต่อ เมื่อมีการให้เหตุผลตามหลักฐานวิจัยทางวิทยาศาสตร์            |   |   |   |   |   |   |
| 60         | แพทย์จำเป็นต้องใส่ใจว่าผู้ป่วยพึงพอใจต่อการรักษาของตน                                   |   |   |   |   |   |   |
| 61         | การช่วยเหลือผู้อื่นเป็นสิ่งที่ดี                                                        |   |   |   |   |   |   |
| 62         | ความรู้จากประสบการณ์ของแพทย์สำคัญเท่ากับความรู้อจากตำรา                                 |   |   |   |   |   |   |
| 63         | ผู้ที่มีประสบการณ์มักแสดงความคิดเห็นที่เป็นประโยชน์มากกว่า                              |   |   |   |   |   |   |

## แบบสอบถามส่วนที่ 4

พิจารณาคำพูดของแพทย์ ในสามสถานการณ์จำลองที่เป็นการสนทนาระหว่างแพทย์กับผู้ป่วยหรือญาติ โดยพิจารณาคำพูดของแพทย์ในแต่ละบทสนทนา และพิจารณาว่าท่านมีโอกาสมากน้อยเพียงใดที่จะเลือกใช้ คำพูดนั้น ๆ ให้การบาทช่องตัวเลขความน่าจะเป็น หรือโอกาสที่ท่านจะเลือกพูด (จาก 1 ครั้ง ไปจนถึง 6 ครั้ง ในโอกาสพูดทั้งหมด 6 ครั้ง)

**หมายเหตุ** ข้อคำพูดในบทสนทนาเดียวกันแม้จะคล้ายคลึงกัน แต่ให้พิจารณาความน่าจะเป็นในแต่ละข้อ ในแต่ละบทสนทนา แบบเป็นอิสระจากกัน ยกตัวอย่างเช่น

ท่านสามารถเลือกความน่าจะเป็นในแต่ละบทสนทนา ดังนี้ ข้อ 1 เลือก 6/6, ข้อ 2 เลือก 6/6, ข้อ 3 เลือก 3/6, ข้อ 4 เลือก 2/6 (ไม่จำเป็นต้องรวมกันเท่ากับ ความน่าจะเป็น 1)

## สถานการณ์จำลอง 1

ผู้ป่วยชายคนหนึ่ง อายุ 30 ปีกว่า ได้รับอุบัติเหตุทางสมอง ผู้ป่วยไม่รู้สีกตัว ช่วยเหลือตนเองไม่ได้ และต้องใช้เครื่องช่วยหายใจ พักรักษาตัวใน ICU มาแล้ว 6 สัปดาห์ อาการทางสมองทรงตัวไม่ดีขึ้น แพทย์เจ้าของไข้ แจ้งแก่มารดาของผู้ป่วยเกี่ยวกับแนวทางการรักษาทางการแพทย์ต่อไป คือ การทำ tracheotomy

## บทสนทนาที่ 1

มารดา: 'การเจาะคอ' คืออะไร

แพทย์: .....

1. 'การเจาะคอ' คือ การเปิดหลอดลม เพื่อใส่ท่อพลาสติก สำหรับช่วยหายใจในผู้ป่วยไม่รู้สีกตัว

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

2. 'การเจาะคอ' คือ การใส่ท่อขนาดเล็กในหลอดลมของผู้ป่วย ใช้เป็นทางเดินของอากาศเข้าสู่ปอด

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

3. 'การเจาะคอ' จะทำเมื่อผู้ป่วยถูกใส่ท่อช่วยหายใจมาเป็นเวลานาน และเพื่อป้องกันภาวะแทรกซ้อนจากการใส่ท่อช่วยหายใจทางปาก

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

4. 'การเจาะคอ' คือ การผ่าตัดเปิดหลอดลมเพื่อใส่ท่อช่วยหายใจ แทนท่อหายใจที่ใส่ผ่านทางปาก

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

## บทสนทนาที่ 2

มารดา: แล้ว การเจาะคอมีประโยชน์หรือโทษอย่างไร

แพทย์: ....

5. 'มีประโยชน์เพื่อป้องกันภาวะแทรกซ้อนบางอย่าง'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

6. 'ขึ้นอยู่กับว่า คุณจะสนใจเรื่องอะไรเป็นหลัก การเจาะคอเป็นการช่วยผู้ป่วยในระยะยาว'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

7. 'การใส่ท่อช่วยหายใจทางปาก ทำให้เกิดหลอดลมตีบตันได้ถึง 1 ใน 3 ของผู้ป่วย'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

### บทสนทนาที่ 3

แพทย์: การเจาะคอไม่ได้ช่วยให้อาการของผู้ป่วยดีขึ้น

มารดา: คุณหมายความว่าจริง ๆ แล้วอาจไม่จำเป็นต้องทำได้ ใช่ไหมคะ

แพทย์:.....

8. 'หมอไม่ได้หมายความว่าเช่นนั้น หมอหมายถึงอาการทางสมองของผู้ป่วยไม่ดีขึ้น แต่การเจาะคอก็น่าจะมีประโยชน์ต่อผู้ป่วย'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

9. 'หมอเพียงแต่อยากจะทำให้ข้อมูลเพิ่มเติม ว่าการเจาะคอไม่ได้รักษาอาการทางสมอง'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

10. 'หมอบอก ถึงอาการโดยรวมไม่ดีขึ้น แต่น่าจะดีกับระบบหายใจ'

|                               |     |     |     |     |     |     |
|-------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดต่อ 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|-------------------------------|-----|-----|-----|-----|-----|-----|

11. 'ในทางการแพทย์ เมื่อใส่ท่อช่วยหายใจทางปากมาระยะเวลาหนึ่ง ควรต้องเปลี่ยน อย่างไรก็ตามต้องพิจารณาความเหมาะสมหลายอย่าง'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

### บทสนทนาที่ 4

มารดา: ในที่สุดลูกชายดิฉันจะเป็นอย่างไร

แพทย์: ใช้เครื่องช่วยหายใจ จนกว่าสมองจะฟื้นซึ่งอาจใช้เวลานานมาก จนกว่าจะหยุดใช้เครื่องช่วยหายใจได้

มารดา: ดิฉันไม่อยากเห็นลูกชายต้องตกอยู่ในสภาพเช่นนี้เลย ต้องเจาะคอ ขยับไม่ได้ ดิฉันปวดใจมาก ถ้าไม่มีโอกาสที่สมองจะฟื้นเลย ดิฉันอยากให้ลูกไปอย่างสบายดีกว่า คิดอีกทีก็เหมือนกับว่าดิฉันอยากฆ่าลูก  
แพทย์:.....

12. 'หมอลงใจความรู้สึกของคนเป็นแม่ ลองลืมเรื่องโอกาสฟื้นก่อน แล้วเรามาช่วยกันคิดว่าจะทำอย่างไรดีจึงจะเหมาะสม'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

13. 'ลองลืมเรื่องเจาะคอก่อน หมอว่าเราสามารถช่วยให้ผู้ป่วยสุขสบายตามอัตภาพได้'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

14. 'คุณอาจคิดว่า คุณไม่ได้ฆ่าลูกได้ เพราะจริง ๆ แล้วหากไม่มีเครื่องมือทางการแพทย์ที่ใช้อยู่ ลูกชายคุณคงเสียชีวิตตามธรรมชาติไปแล้ว'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

## สถานการณ์จำลอง 2

ผู้ป่วยชาย อายุ 77 ปี เป็นมะเร็งที่ลำไส้ ภายหลังการผ่าตัดมะเร็งและลำไส้ออกบางส่วน ได้รับการดูแลใน ICU อาการทรงตัวผลการตรวจเลือดพบว่า เม็ดเลือดขาวค่อนข้างสูง มีไข้ต่ำ ๆ และท้องสลายงาที่ออกจากร่างกายผู้ป่วยยังคงมีน้ำสีเหลืองขุ่น 5 วันต่อมา ผู้ป่วยเริ่มไข้สูง ซึมลง หายใจหอบ จนต้องใส่ท่อช่วยหายใจและใช้เครื่องช่วยหายใจ ผลตรวจทางรังสีพบว่า มีน้ำในช่องท้องจึงเข้าไปผ่าตัดล้างท้อง ผู้ป่วยอยู่ ICU อีกหลายสัปดาห์ด้วยอาการติดเชื้อ และได้รับการล้างท้องเป็น 10 ครั้ง อาการผู้ป่วยค่อย ๆ แย่ลง ผลตรวจทางห้องปฏิบัติการพบว่า เริ่มมีอาการเลือดแข็งตัวช้า และเกร็ดเลือดต่ำ กลุ่มแพทย์คิดว่า การผ่าตัดล้างท้องน่าจะช่วยกำจัด source of infection ได้ แต่จะเสี่ยงกับการเสียเลือดมาก แพทย์รู้ว่าอาการผู้ป่วยจะเลวลงเรื่อย ๆ และโอกาสที่ผู้ป่วยจะรอดชีวิตน้อยมาก

### บทสนทนาที่ 1

ญาติ: ผู้ป่วยเป็นอย่างไรครับคุณหมอ

แพทย์: .....

15. 'มีอาการติดเชื้อในเลือด ต้องให้ยาปฏิชีวนะอยู่'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

16. 'ภายหลังผ่าตัด ร่างกายจะอ่อนแอ และต้องต่อสู้กับภาวะติดเชื้อ ตอนนี้ให้การรักษาแบบประคับประคอง ต้องเฝ้าดูอาการ'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

17. 'ขณะนี้การนำเป็นห่วง ภาวะติดเชื้อมีความเสี่ยงหรือไม่ได้'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

18. 'เมื่อการเกิดเลือดต่ำ ทำให้ต้องดูแลรักษาอย่างใกล้ชิด'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

### บทสนทนาที่ 2

ญาติ: การผ่าตัดลำท้องจะช่วยไหม ครับ

แพทย์: .....

19. 'ตามทฤษฎีการลำท้องช่วยลดภาวะติดเชื้อมีได้ แต่การผ่าตัดก็อาจทำให้ผู้ป่วยอ่อนแอลง'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

20. 'จะเสี่ยงกับการเสียชีวิตบนเตียงผ่าตัด'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

21. 'การลำท้องก็อาจมีประโยชน์ แต่ก็อาจเกิดภาวะแทรกซ้อนจากการผ่าตัดได้'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

### บทสนทนาที่ 3

ญาติ: ถึงแม้จะมีโอกาสน้อยมากที่จะรอดชีวิต แต่ขอให้คุณหมอช่วยอย่างเต็มที่ ผมยังอยากให้คุณหมอช่วยผ่าตัดลำท้อง

แพทย์:.....

22. 'ทุกครั้งภายหลังผ่าตัด ผู้ป่วยจะอ่อนแอลง หากร่างกายอ่อนแอภาวะติดเชื้อมีจะแสดงอาการมากขึ้น'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

23. 'หมอช่วยเต็มที่อยู่แล้ว'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

24. 'ตอนนี้การรักษาเป็นไปตามมาตรฐาน หมออยากให้คุณลองคิดในมุมอื่นบ้าง การผ่าตัดแม้จะเป็นการรักษา แต่ก็ไม่ใช่ว่าจะไม่อันตราย'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

บทสนทนาที่ 4

ญาติ: ผมยังไม่อยากให้คุณพ่อเสียชีวิตตอนนี้ ผมยังไม่มีโอกาสได้ดูแลท่านเลย

แพทย์: .....

25. 'วิธีการรักษาต่างๆ เป็นแค่การรักษาประคับประคอง ร่างกายของผู้ป่วยต้องแข็งแรงพอด้วย แต่ร่างกายผู้ป่วยอ่อนแอมาก หอมคิดว่าอาการจะทรุดลง'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

26. 'หมอเห็นใจ ทั้งหมอและคุณทำดีที่สุดแล้ว'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

27. 'หมอบอกว่า เราจะพยายามรักษาอย่างเต็มที่โดยไม่ได้คิดถึงว่าผู้ป่วยอาจจะไม่รอดชีวิต และควรดูแลให้ผู้ป่วยสุขสบายมากที่สุด คุณเห็นด้วยไหม'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

28. 'หมอเข้าใจความรู้สึกของคุณดี ที่ผ่านมามหมอเห็นว่าคุณเอาใจใส่คุณพ่อเป็นอย่างมาก แต่ความเจ็บป่วยบางอย่างการแพทย์ก็ไม่สามารถรักษาให้หายได้'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

สถานการณ์จำลอง 3

ผู้ป่วยอายุ 65 ปี ตรวจพบว่ามีก้อนที่ปอดด้านขวา ขนาดใหญ่ แพทย์ทำการตรวจเพิ่มเติมและทราบผลว่าเป็นมะเร็งปอด ที่ต้องรักษาด้วยยาเคมีบำบัด แพทย์นัดผู้ป่วยเพื่อบอกผลการตรวจ

บทสนทนาที่ 1

ผู้ป่วย: ผลตรวจเป็นอย่างไรคะ

แพทย์: .....

29. 'คุณเป็นเนื้อร้ายที่ปอดชนิดลุกลาม'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

30. 'คุณเป็นมะเร็งที่ปอดซึ่งจะโตขึ้นเรื่อย ๆ และไปอกที่อวัยวะอื่นๆ ได้'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

31. 'คุณเป็นเนื้องอกที่ปอด ซึ่งโตขึ้นและเบียดบังปอดทำให้ปอดทำงานผิดปกติ'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

บทสนทนาที่ 2

ผู้ป่วย: จะอันตรายไหมคะ ดิฉันจะต้องทำอย่างไรบ้าง

แพทย์:.....

32. 'จากการตรวจ พบว่าเนื้องอกนี้ต้องรักษาด้วยยาเคมีบำบัด ซึ่งรักษาได้ผลดี'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

33. 'มีวิธีการรักษาหลายวิธี แต่ที่น่าจะเป็นวิธีที่ดีที่สุดคือยาเคมีบำบัด ผลการรักษาขึ้นอยู่กับการตอบสนองต่อยาเคมีบำบัด'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

34. 'มีรายงานว่าทำให้อาการลุกลามช้าลงหากเลือกรักษา และเนื้องอกนี้ต้องใช้ยาเคมีบำบัดรักษา อย่างไรก็ตาม ผู้ป่วยมักมีอาการข้างเคียงจากยาเคมีบำบัด'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

35. 'ต้องรักษาด้วยยาเคมีบำบัดหลายตัว ซึ่งปัจจุบันยาเคมีบำบัดมีผลข้างเคียงน้อย'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

สถานการณ์จำลอง 3 (ต่อ)

ผู้ป่วยเลือกรักษาด้วยยาเคมีบำบัดจนครบโปรแกรม, 1 ปีผ่านไปผู้ป่วยเข้าโรงพยาบาลด้วยอาการแขนบวม หายใจไม่ออก มีน้ำท่วมปอด แพทย์ทำการรักษาโดยการเจาะเอาน้ำออกจากปอด และพบว่าขนาดก้อนใหญ่ขึ้น กดทางเดินเลือดที่กลับเข้าสู่หัวใจ แพทย์เห็นว่าควรต้องใช้รังสีรักษา เพื่อช่วยบรรเทาอาการ ส่วนผู้ป่วยรู้ตัวเองว่า อาการหนักมาก อาจมีชีวิตอยู่ไม่นาน แพทย์เจ้าของไข้เข้าเยี่ยมอาการ

บทสนทนาที่ 3

แพทย์: สบายดีไหมครับ วันนี้

ผู้ป่วย: ดีขึ้น เหนื่อยน้อยลง พอทานข้าวได้ คุณหมอจะให้กลับบ้านวันไหนคะ

แพทย์:.....

36. 'หมอขอให้ข้อมูลเรื่องการฉายรังสีที่จะช่วยลดขนาดก้อนลงและลดอาการเหนื่อยและ แขนบวม แต่การฉายรังสีก็อาจแทรกซ้อนบางอย่างที่ทำให้คุณต้องอยู่โรงพยาบาลอีกสักพัก คุณอาจเลือกรักษาหรือไม่ก็ได้'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

37. 'หมออนุญาตให้คุณกลับบ้านได้พุงนี้ แต่คุณอาจต้องกลับเข้าโรงพยาบาลอีกครั้งในไม่ช้าจากอาการก่อน  
เนื้องอกที่โตขึ้น การฉายรังสีเป็นวิธีการหนึ่งที่ทำให้ก้อนเล็กลงได้ ซึ่งอาจทำให้เล็กลงเวลาอาการเหนื่อยอีกครั้งได้  
คุณลองคิดดู'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

38. 'หมอตรวจอาการแล้ว พบว่าก้อนใหญ่ขึ้น จำเป็นต้องฉายรังสีเพื่อลดขนาดก้อนลง'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

39. 'เพื่อลดอาการแขนบวมและอาการเหนื่อยของคุณ ควรจะฉายรังสีก่อนกลับบ้าน'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

#### บทสนทนาที่ 4

ผู้ป่วย: คุณหมอมคิดว่า ดิฉันจะอยู่ได้อีกนานเท่าไรคะ

แพทย์:.....

40. 'ถ้ารักษา อาจอยู่ได้อีก 9 เดือน บางคนอาจนานกว่านี้'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

41. 'ตามประสบการณ์ น่าจะอยู่ได้อีก 9 เดือน แต่ช่วง 3-4 เดือนถัดจากนี้ไป คุณอาจต้องเข้าโรงพยาบาลบ่อย'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

42. 'ตอนนี้อาการของคุณเป็นระยะสุดท้าย ซึ่งช่วง 1 เดือนนี้คุณยังคงช่วยเหลือตัวเองได้ แต่หลังจากนั้นคงมี  
อาการป่วยกระเสาะกระแสะ'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

43. 'ไม่มีใครบอกได้แน่นอน น่าจะประมาณ 9 เดือน'

|                              |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|
| โอกาสที่จะเลือกพูดใน 6 ครั้ง | 1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6 |
|------------------------------|-----|-----|-----|-----|-----|-----|

-----จบแบบสอบถาม ขอขอบคุณในความกรุณาของท่านเป็นอย่างยิ่ง-----

## APPENDIX B

### DISTRIBUTION OF THE MEDICAL IDEOLOGY SCORES

| This presented<br>sequence of the items was<br>as stated in Table 4.4 |   | Scale |       |       |       |       |       | Total |
|-----------------------------------------------------------------------|---|-------|-------|-------|-------|-------|-------|-------|
|                                                                       |   | 1     | 2     | 3     | 4     | 5     | 6     |       |
| Item1                                                                 | % | 1.70  | 3.50  | 17.30 | 38.70 | 34.10 | 4.60  | 100   |
|                                                                       | n | (3)   | (6)   | (30)  | (67)  | (59)  | (8)   | (173) |
| Item2                                                                 | % | 10.40 | 16.80 | 25.40 | 38.20 | 9.20  | 0     | 100   |
|                                                                       | n | (18)  | (29)  | (44)  | (66)  | (16)  | 0     | (173) |
| Item3                                                                 | % | 1.79  | 39.9  | 21.40 | 12.10 | 5.20  | 3.50  | 100   |
|                                                                       | n | (31)  | (69)  | (3.7) | (21)  | (9)   | (6)   | (173) |
| Item4                                                                 | % | 4.60  | 12.70 | 16.20 | 37.60 | 26.00 | 2.90  | 100   |
|                                                                       | n | (8)   | (22)  | (28)  | (65)  | (45)  | (5)   | (173) |
| Item5                                                                 | % | 4.60  | 18.50 | 41.00 | 23.70 | 10.40 | 1.70  | 100   |
|                                                                       | n | (8)   | (32)  | (71)  | (41)  | (18)  | (3)   | (173) |
| Item6                                                                 | % | 20.20 | 23.10 | 20.20 | 26.60 | 9.20  | 0.60  | 100   |
|                                                                       | n | (35)  | (40)  | (35)  | (46)  | (16)  | (1)   | (173) |
| Item7                                                                 | % | 18.50 | 25.40 | 27.20 | 20.20 | 6.90  | 1.70  | 100   |
|                                                                       | n | (32)  | (44)  | (47)  | (35)  | (12)  | (3)   | (173) |
| Item8                                                                 | % | 36.40 | 46.80 | 13.90 | 2.90  | 0     | 0     | 100   |
|                                                                       | n | (63)  | (81)  | (24)  | (5)   | (0)   | (0)   | (173) |
| Item9                                                                 | % | 4.00  | 11.60 | 16.20 | 30.10 | 31.20 | 6.90  | 100   |
|                                                                       | n | (7)   | (20)  | (28)  | (52)  | (54)  | (12)  | (173) |
| Item10                                                                | % | 12.10 | 23.70 | 22.00 | 30.10 | 11.60 | 0.60  | 100   |
|                                                                       | n | (21)  | (41)  | (38)  | (52)  | (20)  | (1)   | (173) |
| Item11                                                                | % | 0.60  | 1.20  | 3.50  | 11.60 | 56.60 | 26.60 | 100   |
|                                                                       | n | (1)   | (2)   | (6)   | (20)  | (98)  | (46)  | (173) |
| Item12                                                                | % | 0     | 1.70  | 4.60  | 29.50 | 43.90 | 20.20 | 100   |
|                                                                       | n | (0)   | (3)   | (8)   | (51)  | (76)  | (35)  | (173) |
| Item13                                                                | % | 1.70  | 1.70  | 6.90  | 31.20 | 43.40 | 15.00 | 100   |
|                                                                       | n | (3)   | (3)   | (12)  | (54)  | (75)  | (26)  | (173) |
| Item14                                                                | % | 4.00  | 8.70  | 17.30 | 32.90 | 27.70 | 9.20  | 100   |
|                                                                       | n | (7)   | (15)  | (30)  | (57)  | (48)  | (16)  | (173) |

|        |   |       |       |       |       |       |      |       |
|--------|---|-------|-------|-------|-------|-------|------|-------|
| Item15 | % | 10.40 | 19.10 | 20.80 | 38.70 | 9.80  | 1.20 | 100   |
|        | n | (18)  | (33)  | (36)  | (67)  | (17)  | (2)  | (173) |
| Item16 | % | 13.30 | 23.10 | 19.70 | 30.10 | 12.10 | 1.70 | 100   |
|        | n | (23)  | (40)  | (34)  | (52)  | (21)  | (3)  | (173) |

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Remark: The item orders and item contents were sequenced as in Table 4.4.

## APPENDIX C

### DISTRIBUTION OF THE SOCIAL IDEOLOGY SCORES

| This presented<br>sequence of items was<br>as stated in Table 4.6 |   | Scale |       |       |       |       |       | Total |
|-------------------------------------------------------------------|---|-------|-------|-------|-------|-------|-------|-------|
|                                                                   |   | 1     | 2     | 3     | 4     | 5     | 6     |       |
| Item1                                                             | % | 0     | 0     | 0.60  | 8.70  | 45.10 | 45.70 | 100   |
|                                                                   | n | (0)   | (0)   | (1)   | (15)  | (78)  | (79)  | (173) |
| Item2                                                             | % | 0.60  | 0.60  | 1.20  | 10.40 | 41.60 | 45.70 | 100   |
|                                                                   | n | (1)   | (1)   | (2)   | (18)  | (72)  | (79)  | (173) |
| Item3                                                             | % | 0     | 0.60  | 4.60  | 23.10 | 42.20 | 29.50 | 100   |
|                                                                   | n | (0)   | (1)   | (8)   | (40)  | (73)  | (51)  | (173) |
| Item4                                                             | % | 0     | 3.50  | 6.40  | 35.30 | 45.70 | 9.20  | 100   |
|                                                                   | n | (0)   | (6)   | (11)  | (61)  | (79)  | (16)  | (173) |
| Item5                                                             | % | 0     | 7.50  | 12.10 | 34.70 | 34.10 | 11.60 | 100   |
|                                                                   | n | (0)   | (13)  | (21)  | (60)  | (59)  | (20)  | (173) |
| Item6                                                             | % | 1.70  | 6.90  | 17.30 | 39.90 | 23.70 | 10.40 | 100   |
|                                                                   | n | (3)   | (12)  | (30)  | (69)  | (41)  | (18)  | (173) |
| Item7                                                             | % | 0.60  | 1.20  | 4.00  | 15.00 | 38.20 | 41.00 | 100   |
|                                                                   | n | (1)   | (2)   | (7)   | (26)  | (66)  | (71)  | (173) |
| Item8                                                             | % | 1.20  | 2.90  | 9.80  | 27.20 | 33.50 | 25.40 | 100   |
|                                                                   | n | (2)   | (5)   | (17)  | (47)  | (58)  | (44)  | (173) |
| Item9                                                             | % | 0.60  | 1.70  | 7.50  | 30.10 | 49.70 | 10.40 | 100   |
|                                                                   | n | (1)   | (3)   | (13)  | (52)  | (86)  | (18)  | (173) |
| Item10                                                            | % | 1.20  | 2.50  | 8.10  | 27.20 | 45.10 | 15.00 | 100   |
|                                                                   | n | (2)   | (6)   | (14)  | (47)  | (78)  | (26)  | (173) |
| Item11                                                            | % | 1.70  | 4.00  | 19.70 | 40.50 | 26.00 | 8.10  | 100   |
|                                                                   | n | (3)   | (7)   | (34)  | (70)  | (45)  | (14)  | (173) |
| Item12                                                            | % | 6.40  | 19.70 | 31.80 | 28.30 | 12.10 | 1.70  | 100   |
|                                                                   | n | (11)  | (34)  | (55)  | (49)  | (21)  | (3)   | (173) |
| Item13                                                            | % | 0     | 0     | 2.90  | 5.20  | 41.60 | 50.30 | 100   |
|                                                                   | n | (0)   | (0)   | (5)   | (9)   | (72)  | (87)  | (173) |
| Item14                                                            | % | 0     | 0     | 4.00  | 13.30 | 38.70 | 43.90 | 100   |
|                                                                   | n | (0)   | (0)   | (7)   | (23)  | (67)  | (76)  | (173) |

|        |   |      |       |       |       |       |       |       |
|--------|---|------|-------|-------|-------|-------|-------|-------|
| Item15 | % | 0    | 1.20  | 3.50  | 16.80 | 38.70 | 39.90 | 100   |
|        | n | (0)  | (2)   | (6)   | (29)  | (67)  | (69)  | (173) |
| Item16 | % | 2.90 | 13.30 | 18.50 | 29.50 | 25.40 | 10.40 | 100   |
|        | n | (5)  | (23)  | (32)  | (51)  | (44)  | (18)  | (173) |

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Remark: The item orders and item contents were sequenced as in Table 4.6.

## APPENDIX D

### DISTRIBUTION OF THE MORALITY IDEOLOGY SCORES

| This presented<br>sequence of items was<br>as stated in Table 4.9 |   | Scale |       |       |       |       |       | Total |
|-------------------------------------------------------------------|---|-------|-------|-------|-------|-------|-------|-------|
|                                                                   |   | 1     | 2     | 3     | 4     | 5     | 6     |       |
| Item1                                                             | % | 0     | 0     | 0     | 1.20  | 16.20 | 82.70 | 100   |
|                                                                   | n | (0)   | (0)   | (0)   | (2)   | (28)  | (143) | (173) |
| Item2                                                             | % | 0     | 0     | 0     | 3.50  | 20.80 | 75.70 | 100   |
|                                                                   | n | (0)   | (0)   | (0)   | (6)   | (36)  | (131) | (173) |
| Item3                                                             | % | 0     | 0     | 0     | 2.90  | 32.40 | 64.70 | 100   |
|                                                                   | n | (0)   | (0)   | (0)   | (5)   | (56)  | (112) | (173) |
| Item4                                                             | % | 0     | 0     | 0.60  | 4.60  | 29.50 | 65.30 | 100   |
|                                                                   | n | (0)   | (0)   | (1)   | (8)   | (51)  | (113) | (173) |
| Item5                                                             | % | 0.60  | 0     | 1.20  | 4.60  | 26.00 | 67.60 | 100   |
|                                                                   | n | (1)   | (0)   | (2)   | (8)   | (45)  | (117) | (173) |
| Item6                                                             | % | 0.60  | 0     | 0     | 12.10 | 21.40 | 65.90 | 100   |
|                                                                   | n | (1)   | (0)   | (0)   | (21)  | (37)  | (114) | (173) |
| Item7                                                             | % | 1.70  | 1.70  | 0.60  | 5.20  | 24.30 | 66.50 | 100   |
|                                                                   | n | (3)   | (3)   | (1)   | (9)   | (42)  | (115) | (173) |
| Item8                                                             | % | 0.60  | 1.20  | 5.20  | 13.30 | 35.30 | 44.50 | 100   |
|                                                                   | n | (1)   | (2)   | (9)   | (23)  | (61)  | (77)  | (173) |
| Item9                                                             | % | 0     | 0     | 2.30  | 16.20 | 53.80 | 27.70 | 100   |
|                                                                   | n | (0)   | (0)   | (4)   | (28)  | (93)  | (48)  | (173) |
| Item10                                                            | % | 1.20  | 1.20  | 6.40  | 23.70 | 41.60 | 26.00 | 100   |
|                                                                   | n | (2)   | (2)   | (11)  | (41)  | (72)  | (45)  | (173) |
| Item11                                                            | % | 3.50  | 10.40 | 15.60 | 13.30 | 30.60 | 26.60 | 100   |
|                                                                   | n | (6)   | (18)  | (27)  | (23)  | (53)  | (46)  | (173) |
| Item12                                                            | % | 4.00  | 9.20  | 23.70 | 32.90 | 22.50 | 7.50  | 100   |
|                                                                   | n | (7)   | (16)  | (41)  | (57)  | (39)  | (13)  | (173) |
| Item13                                                            | % | 5.20  | 12.10 | 24.30 | 37.00 | 13.90 | 7.50  | 100   |
|                                                                   | n | (9)   | (21)  | (42)  | (64)  | (24)  | (13)  | (173) |
| Item14                                                            | % | 11.60 | 16.80 | 28.30 | 31.20 | 9.80  | 2.30  | 100   |
|                                                                   | n | (20)  | (29)  | (49)  | (54)  | (17)  | (4)   | (173) |

## APPENDIX E

### DISTRIBUTION OF THE CRITICIZABILITY VALUE SCORES

| This presented<br>sequence of items was<br>as stated in Table 4.10 |   | Scale |       |       |       |       |       | Total |
|--------------------------------------------------------------------|---|-------|-------|-------|-------|-------|-------|-------|
|                                                                    |   | 1     | 2     | 3     | 4     | 5     | 6     |       |
| Item1                                                              | % | 0.60  | 7.50  | 17.90 | 26.00 | 30.60 | 17.30 | 100   |
|                                                                    | n | (1)   | (13)  | (31)  | (45)  | (53)  | (30)  | (173) |
| Item2                                                              | % | 6.4   | 8.10  | 9.80  | 28.90 | 31.20 | 15.60 | 100   |
|                                                                    | n | (11)  | (14)  | (17)  | (50)  | (54)  | (27)  | (173) |
| Item3                                                              | % | 0.60  | 9.20  | 14.50 | 37.60 | 33.50 | 4.60  | 100   |
|                                                                    | n | (1)   | (16)  | (25)  | (65)  | (58)  | (8)   | (173) |
| Item4                                                              | % | 1.20  | 11.60 | 30.10 | 27.70 | 22.00 | 7.50  | 100   |
|                                                                    | n | (2)   | (20)  | (52)  | (48)  | (38)  | (13)  | (173) |
| Item5                                                              | % | 1.70  | 16.20 | 31.80 | 26.00 | 14.50 | 9.80  | 100   |
|                                                                    | n | (3)   | (28)  | (55)  | (45)  | (25)  | (17)  | (173) |
| Item6                                                              | % | 4.00  | 16.20 | 33.50 | 19.10 | 16.80 | 10.40 | 100   |
|                                                                    | n | (7)   | (28)  | (58)  | (33)  | (29)  | (18)  | (173) |
| Item7                                                              | % | 2.90  | 19.70 | 31.20 | 25.40 | 14.50 | 6.40  | 100   |
|                                                                    | n | (5)   | (34)  | (54)  | (44)  | (25)  | (11)  | (173) |
| Item8                                                              | % | 2.30  | 27.20 | 32.40 | 20.80 | 12.70 | 4.60  | 100   |
|                                                                    | n | (4)   | (47)  | (56)  | (36)  | (22)  | (8)   | (173) |
| Item9                                                              | % | 11.6  | 34.1  | 32.9  | 13.3  | 6.4   | 1.7   | 100   |
|                                                                    | n | (20)  | (59)  | (57)  | (23)  | (11)  | (3)   | (173) |
| Item10                                                             | % | 0     | 1.70  | 4.00  | 16.20 | 46.20 | 31.80 | 100   |
|                                                                    | n | (0)   | (3)   | (7)   | (28)  | (80)  | (55)  | (173) |
| Item11                                                             | % | 0     | 7.50  | 15.60 | 26.60 | 30.60 | 19.70 | 100   |
|                                                                    | n | (0)   | (13)  | (27)  | (46)  | (53)  | (34)  | (173) |
| Item12                                                             | % | 1.20  | 4.60  | 27.30 | 28.30 | 30.60 | 17.90 | 100   |
|                                                                    | n | (2)   | (8)   | (30)  | (49)  | (53)  | (31)  | (173) |
| Item13                                                             | % | 0.60  | 11.60 | 18.50 | 26.00 | 25.40 | 17.90 | 100   |
|                                                                    | n | (1)   | (20)  | (32)  | (45)  | (44)  | (31)  | (173) |
| Item14                                                             | % | 0.60  | 9.20  | 14.50 | 37.60 | 33.50 | 4.60  | 100   |
|                                                                    | n | (1)   | (16)  | (25)  | (65)  | (58)  | (8)   | (173) |

|        |   |      |       |       |       |       |      |       |
|--------|---|------|-------|-------|-------|-------|------|-------|
| Item15 | % | 2.90 | 8.70  | 29.50 | 25.40 | 14.50 | 6.40 | 100   |
|        | n | (5)  | (15)  | (51)  | (44)  | (25)  | (11) | (173) |
| Item16 | % | 5.20 | 27.20 | 36.40 | 19.10 | 10.40 | 1.70 | 100   |
|        | n | (9)  | (47)  | (63)  | (33)  | (18)  | (3)  | (173) |
| Item17 | % | 2.30 | 8.70  | 22.00 | 27.20 | 30.10 | 9.80 | 100   |
|        | n | (4)  | (15)  | (38)  | (47)  | (52)  | (17) | (173) |

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Remark: The item orders and item contents were sequenced as in Table 4.10.

## APPENDIX F

### DISTRIBUTION OF THE COGNITIVE-INSTRUMENTAL RATIONALITY SCORES

| Component of<br>rationality as stated<br>in Table 4.15 | Item* |   | Scale |       |       |       |       |       |       | Total |
|--------------------------------------------------------|-------|---|-------|-------|-------|-------|-------|-------|-------|-------|
|                                                        |       |   | 1     | 2     | 3     | 4     | 5     | 6     | 7     |       |
| Medical outcomes                                       | 1     | % | 6.40  | 11.00 | 11.60 | 23.70 | 31.20 | 13.90 | 2.30  | 100   |
|                                                        |       | n | 11    | 19    | 20    | 41    | 54    | 24    | 4     | (173) |
|                                                        | 8     | % | 2.90  | 12.10 | 6.90  | 22.50 | 17.90 | 26.60 | 11.00 | 100   |
|                                                        |       | n | 5     | 21    | 12    | 39    | 31    | 46    | 19    | (173) |
|                                                        | 10    | % | 4.00  | 12.10 | 11.60 | 22.50 | 24.30 | 19.10 | 6.40  | 100   |
|                                                        |       | n | 7     | 21    | 20    | 39    | 42    | 33    | 11    | (173) |
|                                                        | 11    | % | 13.30 | 20.20 | 16.80 | 27.20 | 16.20 | 5.80  | 0.6   | 100   |
|                                                        |       | n | 23    | 35    | 29    | 47    | 28    | 10    | 1     | (173) |
|                                                        | 12    | % | 7.50  | 15.60 | 16.80 | 26.60 | 20.20 | 11.60 | 1.70  | 100   |
|                                                        |       | n | 13    | 27    | 29    | 46    | 35    | 20    | 3     | (173) |
|                                                        | 15    | % | 3.50  | 12.70 | 13.90 | 26.00 | 20.20 | 15.00 | 8.70  | 100   |
|                                                        |       | n | 6     | 22    | 24    | 45    | 35    | 26    | 15    | (173) |
|                                                        | 17    | % | 6.40  | 9.80  | 11.00 | 25.40 | 26.60 | 16.20 | 4.60  | 100   |
|                                                        |       | n | 11    | 17    | 19    | 44    | 46    | 28    | 8     | (173) |
|                                                        | 18    | % | 11.00 | 19.10 | 17.30 | 27.70 | 15.60 | 6.90  | 2.3   | 100   |
|                                                        |       | n | 19    | 33    | 30    | 48    | 27    | 12    | 4     | (173) |
| Standard medical<br>practice                           | 26    | % | 5.20  | 9.20  | 8.10  | 15.60 | 15.00 | 30.60 | 16.20 | 100   |
|                                                        |       | n | 9     | 16    | 14    | 27    | 26    | 53    | 28    | (173) |
|                                                        | 4     | % | 6.50  | 6.50  | 7.50  | 16.80 | 26.00 | 26.60 | 16.20 | 100   |
|                                                        |       | n | 6     | 6     | 13    | 29    | 45    | 46    | 28    | (173) |
|                                                        | 5     | % | 6.40  | 8.70  | 12.10 | 19.10 | 27.20 | 18.50 | 8.10  | 100   |
|                                                        |       | n | 11    | 15    | 21    | 33    | 47    | 32    | 14    | (173) |
| Efficiency                                             | 19    | % | 5.20  | 18.50 | 15.60 | 27.20 | 23.70 | 8.70  | 1.20  | 100   |
|                                                        |       | n | 9     | 32    | 27    | 47    | 41    | 15    | 2     | (173) |

|                       |   |   |       |       |       |       |       |       |      |       |
|-----------------------|---|---|-------|-------|-------|-------|-------|-------|------|-------|
|                       |   | n | 3     | 3     | 9     | 19    | 45    | 72    | 22   | (173) |
|                       | 7 | % | 11.60 | 16.80 | 16.80 | 28.30 | 15.00 | 8.70  | 2.90 | 100   |
|                       |   | n | 20    | 29    | 29    | 49    | 26    | 15    | 5    | (173) |
| Technological control | 2 | % | 1.70  | 4.00  | 8.10  | 10.40 | 29.50 | 38.20 | 8.10 | 100   |
|                       |   | n | 3     | 7     | 14    | 18    | 51    | 66    | 14   | (173) |

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**Remark:** \*These item orders were the item order in the rationality scale (Part II) presented in the questionnaire.

## APPENDIX G

### DISTRIBUTION OF THE MORAL-PRACTICAL RATIONALITY SCORES

| Component of<br>Rationality as<br>stated<br>in Table 4.16 | Item* |   | Scale |       |       |       |       |       |       | Total |
|-----------------------------------------------------------|-------|---|-------|-------|-------|-------|-------|-------|-------|-------|
|                                                           |       |   | 1     | 2     | 3     | 4     | 5     | 6     | 7     |       |
| Stage 3                                                   | 24    | % | 5.80  | 13.90 | 12.70 | 17.90 | 19.70 | 20.80 | 9.20  | 100   |
|                                                           |       | n | 10    | 24    | 22    | 31    | 34    | 36    | 16    | (173) |
|                                                           | 25    | n | 0.60  | 5.80  | 9.20  | 23.10 | 21.40 | 24.90 | 15.00 | 100   |
|                                                           |       | % | 1     | 10    | 16    | 40    | 37    | 43    | 29    | (173) |
| Stage 4                                                   | 9     | % | 2.90  | 10.40 | 3.50  | 17.90 | 16.80 | 27.20 | 21.40 | 100   |
|                                                           |       | n | 5     | 18    | 6     | 31    | 29    | 47    | 37    | (173) |
|                                                           | 13    | % | 11.00 | 28.30 | 22.50 | 19.70 | 10.40 | 4.60  | 3.50  | 100   |
|                                                           |       | n | 29    | 49    | 39    | 34    | 18    | 8     | 6     | (173) |
|                                                           | 14    | % | 27.70 | 25.40 | 13.30 | 9.80  | 11.60 | 6.90  | 5.20  | 100   |
|                                                           |       | n | 48    | 44    | 23    | 17    | 20    | 12    | 9     | (173) |
|                                                           | 16    | % | 7.50  | 19.10 | 22.00 | 20.80 | 20.20 | 9.80  | 0.6   | 100   |
|                                                           |       | n | 13    | 33    | 38    | 36    | 35    | 17    | 1     | (173) |
|                                                           | 22    | % | 1.20  | 1.70  | 2.30  | 4.00  | 12.70 | 29.50 | 48.60 | 100   |
|                                                           |       | n | 2     | 3     | 4     | 7     | 22    | 51    | 84    | (173) |
| Stage 5                                                   | 6     | % | 1.70  | 6.40  | 13.30 | 14.50 | 21.40 | 22.50 | 20.20 | 100   |
|                                                           |       | n | 3     | 11    | 23    | 25    | 37    | 39    | 35    | (173) |
|                                                           | 20    | % | 15.60 | 17.90 | 11.60 | 15.60 | 22.00 | 11.60 | 5.80  | 100   |
|                                                           |       | n | 27    | 31    | 20    | 27    | 38    | 20    | 10    | (173) |
|                                                           | 21    | % | 1.70  | 2.90  | 4.60  | 12.10 | 15.60 | 38.70 | 24.30 | 100   |
|                                                           |       | n | 3     | 5     | 8     | 21    | 27    | 67    | 42    | (173) |
| Stage 6                                                   | 23    | % | 1.70  | 0.60  | 1.70  | 6.40  | 12.70 | 30.60 | 46.20 | 100   |
|                                                           |       | n | 3     | 1     | 3     | 11    | 22    | 53    | 80    | (173) |
|                                                           | 27    | % | 4.60  | 5.20  | 6.40  | 20.20 | 15.60 | 22.50 | 25.40 | 100   |
|                                                           |       | n | 8     | 9     | 11    | 35    | 27    | 39    | 44    | (173) |

## APPENDIX H

### DISTRIBUTION OF THE COMMUNICATIVE ACTION SCORES

| Component of<br>Communicative<br>action<br>as stated<br>in Table 4.21 | Item* |   | Scale |       |       |       |       |       | Total |
|-----------------------------------------------------------------------|-------|---|-------|-------|-------|-------|-------|-------|-------|
|                                                                       |       |   | 1     | 2     | 3     | 4     | 5     | 6     |       |
| Comprehensibility                                                     | 2     | % | 24.30 | 17.90 | 17.30 | 14.50 | 20.20 | 5.80  | 100   |
|                                                                       |       | n | 42    | 31    | 30    | 25    | 35    | 10    | (173) |
|                                                                       | 4     | % | 12.10 | 15.60 | 19.70 | 20.20 | 17.90 | 14.50 | 100   |
|                                                                       |       | n | 21    | 27    | 34    | 35    | 31    | 25    | (173) |
|                                                                       | 16    | % | 6.40  | 15.00 | 20.20 | 22.50 | 21.40 | 14.50 | 100   |
|                                                                       |       | n | 11    | 26    | 35    | 39    | 37    | 25    | (173) |
|                                                                       | 17    | % | 5.80  | 10.40 | 15.60 | 19.70 | 24.30 | 24.30 | 100   |
|                                                                       |       | n | 10    | 18    | 27    | 34    | 42    | 42    | (173) |
|                                                                       | 30    | % | 26.60 | 26.00 | 24.90 | 12.70 | 5.20  | 4.60  | 100   |
|                                                                       |       | n | 46    | 45    | 43    | 22    | 9     | 8     | (173) |
|                                                                       | 31    | % | 5.20  | 16.20 | 23.70 | 19.10 | 19.10 | 16.80 | 100   |
|                                                                       |       | n | 9     | 28    | 41    | 33    | 33    | 29    | (173) |
| Truth                                                                 | 6     | % | 45.70 | 26.00 | 15.00 | 10.40 | 2.30  | 0.60  | 100   |
|                                                                       |       | n | 79    | 45    | 26    | 18    | 4     | 1     | (173) |
|                                                                       | 19    | % | 4.60  | 11.00 | 22.00 | 18.50 | 30.10 | 13.90 | 100   |
|                                                                       |       | n | 8     | 19    | 38    | 32    | 52    | 24    | (173) |
|                                                                       | 21    | % | 1.70  | 1.70  | 8.10  | 27.20 | 32.90 | 28.30 | 100   |
|                                                                       |       | n | 3     | 3     | 14    | 47    | 57    | 49    | (173) |
|                                                                       | 33    | % | 1.20  | 0.00  | 11.00 | 23.10 | 35.80 | 28.90 | 100   |
|                                                                       |       | n | 2     | 0     | 19    | 40    | 62    | 50    | (173) |
|                                                                       | 34    | % | 3.50  | 8.70  | 13.30 | 19.70 | 35.30 | 19.70 | 100   |
|                                                                       |       | n | 6     | 15    | 23    | 34    | 61    | 34    | (173) |
| Appropriateness                                                       | 12    | % | 22.00 | 17.30 | 18.50 | 16.80 | 16.80 | 8.70  | 100   |
|                                                                       |       | n | 38    | 30    | 32    | 29    | 29    | 15    | (173) |
|                                                                       | 13    | % | 23.10 | 21.40 | 26.00 | 14.50 | 12.70 | 2.30  | 100   |
|                                                                       |       | n | 40    | 37    | 45    | 25    | 22    | 4     | (173) |

|           |    |   |       |       |       |       |       |       |       |
|-----------|----|---|-------|-------|-------|-------|-------|-------|-------|
| Sincerity | 25 | % | 6.90  | 14.50 | 20.80 | 21.40 | 26.00 | 10.40 | 100   |
|           |    | n | 12    | 25    | 36    | 37    | 45    | 18    | (173) |
|           | 27 | % | 9.20  | 13.90 | 23.70 | 20.20 | 22.50 | 10.40 | 100   |
|           |    | n | 16    | 24    | 41    | 35    | 39    | 18    | (173) |
|           | 41 | % | 17.30 | 18.50 | 24.30 | 20.80 | 15.60 | 3.50  | 100   |
|           |    | n | 30    | 32    | 42    | 36    | 27    | 6     | (173) |
|           | 42 | % | 43.40 | 28.30 | 14.50 | 8.70  | 4.60  | 0.60  | 100   |
|           |    | n | 75    | 49    | 25    | 15    | 8     | 1     | (173) |
|           | 9  | % | 8.70  | 16.20 | 18.50 | 22.00 | 20.20 | 14.50 | 100   |
|           |    | n | 15    | 28    | 32    | 38    | 35    | 25    | (173) |
|           | 11 | % | 9.80  | 12.70 | 16.20 | 22.50 | 22.00 | 16.80 | 100   |
|           |    | n | 17    | 22    | 28    | 39    | 38    | 29    | (173) |
|           | 22 | % | 4.60  | 12.70 | 25.40 | 23.70 | 25.40 | 8.10  | 100   |
|           |    | n | 8     | 22    | 44    | 41    | 44    | 14    | (173) |
|           | 24 | % | 4.60  | 12.70 | 19.70 | 24.30 | 26.60 | 12.10 | 100   |
|           |    | n | 8     | 22    | 34    | 42    | 46    | 21    | (173) |
|           | 36 | % | 10.40 | 17.90 | 25.40 | 20.80 | 19.10 | 6.40  | 100   |
|           |    | n | 18    | 31    | 44    | 36    | 33    | 11    | (173) |
|           | 37 | % | 17.30 | 17.30 | 24.30 | 22.50 | 13.90 | 4.60  | 100   |
|           |    | n | 30    | 30    | 42    | 39    | 24    | 8     | (173) |

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**Remark:** \*These item orders were the item order in the action scale (Part IV) presented in the questionnaire.

## APPENDIX I

### DISTRIBUTION OF THE STRATEGIC ACTION SCORES

| Component of<br>Strategic action as<br>stated<br>in Table 4.22 | Item* |   | Scale |       |       |       |       |       | Total |
|----------------------------------------------------------------|-------|---|-------|-------|-------|-------|-------|-------|-------|
|                                                                |       |   | 1     | 2     | 3     | 4     | 5     | 6     |       |
| Ignored<br>Comprehensibility                                   | 1     | % | 28.30 | 16.20 | 16.20 | 13.30 | 15.00 | 11.00 | 100   |
|                                                                |       | n | 49    | 28    | 28    | 23    | 26    | 19    | (173) |
|                                                                | 3     | % | 2.30  | 2.90  | 9.20  | 13.30 | 31.20 | 41.00 | 100   |
|                                                                |       | n | 4     | 5     | 16    | 23    | 54    | 71    | (173) |
|                                                                | 15    | % | 6.40  | 9.80  | 17.30 | 20.80 | 20.20 | 25.40 | 100   |
|                                                                |       | n | 11    | 17    | 30    | 36    | 35    | 44    | (173) |
|                                                                | 18    | % | 5.80  | 4.60  | 13.30 | 24.90 | 27.70 | 23.70 | 100   |
|                                                                |       | n | 10    | 8     | 23    | 43    | 48    | 41    | (173) |
|                                                                | 29    | % | 29.50 | 17.30 | 22.00 | 12.10 | 11.00 | 8.10  | 100   |
|                                                                |       | n | 51    | 30    | 38    | 21    | 19    | 14    | (173) |
| Ignored Truth                                                  | 5     | % | 14.50 | 18.50 | 13.30 | 21.40 | 15.60 | 16.80 | 100   |
|                                                                |       | n | 25    | 32    | 23    | 37    | 27    | 29    | (173) |
|                                                                | 7     | % | 17.30 | 21.40 | 21.40 | 13.30 | 15.00 | 11.60 | 100   |
|                                                                |       | n | 30    | 37    | 37    | 23    | 26    | 20    | (173) |
|                                                                | 20    | % | 16.20 | 19.10 | 17.30 | 19.70 | 13.90 | 13.90 | 100   |
|                                                                |       | n | 28    | 33    | 30    | 34    | 24    | 24    | (173) |
|                                                                | 32    | % | 5.80  | 18.50 | 34.70 | 21.40 | 13.90 | 5.80  | 100   |
|                                                                |       | n | 10    | 32    | 60    | 37    | 24    | 10    | (173) |
|                                                                | 35    | % | 11.00 | 27.20 | 27.20 | 17.30 | 13.30 | 4.00  | 100   |
|                                                                |       | n | 19    | 47    | 47    | 30    | 23    | 7     | (173) |
| Ignored<br>Appropriateness                                     | 14    | % | 47.40 | 25.40 | 12.70 | 9.80  | 3.50  | 1.20  | 100   |
|                                                                |       | n | 82    | 44    | 22    | 17    | 6     | 2     | (173) |
|                                                                | 26    | % | 8.10  | 12.70 | 24.90 | 18.50 | 19.10 | 16.80 | 100   |
|                                                                |       | n | 14    | 22    | 43    | 32    | 33    | 29    | (173) |
|                                                                | 28    | % | 1.20  | 5.80  | 8.70  | 20.80 | 29.50 | 34.10 | 100   |
|                                                                |       | n |       |       |       |       |       |       |       |

|                   |    |   |       |       |       |       |       |       |       |
|-------------------|----|---|-------|-------|-------|-------|-------|-------|-------|
| Ignored Sincerity |    | n | 2     | 10    | 15    | 36    | 51    | 59    | (173) |
|                   | 40 | % | 19.70 | 25.40 | 22.00 | 16.20 | 14.50 | 2.30  | 100   |
|                   |    | n | 34    | 44    | 38    | 28    | 25    | 4     | (173) |
|                   | 43 | % | 25.40 | 23.10 | 22.50 | 10.40 | 13.90 | 4.60  | 100   |
|                   |    | n | 44    | 40    | 39    | 18    | 24    | 8     | (173) |
|                   | 8  | % | 11.00 | 12.70 | 22.50 | 22.50 | 20.20 | 11.00 | 100   |
|                   |    | n | 19    | 22    | 39    | 39    | 35    | 19    | (173) |
|                   | 10 | % | 8.70  | 16.20 | 25.40 | 21.40 | 17.90 | 10.40 | 100   |
|                   |    | n | 15    | 28    | 44    | 37    | 31    | 18    | (173) |
|                   | 23 | % | 7.50  | 11.00 | 17.90 | 19.70 | 22.50 | 21.40 | 100   |
|                   |    | n | 13    | 19    | 21    | 34    | 39    | 37    | (173) |
|                   | 38 | % | 5.20  | 15.60 | 23.10 | 23.10 | 24.30 | 8.70  | 100   |
|                   |    | n | 9     | 27    | 40    | 40    | 42    | 15    | (173) |
|                   | 39 | % | 15.00 | 22.50 | 20.20 | 20.20 | 17.30 | 4.60  | 100   |
|                   |    | n | 26    | 39    | 35    | 35    | 30    | 8     | (173) |

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**Remark:** \*These item orders were the item order in the rationality scale (Part II) presented in the questionnaire.

## BIOGRAPHY

|                              |                                                                                                                                                                                                                                                    |
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