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Contents

Editorial address, and all correspondence to:
Prof. Darryl Macer, Ph.D., Hon.D.
Provost, American University of Sovereign Nations (AUSN), 8840 East Chaparral Road, Suite 285, Scottsdale, Arizona, 85250 USA
Email: darryl@eubios.info
http://www.eubios.info

Registered address of EJAIB: P.O. Box 16 329, Hornby, Christchurch 8441, New Zealand

Editorial: End of life issues

This issue includes two papers that are based on Masters thesis research for AUSN that break new ground. The first is a study of end-of-life care in adult intensive care units in Bangladesh which describes the attitudes and practices of critical care physicians and nurses, by Shahanaz Chowdhury. It found humane attitudes being expressed beyond what is in the law, and the results are useful for policy formation.

The second paper is on fortune telling as mental health support by Ananya Tritipthumrongchok, which found that people in Thailand are three times more likely to visit fortune tellers for mental health support compared to psychologists. The roles of fortune telling and types are discussed from a bioethical perspective. Perhaps greater promotion of the counseling roles of fortune telling, and having easily accessible mental health support may alleviate the burden of suicides that afflict some communities and countries.

The third paper is by Nader Ghotbi on bioethical interpretation of Buddha's enlightenment, which has some background for the previous paper as well. Interestingly in the paper on fortune telling almost all respondents, from any religion believed in karma.

- Darryl Macer

ABA Renewals and Membership

The annual membership of Asian Bioethics Association (ABA), for the 2016 issues of *Eubios Journal of Asian and International Bioethics (EJAIB)* (The Official Journal) are due, please see the back page.

End-of-life care in the adult intensive care unit: Attitudes and practices of critical care physicians and nurses

- Shahanaz Chowdhury, M.D., MBGPH
Dhaka, Bangladesh
Email: jesmin_70@yahoo.com

Abstract

End-of-life care in ICUs is often inadequate because of factors such as lack of communication between patients and health care providers, lack of patient- and family-centered care and lack of emotional and psychosocial support. The objective of this study was to determine the attitudes and practices of physicians and nurses attending patients and providing critical care on end-of-life care. This was a cross-sectional study comprising of45 respondents including Physicians (N=24) and Nurses (N=21). Subjects were collected purposively and data was collected by face-to-face interviews through a semi-structured pretested questionnaire and data were collected in the ICU of 3 hospitals in Dhaka, Bangladesh (Holy Family Red Crescent Medical College, NICVD and National Heart Foundation Hospital and Research Institute). Signed consent was obtained from the participants and the results were shared among the participants. Data was analyzed using statistical software namely SPSS version 20 for Windows and both descriptive and inferential analysis was used, as appropriate. There was one more male (51%) than female respondent (49%), more than half (58%) of the doctors had a Bachelor degree and more than two thirds (71%) of the nurses had a Diploma. More than half (56%) of the doctors and nearly half (44%) of the nurses had formal education or training in critical care. Among the doctors, 37% had 1-5 years and 62% of nurses had 6-10 years of ICU experience. Overall, 80% reported that they wanted to be involved in decision making of end of life care, and 76% were satisfied with decision making in end of life care. Most (71%) respondents said their ability was sufficient to make decisions about end of life treatment. Most (69%) said it was time consuming discussing end of life decisions with the patients and family members. Two thirds (69%) did not think decisions for end of life care were usually taken quickly. More than half (53%) thought that 'do not resuscitate' orders should be present. Nearly half (40%) agreed that withholding or withdrawing life support is unethical and (56%) disagreed that withholding and withdrawing are ethically the same. Sixty percent thought financial costs to society are an important factor in influencing decisions on the extent of life support therapy to provide to a patient. Most (87%) let the family attend the meetings with the medical team. Moreover, most (80%) respondents fully informed the family about all aspects of the plan of care of the patient. More than half (56%) permitted the family to visit outside of regular visiting hours. Half (49%) asked the family how they are coping. The association between feeling that it is sex, difficult to approach a dying patient and to ask the family how they are coping with occupation of the respondent, was found statistically significant (p value<0.05). There was no significant association between experience in ICU, involved in decision making of end of life care, satisfaction with involvement in decision making, attitudes to the presence of 'do not resuscitate' orders, beliefs that withholding and withdrawing life support are ethically the same, belief that the ICU bed availability should influence decisions, providing the family with options about the care of the patient, reassuring the family that they are not responsible, explaining all interventions to the family about the dying process, permitting the family to visit outside of regular visiting hours, asking the family about their feelings, with occupation of respondent (p value>0.05).The results of this thesis may help plan strategies to promote and emphasis on competent and compassionate end-of-life care of among the physician and nurses of adult intensive care units (ICUs).

1. Introduction

1.1. Background Information

The primary goals of intensive care medicine are to help patients survive acute threats to their lives while preserving and restoring the quality of those lives. These goals are frequently achieved, with approximately 75% to 90% of patients admitted to an intensive care unit (ICU) surviving to discharge (Luce and Prendergast, 2001). Even so, the ICU has become a common place to die; studies show that 22% of all deaths in the United States now occur in or after admission to an ICU(Angus et al., 2004). Admission to the ICU is therefore often a therapeutic trial. Only when the trial fails do patients and families consider a change in goals, from restorative care to palliative care. This change, which has been called the transition from cure to comfort, is one of the most difficult and important aspects of medical and nursing practice in the ICU(Curtis, 2000). Two truths ensure that this transition will remain difficult, despite our best efforts. *"First is the widespread and deeply held desire not to be dead. Second is medicine's inability to predict the future, and to give patients a precise, reliable prognosis about when death will come. If death is the alternative, many patients who have only a small amount of hope will pay a high price to continue the struggle"(Finucane, 1999).*

Many intensive care unit (ICU) patients do not survive the ICU experience(Prendergast et al., 1998)more die before leaving the hospital. Those who eventually die in the ICU consume a disproportionate amount of ICU resources (Esserman et al., 1995). In the period before death, these patients may endure physical and emotional consequences of aggressive supportive technologies for longer than necessary, when comfort-care measures would have been more

appropriate and more humane(Lilly et al., 2000, Nelson, 2002).

Only recently have a few investigators begun to explore how interdisciplinary collaboration may improve the care experience of ICU patients who eventually die in this setting. These researchers have demonstrated improvement in care(Baggs et al., 2004).The key activity of teams is collaboration, which has been defined in the ICU context as ''nurses and physicians cooperatively working together, sharing responsibility for solving problems, and making decisions to formulate and carry out plans for patient care'' (Baggs and Schmitt, 1988). In a grounded theory study the process of collaboration between ICU nurses and resident physicians was found to entail ''working together'' as the core process, which incorporated a focus on the patient, recognition of the importance of the team, and sharing. Antecedent conditions were ''being available'' and ''being receptive,'' processes of mutual respect and trust between the nurses and physicians, and their willingness to discuss patient care. The outcomes of collaboration included ''improving patient care, feeling better in the job, and controlling costs'' (Baggs and Schmitt, 1997).

End-of-life care was hardly a consideration when intensive care units (ICUs) were developed in the mid-20th century to provide invasive monitoring and medical interventions to the critically ill (Luce and White, 2009). Intensive care medicine was full of promise in those days, and ICU clinicians, especially physicians, seemed more interested in saving lives with new technologies than in comforting dying patients and their families. Nevertheless, as ICUs proliferated, the limitations of the therapies they provided were appreciated, along with the realization that some 20% of patients in countries like the United States die in ICUs or shortly after discharge from them, usually after decisions to forego life-sustaining therapy have been made(Angus et al., 2004). As a result, end-of-life care in the ICU has become a clinical, educational, and research imperative (White and Luce, 2004). End-of-life care and decision-making are frequent issues for critically ill patients in intensive care units(Curtis, 2005).Good end-of-life care is based on the understanding that death is inevitable, and a natural part of life. As the final stage in a person's life it is a uniquely important time for the dying person and their family and close friends. The goals of end-of-life care are: to maintain the comfort, choices, and quality of life of a person who is recognized to be dying (in the terminal phase); to support their individuality; and to care for the psychosocial and spiritual needs of themselves and their families. Support for families, if needed, continues after death as bereavement care. End-of-life care also aims to reduce inappropriate and burdensome healthcare interventions and to offer a choice of place of care when possible(Steinhauser et al., 2001).

During the last 15 yrs, there has been a dramatic increase in decisions to withhold or withdraw life-sustaining treatment in critically ill patients (Prendergast and Luce, 1997). All recent observational studies reveal that more patients die in the intensive care unit after the limitation of some form of life sustaining treatment than the number who die after a failed but unrestricted resuscitation attempt (Prendergast et al., 1998, Balfour-Lynn and Tasker, 1996, Ryan et al., 1993, Vernon et al., 1993). How clinicians should reason about end-of-life decisions has also received more scrutiny in recent years. Recommendations for ethical decision-making regarding limitations of life-sustaining treatments, as well as the appropriate care of these patients once a decision has been made, were put forth as early as 1983 by the U.S. President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research (United, 1983). Since then, consensus guidelines and recommendations for clinicians on the care of critically ill patients have been put forth by most medical and nursing organizations (Panel, 1990, Society, 1991, 1994a, 1996, Hafemeister, 1992, States, 1998, Cassel et al., 1999). These statements advise clinicians, among other things, that there is *"no ethically significant distinction between withholding or withdrawal of life sustaining treatment"(United, 1983, Panel, 1990, Society, 1991, 1994a)*and that health professionals should *"aggressively treat pain with analgesic drugs and, when needed, with heavy sedation, even if these treatments hasten death"(States, 1998, Cassel et al., 1999).*

Despite these consensus guidelines and recommendations, accumulating data in the literature document wide variation in how clinicians make decisions about life-sustaining treatments. Some studies suggest that variables independent of patients' preferences, such as physicians' attitudes and practice specialty, are better predictors of end-of-life decision-making (Cook et al., 1995, Christakis and Asch, 1993, Hakim et al., 1996, Randolph et al., 1997, Randolph et al., 1999). Other research in this field has demonstrated that practitioners of critical care often hold views dissimilar to consensus guidelines, and that significant differences exist between physicians and nurses on end-of-life decision-making as well as with their satisfaction with the actual care provided in this area(Solomon et al., 1993, Eliasson et al., 1997, 1994b). Decisions about end-of-life care were most often reported as being made too late or too infrequently, and nurses as well as physicians were greatly distressed by the perception of inappropriate care(Nelson et al., 2010a, Cox et al., 2009).

Death in an ICU is often described as a devastating experience for patients and their families, with patients remaining dependent on intensive life support care, neither dying nor recovering. Expectations are still unrealistically high among patients and their families and also among physicians (Nelson et al., 2010a, Cox et al., 2009). Continuing life-sustaining treatments without clinical improvement causes suffering to patients and deprives them and their families of palliative care, deprives them and their families of honest prognostic information, and reduces patients¿ time to prepare for dying and their families¿ time to prepare for bereavement (Nelson et al., 2010a, Nelson

et al., 2010b). End-of-life care in ICUs is often inadequate because of factors such as lack of communication between patients and health care providers, lack of patient- and family-centred care and lack of emotional and psychosocial support. It is apparent that some of these factors are due to physician-related barriers, many of which have been reported in the scientific literature(Nelson et al., 2010b, Organization, 2014). ICU physicians are unable to provide treatment according to a patient's wishes when the goals of care and the treatment preferences of the patient are not clear and treatment decisions are not shared with the patient and the patient's family. As a result, the patient's quality of life may be harmed. This is why patients and families are currently expressing their wishes for better communication and a larger role in the treatment decision-making process and asking ICU clinicians to respond to their palliative care needs(Davidson et al., 2007).

1.2 Justification of the study

Admission to the ICU is therefore often a therapeutic trial. Only when the trial fails do patients and families consider a change in goals, from restorative care to palliative care. This change, which has been called the transition from cure to comfort, is one of the most difficult and important aspects of medical and nursing practice in the ICU (Curtis, 2000). Many intensive care unit (ICU) patients do not survive the ICU experience (Prendergast et al., 1998), more die before leaving the hospital. Those who eventually die in the ICU consume a disproportionate amount of ICU resources (Esserman et al., 1995). In the period before death, these patients may endure physical and emotional consequences of aggressive supportive technologies for longer than necessary, when comfort-care measures would have been more appropriate and more humane (Lilly et al., 2000, Nelson, 2002).

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A majority of physicians surveyed throughout Asia reported almost always or often withholding life-sustaining treatment in end-of-life care for patients in hospital intensive care units when there is little chance of meaningful recovery, although attitudes and practice of end-of-life care varied widely across countries and regions on the continent(Younsuckm and Mervyn)

Recognizing the dying patient seems to be more difficult than physicians care to admit. Knowing when to let go as a provider and helping the family let go of their loved one can be onerous. Furthermore, communication with the family and among medical, nursing, and ancillary health teams is not only challenging and necessary, but it must also be successful (Papadimos et al., 2011).

Limited research has investigated the actual attitude and practices of critical care nurses and physicians in the provision of end-of-life care, or the factors influencing these practices. To improve that patients at the end of life and their families receive, and to support nurses and physicians in the provision of this care, further research is needed. Interesting and important findings has been found in several published articles on the attitude and practices of critical care of physicians and nurses regarding end of life care in Intensive care unit in different countries of the world but no study could be found in Bangladesh on this regards. The purpose of this study is to determine the attitudes and practices of physicians and nurses attending patients and providing critical care on end-of-life care. The results of this thesis will be used to help plan strategies to promote and emphasis on competent and compassionate end-of-life care of among the physician and nurses of adult intensive care unit.

This paper is based on a dissertation from the Masters in Bioethics and Global Public Health (MBGPH) Program of American University of Sovereign Nations (AUSN), United States of America (USA).

1.3. Operational Definitions

Withholding treatment means that a treatment, which might be beneficial in a different scenario or patient, is not initiated, e.g. in a patient weaned from ventilation, a decision not to recommence mechanical ventilation if respiration became inadequate. Other forms of withholding include "Do not attempt cardiopulmonary resuscitation" orders; not initiating haemodialysis or treatments such as antibiotic therapy or vasopressors.

Withdrawal of treatment means a treatment, which might be beneficial in a different scenario or patient, is reduced and stopped. Most treatments which may be withheld can, in other situations in which they were commenced, be withdrawn. Most ethicists view withdrawing or withholding treatment as equivalent.

1.4 Research Question

What are the attitudes and practices of physicians and nurses attending patients and providing critical care on end-of-life care?

2. Literature Review

2.1. ICU environment

Every member in the care team has the same fiduciary obligation that is to protect and promote patients' health-related interests and implement patients' preferences in pursuit of health. However, the conflicting interests of end-of-life (EOL) care result in stress for health care professionals involved in intensive care in clinical practice. The urgent need for treatment and complexity of the diseases being cared for in an intensive care unit (ICU) make the situation even more complicated (Lee et al., 2009). ICUs are environments where patients have illnesses of high morbidity and mortality. The ICU is a specialized medical environment where critically ill patients are cared for. Patients in ICU have their own unique characteristics. Their mortality rates are high, varying from 10% to 20% in different ICUs (Knaus et al., 1986). Avoidance of futile care is an essential task in ICU, since the ward is supposed to resuscitate dying patients(Lynn et al., 1997).These conflicts come from not only the dilemma of human dignity between the rights of life and death, but also the dilemma of differing attitudes toward EOL care between the medical staff and family members (Chiu et al., 2000).

2.2. Attitudes and practices surrounding end of life care in ICUs

A majority of physicians surveyed throughout Asia reported almost always or often withholding life-sustaining treatment in end-of-life care for patients in hospital intensive care units (ICUs) when there is little chance of meaningful recovery, although attitudes and practice of end-of-life care varied widely across countries and regions on the continent, according to a report published online by *JAMA Internal Medicine(Younsuckm and Mervyn).*Asia accounts for at least half of all patients with critical illness, mechanical ventilation and ICU deaths internationally but data on end-of-life care in ICUs in countries in Asia are sparse, according to this background information.

Jason Phua, F.R.C.P., of the National University Hospital, Singapore, and coauthors used survey data to describe physicians' attitudes toward withholding and withdrawal of life-sustaining treatments in end-of-life care and evaluate the factors tied to those attitudes. The survey was conducted among 1,465 physicians (physician response rate of 60% percent) who manage patients in 466 ICUs (ICU response rate of 59% percent) in 16 Asian countries and regions, including Bangladesh, China, Hong Kong, Iran and Thailand. The majority of respondents (70% percent) reported they almost always or often withhold life-sustaining treatments for patients with no real chance of recovering a meaningful life, 20.7 percent almost always or often withdraw life-sustaining treatments, and 2.5 percent almost always or often deliberately give large doses of drugs, such as barbiturates or morphine, until the patient dies, according to survey results (Younsuckm and Mervyn). Survey results also indicate that 75% of respondents believe that withholding and withdrawing treatments were ethically different, a view supported by the majority of respondents in all countries and regions, except Hong Kong and Singapore. Of all the respondents, 84%and 78%, respectively, reported that patients' wishes and requests from family or surrogates were important factors when considering limiting life-sustaining treatment. However, only 44% of respondents were comfortable discussing limitation of care with families or surrogates and 36% of respondents said patients, families or surrogates almost always or often requested inappropriate life-sustaining treatments.

"Multiple factors related to country or region, including economic, cultural, religious and legal differences, as well as personal attitudes, were associated with these variations. Initiatives to improve end-of-life care in Asia must begin with a thorough understanding of these factors," the study concludes **(Younsuckm and Mervyn).**

2.3. The Value and Risk of Informed Assent

In the critical care setting, there are specific circumstances when some standard therapies, such as cardiopulmonary resuscitation, may not provide any benefit to the patient. In these circumstances, are clinicians always obliged to obtain informed consent from patients or family membzers to withhold or withdraw such therapies? Because the process of obtaining informed consent may cause considerable distress for some patients and family members, the researcher contend that obtaining informed assent—when the patient or family is explicitly invited to defer to clinicians' judgment in favor of withholding or withdrawing life-sustaining therapy—is an appropriate, ethical alternative(Curtis and Burt, 2007).

2.4. End-of-life communication among medical teams

Communication between patients (where possible), families, and caregivers of patients in ICU is vital and becomes even more important when considering end-of-life decisions(Cohen et al., 2005).These recommendations, therefore, do not deal primarily with the process that leads to the decision to forego life prolonging treatments but rather focus on the implementation of that decision, with particular emphasis on the ICU environment. As the decision to forego further use of life-sustaining treatments is being made, the family and clinical team must be prepared for what is to follow. As familiar as many clinicians may be with the process of withdrawing life support, it is a singular event in the life of the patient and often is unprecedented for family members. Therefore, they may suffer great anxiety during the experience. Clear and explicit explanations on the part of the clinician may alleviate anxiety and refocus familial expectations(Truog et al., 2001).

Although the needs of the patient must be the primary focus of caregivers, there is growing consensus that a family-centered approach is particularly important in end-of-life care(Curley and Meyer, 1999). Families of the dying need to be kept informed about what to expect and about what is happening during the dying process. Communication between clinicians and grieving families may be difficult in the absence of a prior relationship, as is frequently the case in the ICU. Primary care providers and other more familiar clinicians may be able to provide a helpful interface with the ICU team(Hampe, 1975).Families vary in their tolerance for uncertainty and ambiguity, but clinicians, from the primary intensivist to the subspecialists to the nursing staff, should strive to deliver a consistent message. This may be facilitated by having all communication occur through the same person, as one model. Families should clearly know the identity of the attending physician, understand that this person is ultimately responsible for the patient's care, and be assured of his or her involvement. Clinicians should avoid making firm predictions about the patient's clinical course, because these are notoriously difficult to make, are often inaccurate, and may result in a substantial loss of credibility when they are in error. Although clinicians should be sensitive and compassionate in their communication, it is important that they explain the physiologic process of dying and describe in concrete terms how the patient will die and what it will look like. At times it will be necessary for the clinicians to anticipate, ask, and answer questions that the family appears to be afraid or unable to verbalize. Families may benefit from reassurance that the clinicians are focused on the patient's comfort. Clinicians should earn the patient's and family's confidence by continually assessing the patient's suffering and demonstrating that pain-relieving medications and treatments are constantly available.

Families should know that the caregivers are committed to having a presence at the bedside, even when the family members themselves are not able to be there. Finally, families often need to be reassured about the decisions they have already reached, emphasizing that the responsibility for these decisions is shared between the family and care team. This can help to dispel lingering doubts and potential feelings of guilt. Families should have the opportunity to be helpful. They may be invited to participate in activities to relieve discomfort, such as mouth care, bathing, and repositioning. They should be encouraged to participate in assessment of the patient's pain and suffering. This is especially important in pediatrics and provides parents with an opportunity to express their nurturing role (Fleischman et al., 1994).

2.5. Good EOL Care—Commitment

The early years of critical care medicine were defined by remarkable discoveries and innovations that dramatically reduced the morbidity and mortality of disease. In recent years, critical care practitioners increasingly have recognized that our obligations to patients extend beyond our attempts to treat disease and include a commitment to providing patients with a dignified and tolerable death.

Practical aspects of end-of-life care are inseparably wed to many intensely controversial ethical issues. Recommendations such as these can only attempt to articulate practices that are based on sound ethical reasoning and that are consonant with current cultural and legal norms. These norms are not static and undoubtedly will change over the years. What is unlikely to change, however, is a basic commitment to the comfort and well-being of the patient, regardless of whether the hopes for cure are high or nonexistent. As Albert Schweitzer noted several decades ago, *"We all must die. But that I can save him from days of torture that is what I feel as my great and ever new privilege. Pain is a more terrible lord of mankind than even death itself*"(Schweitzer, 1931).

3.2 Objectives of the Study

3.2.1. General objective

General objectives: To determine the attitudes and practices of physicians and nurses attending patients and providing critical care on end-of-life care.

3.2.2. Specific objectives

- To assess the attitude of physicians and nurses attending patients and providing critical care on end-of-life care.
- To identify the practice of physicians and nurses attending patients and providing critical care on end-of-life care.
- To find out the factors influencing the provision of end-of-life care by the critical care physicians and nurses.
- To find out the relationship between the attitude and practice with selected socio-demographic variables.

3.3. Data collection instrument

The tools were prepared by keeping the objectives

of the study as the framework that reflect the study variables. All variables were listed and appropriate scales of measurements were determined. In the study for maximum output, a semi-structured questionnaire was developed and applied for data collection. The questionnaire was pre-tested among a similar group of people. Pretesting of the research instrument for the purpose of validation was done before finalization. The questionnaire was pretested on 10 critical care clinicians, who was not part of the final sample. Permission for collection of data was taken from the Director/Principal of the three hospitals.

3.4. Study details

The study was done within the time period of May to October 2015. The respondents of the study were doctors and nurses working in adult Intensive care units (ICU). All the physicians and nurses who were involved with critical care on end-of-life care at the time of data collection were enrolled.

The study area was selected purposively. These are 3 Intensive care Units (ICU).

a) National Heart Foundation Hospital and Research Institute, Dhaka

b) National Institute of Cardiovascular Diseases, Dhaka.

C) Holy Family Red Crescent Medical College an Hospital, Dhaka.

Participants who meet the criteria will be included in the study:

- Doctors and nurses who worked in ICUs.
- Those who were willing to participate in the study.

Participants that will be excluded from the study:

- Doctors and nurses who worked did not work in ICU.
- Those who were not willing to participate in the study.

The researcher observed the doctors and nurses working in critical care in adult ICUs that meet the inclusion criteria. The purpose of the study was explained to the selected respondents. Then data were collected by face to face interview by me (researcher) and the responses were written in the questionnaire accordingly. One questionnaire was used for each respondent. Nine to ten respondents were interviewed each day within 5 days and each interview required around 30-40 minutes including rapport building with the respondents.

The researcher individually approached them and invited them to participate in the study. The workers, volunteering to participate in this study, were assured that their confidentiality and anonymity would be maintained. A convenient sample of 45 workers was interviewed considering the time frame given by the University. The study was conducted for learning purposes only. A convenient sample was used because this method of sampling is to organize and includes subjects who agree to participate in the study. The convenient sampling technique also allows the researcher to target particular subjects who may be in the best position to provide the information required in answering the research question.

3.5 Data management and analysis plan

All possible measures have been taken to maintain good quality of the data. At the end of the data collection through a semi-structured interview questionnaire they were edited and coded. Both descriptive and inferential statistics was used and it was presented in the form of tables, graphs and diagrams. Both descriptive and inferential statistics was done as it appropriate. Demographic Variables was analyzed by frequency and percentage distribution. A 5-point Likert scale was used to measure the attitude level of respondents.

For the better quality of the research I followed the standard proposal format provided by the University. Pre test of the questionnaire that was taken in the similar situation in other places.

3.6. Ethical considerations

Ethical clearance was taken from the appropriate authority and ethics were maintained strictly throughout the study. Ethical clearance was obtained from Ethics Review Committee of Bangladesh Bioethics Society, and the AUSN Institutional Review Board. A letter of cooperation written from the Bangladesh Bioethics Society to the hospitals was taken that were involved in this study prior to the data collection period. All the participants' were given an explanation about the objective of the study and their right to participate or not to participate in the study. An Information sheet for participants in Bengali was given to each participant to read and it was also explained by the investigator. All questionnaire and ethical documents was translated into Bengali before interview. The prospective participants were given free opportunities to receive summary information of the study in writing before giving consent and taking part in the interviews of the research. All participants who provided written consent to take part in the study were included in the sample. Personal information of the participants was keep confidential.

The limitations while conducting the research work include:

1. As the study place is purposively selected in Dhaka city so the result might be area specific.
2. To conduct research work on the topic, longer time should be utilized.
3. To conduct such a study resources are very important factors. The researchers was a student without financial support.
4. The sample size was of the study is small to represent the situation prevailing nationally, so there is a high margin of error when we extrapolate nationally.
5. Lastly, the information of the respondents was subjective.

Table 4.1: Distribution of respondents according to the Demographic status (n=45)

Variable	Number	Percentage	Mean(SD)
Sex			
Male	23	51.1	
Female	22	48.9	
Age group (years)			
Doctors			38.1±9.2
25-34	7	43.8	
35-44	11	55	
45-54	2	40	
55-64	4	100	
Nurses			
25-34	9	56.3	
35-44	9	45	
45-54	3	60	
55-64	0	0	
Education			
Doctors			
Masters	4	16.7	
Bachelor	14	58.3	
Diploma	6	25	
Nurses			
Master	0	0	
Bachelor	6	28.6	
Diploma	15	71.4	
Occupation			
Doctor	24	53.3	
Nurse	21	46.7	
Experience in ICU			
Doctor			
1-5 years	9	37.5	
6-10	8	33.3	
11-15	7	29.2	
Nurse			
1-5 years	5	23.8	
6-10	13	61.9	
11-15	3	14.3	
Formal education/training in critical care			
Doctor			
Yes	15	55.6	
No	9	50	
Nurse			
Yes	12	44.4	
No	9	50	
Religion			
Muslim	42	93.3	
Hindu	1	2.2	
Christian	2	4.4	

4. Results

4.1. Demographics of sample

Table 4.1 shows the demographic characteristics of the 45 doctors and nurses. Among 45 respondents, 23 (51%) were male and 22 (49%) were female. The mean (±SD) of the respondents' age was 38.1+9.2 years whereas more than half 11 (55%) doctors aged from 35-44 years and more than half 9 (60%) nurses aged from 25-34 years. Regarding occupation among the 45 respondents 24 (53%) were doctors and 21 (47%) were nurses. Regarding education among the doctors more than half of the doctors 14 (58%) had a Bachelor's degree, 6 (25%) had Diploma and 4 (17%) had a Master degree and among the nurses more than two-thirds 15 (71%) had a Diploma and 6 (29%) had a Bachelor's degree. Regarding experience in ICU among the doctors one-third, 9 (38%) had 1-5 years experience, 8 (33%) had 6-10 years experience and 7 (29%) had 11-15 years experience and among the nurses more than one fifth 5 (24%) had 1-5 years experience, 13 (62%) had 6-10 years experience and 3 (14%) had 11-15 years experience. Regarding formal education/training in critical care among doctors more than half 15 (56%) had formal education/training in critical care and 9 (50%) had no formal education/training in critical care and among nurses 12 (44%) had formal education/training in critical care and 9 (50%) had no formal education/training in critical care. Regarding religion 42 (93%) were Muslim, 2 (4%) were Christian and 1 (2%) were Hindu.

4.2. Attitudes related to decision of end of life care

Table 4.2 shows attitudes related to involvement in decision of life support of the respondents. It shows that out of 45 respondents 36 (80%) wanted to be involved, 8 (18%) did not want to be involved and 1 (2%) sometimes want to involved in decision making of end of life care. More than two third 34 (76%) said they were satisfied, 8 (18%) said they were not satisfied and only 3 (7%) said sometimes satisfied with their involvement in decision making of end of life care to date. Regarding their ability to make decisions about end of life treatment, 32 (71%) of respondents said their ability was sufficient, 8 (18%) said that their ability was not sufficient and only 5 (11%) said their ability was sometimes sufficient to make decisions about end of life treatment. Out of 45 respondents 33 (73%) said it was difficult to approach a dying patient, 10 (22%) said they had no difficulty and only 2 (4%) said sometimes it was difficult to approach a dying patient**.** The majority of the respondents 36 (80%) said that giving dying patients their prognosis provoked some anxiety, 5 (11%) said sometimes it provoked some anxiety and only 5 (11%) said it did not provoke anxiety**.** Nearly two thirds 31 (69%) did not think that decisions for end of life care were usually taken quickly and 14 (31%) thought the decision was usually taken quickly. Among the 14 respondents who stated that the decision for end of life care is usually taken quickly, 9 (20%) said lack of hospital beds was the reason and 5 (11%) said the matter of cost was the reason behind the decisions for end of life care usually being taken quickly.

Out of 45 respondents, more than half 24 (53%) thought that 'do not resuscitate' orders should be present and 21 (47%) thought that 'do not resuscitate' orders should not be present.

Table 4.2: Distribution of respondents according to the attitude related to decision of life care (n=45)

Variable	Number	Percentage
Want to be involved in decision making of end of life care		
Yes	36	80
No	8	17.8
Sometimes	1	2.2
Satisfied with involvement in decision making of end of life care		
Yes	34	75.6
No	8	17.8
Sometimes	3	6.7
Have the ability to make decisions about end of life treatment was sufficient		
Yes	32	71.1
No	8	17.8
Sometimes	5	11.1
Difficult to approach a dying patient		
Yes	33	73.3
No	10	22.2
Sometimes	2	4.4
Giving dying patients their prognosis provoked some anxiety		
Yes	36	80
No	4	8.9
Sometimes	5	11.1
Thought decision for end of life care usually taken quickly		
Yes	14	31.1
No	31	68.9
Reasons for taking decision quickly for end of life care		
Lack of hospital beds	9	20
Matter of cost	5	11.1

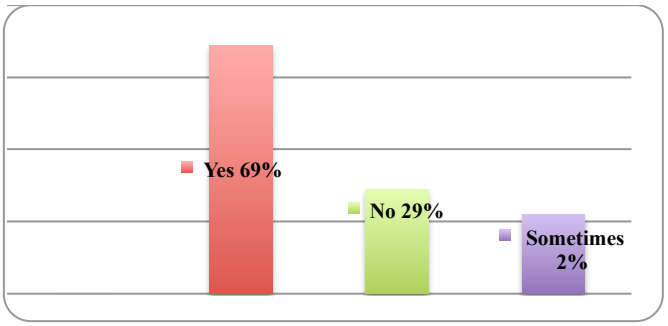

Figure 1: Distribution of respondents according to time consuming discussing end of life decisions with the patients and family members (n=45)

Figure 1 shows that regarding discussing end of life decisions, out of 45 respondents, 31 (69%) said it was time consuming, 13 (29%) not time consuming, and only 1 (2%) said it was time consuming to discuss the end of life decisions with the patients and family members.

4.3. Attitudes related to withholding or withdrawing of life support

Table 4.3 shows the attitudes related to withholding or withdrawing of life support. Over half, 25 (56%) agreed that withholding or withdrawing life support is unethical. Two thirds, 32 (71%) agreed that withholding is more ethical than withdrawing. Only7 (16%) agreed that withdrawing is more ethical than withholding. Regarding whether withholding and withdrawing are ethically the same, 25 (56%) disagreed and 13 (29%) agreed.

Table 4.3: Distribution of respondents according to the attitude related to withholding or withdrawing of life support (n=45)

Variable	Number	Percentage
Withholding or withdrawing life support is unethical		
Strongly disagree	4	8.9
Disagree	14	31.1
Neutral	2	4.4
Agree	18	40
Strongly agree	7	15.6
Withholding is more ethical than withdrawing		
Strongly disagree	4	8.9
Disagree	5	11.1
Neutral	4	8.9
Agree	29	64.4
Strongly agree	3	6.7
Withdrawing is more ethical than withholding		
Strongly disagree	1	2.2
Disagree	35	77.8
Neutral	2	4.4
Agree	4	8.9
Strongly agree	3	6.7
Withholding and withdrawing are ethically the same		
Strongly disagree	0	0
Disagree	25	55.6
Neutral	7	15.6
Agree	11	24.4
Strongly agree	2	4.4

4.4. Attitudes related to factors in influencing decisions on the extent of life support therapy to provide a patient

Table 4.4 shows attitudes related to factors in influencing decisions on the extent of life support therapy to provide to a patient. Out of 45 respondents 35(78%) viewed it important that the quality of life as viewed by the patient was a factor in influencing decision on the extent of life support therapy to provide a patient. Regarding quality of life as viewed by the family as factor in influencing decision 33(73%) of the respondents viewed it to be important. Over half

26(58%) of the respondents said it was important and 12(27%) say it as less important that the patient was unlikely to survive as a factor in influencing decisions on the extent of life support therapy to provide a patient. Fear of litigation or breaking the law was thought to be important by 27(60%) respondents and less important by 11(5%) thought it was not important as a factor in influencing decisions on the extent of life support therapy to provide a patient. Out of 45 respondents, financial costs to society was thought to be a factor in influencing decision on the extent of life support therapy to provide a patient as important by 35(78%) and 4(9%) a less important factor. Regarding ICU bed availability, 33(73%) thought it was important as a factor in influencing decision on the extent of life support therapy to provide a patient.

Table 4.4: Distribution of respondents according to the attitudes related to factors in influencing decision on the extent of life support therapy to provide a patient (n=45)

Variable	Number	Percentage
Quality of life as viewed by the patient		
Less important	7	15.6
Neutral	3	6.7
Important	22	48.9
Very important	13	28.9
Quality of life as viewed by the family		
Less important	10	22.2
Neutral	2	4.4
Important	19	42.2
Very important	14	31.1
Patient unlikely to survive		
Not important	2	4.4
Less important	12	26.7
Neutral	5	11.1
Important	20	44.4
Very important	6	13.3
Fear of litigation or breaking the law		
Not important	2	4.4
Less important	11	24.4
Neutral	5	11.1
Important	19	42.2
Very important	8	17.8
Financial costs to society		
Not important	2	4.4
Less important	4	8.9
Neutral	4	8.9
Important	27	60
Very important	8	17.8
ICU bed availability		
Not important	3	6.7
Less important	6	13.3
Neutral	3	6.7
Important	22	48.9
Very important	11	24.4

4.5. Attitudes related to medications

Table 4.5 shows that attitudes related to medications should be added or increased in the patient's regimen as life support is discontinued. Regarding narcotics 29(65%) said that they had not prescribed them in end of life care, while 7(16%) said that they should be added or increased in the patient's regimen as life support is discontinued. More than half 26(58%) said never and 9(20%) said sometimes regarding adding Benzodiazepines or increased in the patient's regimen as life support is discontinued**.** Three fifth of the respondents 27(60%) said never, while 11(24%) said sometimes Barbiturates should be added or increased in the patient's regimen as life support is discontinued. Regarding neuromuscular blocking agents 32(71%) said never and 6(13%) said sometimes that it should be added or increased in the patient's regimen as life support is discontinued.

Table 4.5: Distribution of respondents according to the attitude related to medications should be added or increased in the patient's regimen as life support is discontinued (n=45)

Variable	Number	Percentage
Narcotics		
Never	29	64.4
Infrequently	1	2.2
Sometimes	5	11.1
Frequently	7	15.6
Always	3	6.7
Benzodiazepines		
Never	26	57.8
Infrequently	3	6.7
Sometimes	9	20
Frequently	3	6.7
Always	4	8.9
Barbiturates		
Never	27	60
Infrequently	4	8.9
Sometimes	11	24.4
Frequently	1	2.2
Always	2	4.4
Neuromuscular blocking agents		
Never	32	71.1
Infrequently	2	4.4
Sometimes	6	13.3
Frequently	4	8.9
Always	1	2.2

4.6. Practice related to patient and family centered decision making

Table 4.6 shows practices related to patient and family centered decision making. It shows that three quarters of the respondents, 34 (76%) provided the family with options about the care of the patient. The majority, 33 (73%) asked and 12(27%) did not ask the family if they would like to be involved in the care of patient. Most, 39 (87%) said that they asked the family their preferences for the patient's care. More than four fifth 39(87%) let the family to attend the meetings with

the medical team. Regarding reassuring the family that they are not responsible for any end of life care decisions made nearly to two third 29 (64%) said they reassured. More than two third 33 (73%) asked the family about knowledge of the patients' wishes for end of life care.

Table 4.6: Distribution of respondents according to the practice related to patient and family centered decision making (n=45)

Variable	Number	Percentage
Provide the family with options about the care of the patient		
Yes	34	75.5
No	9	20
Sometimes	2	4.4
Ask the family if they would like to be involved in the care of patient		
Yes	33	73.3
No	12	26.7
Sometimes	0	0
Ask the family if their preferences for the patient's care		
Yes	39	86.7
No	6	13.3
Sometimes	0	0
Let the family to attend the meetings with the medical team		
Yes	39	86.7
No	5	11.1
Sometimes	1	2.2
Reassure the family that they are not responsible for any end of life care decisions made		
Yes	29	64.4
No	15	33.3
Sometimes	1	2.2
Ask the family about knowledge of the patients' wishes for end of life care		
Yes	33	73.3
No	9	20
Sometimes	3	6.7

4.7: Practice related to explaining and providing information of the patient:

Table 4.7 shows practices related to explaining and providing information to the patient. It shows that most (89%) answered the family's questions about the patients' condition and nearly four fifths, 36(80%) respondents fully informed the family about all aspects of the plan of care of the patient. Regarding explaining all interventions to the family about the dying process, the majority of respondents (73%) explained and 87% explained to the family what is happening to the patient. The table also shows that 82% listened to the family reminisces about the patient.

Table 4.7: Distribution of respondents according to the practice related to explaining and providing information of the patient (n=45)

Variable	Number	Percentage
Answer the family's questions about the patients' condition		
Yes	40	88.9
No	1	2.2
Sometimes	4	8.9
Fully inform the family about all aspects of the plan of care		
Yes	36	80
No	3	6.7
Sometimes	6	13.3
Explain all interventions to the family about the dying process		
Yes	33	73.3
No	9	20
Sometimes	3	6.7
Explain to the family what is happening to the patient		
Yes	39	86.7
No	5	11.1
Sometimes	1	2.2
Listen to the family reminisce about the patient		
Yes	37	82.2
No	5	11.1
Sometimes	3	6.7

Table 4.8: Distribution of respondents according to the practice related to continuity of care of the patient (n=45)

Variable	Number	Percentage
Arrange for transfer of the patient out of the ICU after a decision to withdraw treatment		
Yes	36	80
No	9	20
Sometimes	0	0
Document the family's preference for the care of their relative		
Yes	33	73.3
No	11	24.4
Sometimes	1	2.2
Introduce the next care staff on the oncoming shift to the patient and family		
Yes	25	55.6
No	16	35.6
Sometimes	4	8.9

4.8. Practice related practice related to continuity of care of the patient

Table 4.8 shows practices related to the practice related to continuity of care of the patient. The table shows that majority (80%) arranged for transfer of the patient out of the ICU after a decision to withdraw treatment. More than two thirds (73%) documented the family's preference for the care of their relative. Half

(56%) introduced next care staff on the oncoming shift to the patient and family.

Table 4.9: Distribution of respondents according to the practice related to emotional and practical support for patient and families (n=45)

Variable	Number	Percentage
Permit the family to visit outside of regular visiting hours		
Yes	25	55.6
No	17	37.8
Sometimes	3	6.7
Encourage the family to talk to the patient		
Yes	32	71.1
No	12	26.7
Sometimes	1	2.2
Encourage the family to touch the patient		
Yes	22	48.9
No	21	46.7
Sometimes	2	4.4
Ask the family how they are coping		
Yes	22	48.9
No	20	44.4
Sometimes	3	6.7
Ask the family about their feelings		
Yes	30	66.7
No	12	26.7
Sometimes	3	6.7

Table 4.10: Distribution of respondents according to practices related to symptom management and comfort care (n=45)

Variable	Number	Percentage
Administer fluids to the patient		
Yes	39	86.7
No	5	11.1
Sometimes	1	2.2
Keep the patient sedated		
Yes	39	86.7
No	6	13.3
Sometimes	0	0
Provide adequate pain management		
Yes	41	91.1
No	4	8.9
Sometimes	0	0
Provide care to maintain patient hygiene		
Yes	39	86.7
No	4	8.9
Sometimes	2	4.4
Maintain the patient's airway using oro/endotracheal suction		
Yes	41	91.1
No	3	6.7
Sometimes	1	2.2

4.9. Practices related to emotional and practical support for patient and families

Table 4.9 shows some practices related to emotional and practical support for patient and families. More than half (56%) permitted the family to visit outside of regular visiting hours respectively. A majority (71%) encouraged the family to talk to the patient. Almost half (49%) encouraged the family to touch the patient also almost half 22(49%) asked the family how they are coping. More than two third 30(67%) asked the family about their feelings.

4.10. Practices related to symptom management and comfort care

Table 4.10 shows practices related to symptom management and comfort care. Most (87%) administered fluids to the patient. A majority 39(87%) kept the patient sedated and 91% of the respondents said that they provided adequate pain management. A majority (87%) provided care to maintain patient hygiene. Moreover nearly all (91%), maintained patient's airway using oro/endotracheal suction respectively.

Table 4.11 shows the association between occupation and different attitudes related to end of life care.

Desire to be involved in decision making about end of life care and occupation

Almost half of the doctors (49%) wanted to be involved while only 4% did not want to be involved, but less nurses (31%) wanted to be involved and 1 (2%) sometimes wanting to be involved in decision making of end of life care. The association between desire to be involved in decision making at end of life care and occupation is not statistically significant (p value>0.05).

Satisfaction with involvement in decision making of end of life and occupation

More than one third (38%) of doctors said they were satisfied with involvement in decision making of end of life care, the same proportion as nurses (38%) who said they were satisfied. There is no statistical difference with involvement in decision-making at the end of life and occupation (p value>0.05).

Have the ability to make decisions about end of life treatment was sufficient

More than one third (40%) nurses and 31% doctors said they had the ability to make decisions about end of life treatment was sufficient. There is no statistical difference with ability to make decisions about end of life treatment was sufficient and occupation (p value>0.05).

Difficulty to approach a dying patient and occupation

Almost half (44%) of doctors said it was difficult to approach a dying patient and very few (4%) said they had no difficulty to approach a dying patient**.** However, only one fourth (29%) of nurses said it was difficult to approach a dying patient, and nearly one fifth (18%) nurses said they had no difficulty to approach a dying patient**.** The association between difficulty to approach a dying patient and occupation is statistically significant (p value<0.05).

Table 4.11: Association between occupation and different attitudes related to end of life care (n=45)

Variable	Occupation		χ2	p-value
	Doctor	Nurse		
Want to be involved in decision making of end of life care				
Yes	22 (48.8%)	14 (31.1%)	4.598	0.100
No	2 (4.4%)	6 (13.3%)		
Sometimes	0	1(2.2)		
Satisfied with involvement in decision making of end of life				
Yes	17 (37.7%)	17 (37.7%)	2.813	0.245
No	4 (8.8%)	4 (8.8%)		
Sometimes	3 (6.6%)	0		
The ability to make decisions about end of life treatment was sufficient				
Yes	14 (31.1%)	18 (40%)	5.82	0.054
No	5 (11.1%)	3 (6.6%)		
Sometimes	5 (11.1%)	0		
Difficult to approach a dying patient				
Yes	20 (44.4%)	13 (28.8%)	6.916	0.031*
No	2 (4.4%)	8 (17.7%)		
Sometimes	2 (4.4%)	0		
Thought 'do not resuscitate' orders should be present				
Yes	14 (31.1%)	10 (22.2%)	0.517	0.472
No	10 (22.2%)	11 (24.4%)		
Withholding and withdrawing life support are ethically the same				
Disagree	15 (33.3%)	10 (22.2%)	1.038	0.792
Neutral	3 (6.6%)	4 (8.8%)		
Agree	5 (11.1%)	6 (13.3%)		
Strongly Agree	1 (2.2%)	1 (2.2%)		
ICU bed availability influencing decision on the extent of life support therapy to provide a patient				
Not important	0	3 (6.6%)	4.821	0.306
Less important	4 (8.8%)	2 (4.4%)		
Neutral	1 (2.2%)	2 (4.4%)		
Important	12 (26.6%)	10 (22.2%)		
Very important	7 (15.5%)	4 (8.8%)		

Belief that 'do not resuscitate' orders should be present and occupation

One third (31%) of doctors thought that 'do not resuscitate' orders should be present and 22% doctors thought that 'do not resuscitate' orders should not be present. One quarter (22%) of nurses thought that 'do not resuscitate' orders should be present and 24% nurses thought that 'do not resuscitate' orders should not be present. The association between those who thought that 'do not resuscitate' orders should be present and occupation is not statistically significant (p value>0.05).

Beliefs that withholding and withdrawing life support are ethically the same and occupation

Regarding the idea that withholding and withdrawing are ethically the same among the doctors 33% disagreed and among the nurses, 22% disagree. The association between the idea that withholding and withdrawing life support are ethically the same and occupation is not statistically significant (p value>0.05).

Beliefs that ICU bed availability influencing decision on the extent of life support therapy to provide a patient & occupation

Regarding ICU bed availability as a factor influencing decisions on the extent of life support therapy to provide a patient, 27% of doctors and 22% of nurses thought it was important. The association between ICU bed availability influencing decision on the extent of life support therapy to provide a patient and occupation is not statistically significant (p value>0.05).

Table 4.12 shows association between occupation and different practices related to end of life care

Provide the family with options about the care of the patient and occupation

It shows that 42% of the doctors and 33% of the nurses provided the family with options about the care of the patient. The association between providing the family with options about the care of the patient and occupation is not statistically significant (p value>0.05).

Reassure the family that they are not responsible for any end of life care decisions made and occupation

Regarding reassuring the family that they are not responsible for any end of life care decisions, 29% doctors reassured and 36% nurses reassured the family that they are not responsible for any end of life care decisions. The association between reassuring the family that they are not responsible for any end of life care decisions made and occupation is not statistically significant (p value>0.05).

Explain all interventions to the family about the dying process and occupation

Regarding explaining all interventions to the family about the dying process 40% of doctors explained and among the nurses one third (33%) explained all interventions to the family about the dying process. The association between explain all interventions to the family about the dying process and occupation is not statistically significant (p value>0.05).

Permit the family to visit outside of regular visiting hours and occupation

One third (31%) of doctors and one quarter (24%) nurses permitted the family to visit outside of regular visiting hours respectively. The association between permit the family to visit outside of regular visiting hours & occupation is not statistically significant (p value>0.05).

Table 4.12: Association between occupation and different practices related to end of life care (n=45)

Variable	Occupation		χ2	p-value
	Doctor	Nurse		
Provide the family with options about the care of the patient				
Yes	19 (42%)	15 (33%)	0.383	0.826
No	4 (9%)	5 (11%)		
Sometimes	1 (2.2%)	1 (2%)		
Reassure the family that they are not responsible for any end of life care decisions made				
Yes	13 (29%)	16 (36%)	2.789	0.248
No	10 (22%)	5 (11%)		
Sometimes	1 (2%)	0		
Explain all interventions to the family about the dying process				
Yes	18 (40%)	15 (33%)	4.091	0.129
No	3 (7%)	6 (7%)		
Sometimes	3 (7%)	0		
Permit the family to visit outside of regular visiting hours				
Yes	14 (31%)	11 (24%)	0.555	0.758
No	9 (20%)	8 (18%)		
Sometimes	1 (2%)	2 (4.4%)		
Ask the family how they are coping				
Yes	8 (18%)	14 (31%)	6.264	0.044*
No	13 (29%)	7 (16%)		
Sometimes	3 (7%)	0		
Ask the family about their feelings				
Yes	14 (31%)	16 (36%)	3.281	0.194
No	9 (20%)	3 (7%)		
Sometimes	1 (2%)	2 (4%)		

Ask the family how they are coping and occupation

One fifth (18%) doctors and one third (31%) nurses 'permitted the family to visit outside of regular visiting hours respectively. There is significant relationship between ask the family how they are coping & occupation (p value<0.05).

Ask the family about their feelings and occupation

Regarding asking the family about their feelings 31% doctors asked the family about their feelings and 36% of nurses asked the family about their feelings. The association between asking the family about their feelings and occupation is not statistically significant (p value>0.05).

Table 4.13: Association between sex and occupation related to end of life care (n=45)

Variable	Occupation		χ2	p-value
	Doctor	Nurse		
Sex				
Male	22 (49%)	1 (2%)	3.852	0.000*
Female	2 (4%)	20 (44%)		

Table 4.13 shows that half (49%) doctors are male and nearly half (44%) nurses' were female. There is a significant relationship between asking the family how they are coping and occupation (p value<0.05).

Table 4.14: Association between experience in ICU and occupation related to end of life care

Variable	Experience in ICU			χ2	p-value
	1-5 years	6-10 years	11-15 years		
Occupation					
Doctor	9 (38%)	8 (33%)	7(29%)	3.75	0.153
Nurses	5 (24%)	13 (62%)	3((14%)		

Table 4.14 shows that one third (38%) doctors had 1-5 years experience and three fifths (62%) nurses' had 6-10 years experience. There is no significant relationship between experience in ICU and occupation (p value>0.05).

Table 4.15. Association between age have the ability to make decisions about end of life treatment was sufficient and age

Variable	Have the ability to make decisions about end of life treatment was sufficient			χ2	p-value
Age	Yes	No	Sometimes		
25-34	14 (31%)	0	2 (4%)	13.753	0.033
35-44	10 (22%)	8v(18%)	2 (4%)		
45-54	5 (11%)	0	0		
55-64	3 (7%)	0	1 (2%)		

Table 4.15 shows that almost one third (31%) respondents aged 25-34 said that their ability to make decisions about end of life treatment was sufficient and more than one fifth (18%) said that their ability to make decisions about end of life treatment was not sufficient. There is a significant relationship between having the ability to make decisions about end of life treatment was sufficient and age (p value<0.05).

5. Discussion

The 45 respondents included 24 doctors and 21 nurses working in adult Intensive care units (ICU), and provide useful information to determine the attitudes and practices of physicians and nurses attending patients and providing critical care on end-of-life care.

This study showed that out of 45 respondents 80% wanted to be involved, 18% did not want to be involved and 2% sometimes want to be involved in decision making of end of life care. In another study done in Italian urban setting it was found that direct involvement of family and treating physician was limited (Giannini et al., 2003). Most (76%) said they were satisfied, 18% said they were not satisfied and only 7% said sometimes satisfied with in involvement in decision making of end of life care. No study could be found regarding this matter. Regarding the ability to make decisions about end of life treatment was sufficient 32 (71%) respondents said their ability was sufficient, 8 (18%) said that their ability was not sufficient and only 11% said their ability was sometimes sufficient to make decisions about end of life treatment. Comparable study was found that 81% of respondents said ethical consultation on end-of-life decisions was never sought and only few physicians sought external ethical advice and decisions were entirely taken by the medical team(Giannini et al., 2003).Fewer respondents in the United States and Canada replied that they would make the decision alone or just with other physicians (27% and 29%, respectively) than in the other regions(Yaguchi et al., 2005).It seems that majority of the respondents in this study were confident enough to state that their ability was sufficient to make decisions about end of life treatment.

Regarding discussing end of life decisions, 69% said it was time consuming, 29% said not time consuming and only 2% said it was time consuming discussing end of life decisions with the patients and family members. Almost similar findings were seen in case of other studies, some respondents also mentioned that discussing end of life decisions with patients and family members was very time consuming in that it had to be repeated over and over again in spite of a tight schedule. Even then, some patients never accepted the poor prognosis of their disease and that they could not be cured: some denied its existence. The physicians believed that the media supported the illusion that all ills could be cured, and they thought the expectations of family members, in particular, were often too high. Judicial claims of malpractice were also feared(Hilden et al., 2004). Regarding this matter no such finding could be in Bangladesh context. Two thirds (69%) did not think of decisions for end of life care usually taken quickly and 31% thought the decision usually is taken quickly. In one study it is stated that high-quality communication about withholding and withdrawing life support in the ICU must not assume “one size fits all.”

An important aspect of this communication is to determine the role an individual patient or family wants to play in such decisions (Council on Ethical and Judicial Affairs, 1999). In other studies, it was found that observational studies have found that communication issues with clinicians are the number one source of complaints among families of deceased patients, with as many as 30% of family members feeling dissatisfied with communication in the ICU (Hanson et al., 1997). Poor communications can affect family satisfaction, clinical decision-making, and the psychological outcomes of family members. One fifth (20%) said lack of hospital ICU beds was the reason behind decision for end of life care usually taken quickly. No study was found regarding this finding. It could be suggested that in this study there is huge pressure in our hospital settings due more patient flow but limited but limited ICU settings in hospitals. More than half (53%) thought that ‘do not resuscitate' orders should be present and nearly half (47%) thought that ‘do not resuscitate' orders should not be present. It might be possible that the less experienced physicians and nurses are aware of recommendations and consensus statements regarding life-sustaining treatments and simply disagree with them; it seems more likely that they are unfamiliar or uncomfortable with these issues. Recent evidence indicates that neither physicians nor nurses are well trained in end-of-life patient management. For example, one-third of 115 medical residents at three teaching hospitals reported that they had never been supervised in “do not resuscitate” discussions with patients(Tulsky et al., 1996).A study of all accredited general surgery residency programs in the United States found that 76% had one or no sessions devoted to teaching ethics in their curriculum (Downing et al., 1997). Similar problems have been noted in the education of nurses. More than half of 300 nurses at an acute care teaching hospital for adult patients reported that they did not have a good understanding of advance directives (Crego and Lipp, 1998).

Regarding the question of whether withholding or withdrawing life support is unethical, 18 (40%) agreed, 7 (16%) strongly agreed, 14 (31%) disagreed, 4 (9%) strongly disagreed and only 2 (4%) were neutral regarding whether withholding or withdrawing life support is unethical. Critical care physicians and nurses in this study held views about end-of-life decision-making and patient management in strong agreement with the ethical and legal consensus that has evolved in these areas. Here in this study physicians and nurses agreed or strongly agreed with the statement that “withholding or withdrawing life support is unethical,” whereas the vast majority of respondents disagreed (56%) that withholding and withdrawing are ethically the same. Similar reasoning has been advanced by numerous ethical and legal positions on this commonly cited distinction that is 47% considered withholding and withdrawing life support were not ethically equivalent (Giannini et al., 2003).

Indeed no valid moral or legal distinction exists between the two, a willingness to withdraw life sustaining treatment may be preferable because it allows for a time-limited trial of treatment in situations where the prognosis is uncertain or there is conflict in

decision-making(Panel, 1990, Society, 1991, 1994a, Briarcliff, 1987, 1990). It was also found that over 60% of physicians and nurses cited financial costs to society variables as the most important determinants of decision-making about life-sustaining treatments, it is different from the study (Sprung et al., 2007) that physicians (88%) and nurses (87%) found quality of life more important and value of life less important in their decisions for themselves than patients (51%) and families (63%).According to published consensus recommendations, especially when considered as a factor in the decision to forego life-sustaining treatment, should only be judged from the patient's perspective, and not by health care workers' personal assessments (United, 1983, 1996, Briarcliff, 1987).

The difference in this study may be because Bangladesh is a developing country and most people are living in poverty and cannot afford the cost burden of the health care. Over three fifths of physicians and nurses were not willing to add or increase analgesia and sedation to a patient's regimen as life-sustaining treatment is discontinued, a position also consistent with other studies. This is not surprising as many studies from different regions have shown that physicians and nurses have issues regarding the use of morphine in oncology patients(Sapir et al., 1999). Maximizing pain relief at the end of life is critical, but can sometimes cause unintended morbidity and even hasten death itself (Paris et al., 1997, Beauchamp and Childress, 2001, Jonsen et al., 2010).Also other studies (Brody et al., 1997, Committee, 1997, Truog et al., 2000) stated that a large majority of physicians and nurses did not agree with the addition of neuromuscular blocking agents, medications devoid of any sedative or analgesic properties, as life-sustaining treatment is discontinued. There has been more discussion of this issue recently, with most commentary strongly discouraging the initiation of neuromuscular blockade as life-sustaining treatment is withdrawn. In this study two thirds of the respondents provided the family with options about the care of the patient and moreover four fifths let the family to attend the meetings with the medical team. Another study shows that patients and family members vary in their interest in being involved in medical decision making about end-of-life care. There are some who want to be centrally involved in all decisions, while others want to defer such decisions to the clinicians (Heyland et al., 2003).

Nevertheless, the results of this study highlight several areas of concern around the provision of end-of-life care in the adult intensive care unit. Finally, more intensive interdisciplinary collaboration, possibly through ongoing case review, is needed to reduce uncertainty at the bedside and to promote an emphasis on competent and compassionate end-of-life care as strongly as other aspects of critical care medicine.

6. Conclusions

End-of-life issues in the ICU are of paramount importance. In the mid-20th century it was obvious only for the health care professionals in ICUs to provide life saving care rather than looking into matter of comforting dying patients and their families. However this understanding of the health care professionals started to undergo some significant change latter on. This global understanding has influenced the national health care professionals in some aspect of end of life care. The study has highlighted some important issues which show the changes. It was found that among 24 doctors and 21 nurses, one more male than female were the respondents. The mean (SD) was 38.1±9.2. More than half of the doctors had a Bachelor degree and more than two thirds of the nurses had a Diploma degree. In addition, more than half of the doctors and nearly half of the nurses had formal education or training in critical care. Most of the doctors had 1-5 years and majority of the nurses had 6-10 years of ICU experience. Thus not only the formal education and training but also adequate experience are the major factors in strengthening the positive attitude and practices of doctors and nurses regarding to the patient who are under the critical care in ICU.

Though this study focuses that more doctors had expressed their desire for their involvement in decision making of end of life care but when it came to discussing end of life care nearly same number of both respondents agreed that it was time consuming.. An explicit attitude is seen among the respondents for the patient and family centered decision making process of end of life care. It might be due to the fact that majority of the respondents thought might be influenced that dying is a normal process of life, doctors and nurses who give care for patients should not hasten their death.

More than one third nurses and one fourth doctors said they had the ability to make decisions about end of life treatment was sufficient. Even though there was no statistical difference with ability to make decisions about end of life treatment was sufficient and occupation it could stated that the nurses in this study seems to be more confident about being able to make the decisions as the nurses were more experienced working in the ICU than the doctors.

More than half thought that 'do not resuscitate' orders should be present. Here it demonstrates that the respondents understood the fact that interventions in the ICU can cause more discomfort to the patient and patient may have quality life reduced. So it focuses that the respondents had a good understanding of advance directives as most of the respondents had undergone training in critical care. Having such instruments in place helps health professionals manage the end-of-life process, which is increasingly fraught with ethical difficulties.

Almost half of doctors and only one fourth of nurses said it was difficult to approach a dying patient and significant association was found between difficulty to approach a dying patient and occupation. As data revealed that nurses were more experienced in working in ICU so they may be more accustomed to handle the medical uncertainties in dealing with end of life care. However, recognizing the situation that the doctors and

nurses are involved in is the best way to overcome these challenges.

This study also focuses that the half of the respondents were agreeing that withholding or withdrawing life support is unethical whereas more than half disagreed that withholding and withdrawing are ethically the same. It focuses that withdrawal of care or withholding decision has an important point of division ICU so to provide the patients proper end of life care from the above finding it focuses the necessity to understand that while therapies may be withheld or withdrawn, care continues until the very end.

Sixty percent thought financial costs to society are an important factor in influencing decisions on the extent of life support therapy to provide to a patient. Bangladesh is a developing country and it is already overburden with outpocket expenditure in health care matter. So in this perspective it might be the reason the respondents financial costs to society are an important factor in influencing decisions on the extent of life support therapy to provide to a patient.

Most of the respondents let the family attend the meetings with the medical team and also fully informed the family about all aspects of the plan of care of the patient. In this study it focuses that precise and inclusive communication has been demonstrated to increase the understanding of patient care plans in the ICU by the respondents.

More than half permitted the family to visit outside of regular visiting hours. Fifty percent asked the family how they were coping. It shows that the respondent actually gives emotional and practical supports for the patient and family.

It also showed significant association between have the ability to make decisions about end of life treatment was sufficient and age. It was found that almost one third respondents aged 25-34 years said that their ability to make decisions about end of was sufficient. It emphasized that more younger aged group were more confident about their ability to make decisions about end of life treatment.

In summary, this was the first study in Bangladesh to evaluate physicians' and nurses views about end of life care. Its weakness was the small number of respondents, and its strength was the high number of responding physicians and nurses. Another limitation is the fact that responses to a questionnaire may give a too positive picture of attitudes and practice. In real life, haste, stress, uncertainty, and demands from different parties may seriously compromise the issue in question. In addition physicians and nurses responding to a questionnaire on ethical decision making probably also tend to pay more attention to the ethical aspects of their work. Furthermore, the respondents were specialist physicians. Thus the results of the study cannot be generalized to physicians and nurses with less experience. I have no information on the attitudes and practices made by senior versus junior physicians and nurses with respect to end of life treatment. .

7. Recommendations

End-of-life care is emerging as a comprehensive area of expertise in the ICU and demands the same high level of knowledge and competence as all other areas of ICU practice. With a view to improve more the present situation, this study finding suggests the following recommendations:

Research:

A broad based longitudinal study can be undertaken on end-of-life care, it would reveal better findings. It could be form for the improve end-of-life care:

1. Defining the problems,
2. Identifying solutions
3. Evaluating solutions, and
4. Overcoming barriers.

Education:

1. Development of training programs such as Education for Doctors on End- of-Life Care and End-of-Life Nursing Education.
2. The results of this thesis may help plan strategies to promote and emphasis on competent and compassionate end-of-life care of among the physician and nurses of adult intensive care units (ICUs).
3. Educational programs that offer the opportunity to talk about their experiences caring for dying critically ill patients and their families and the effect of providing this care on their own emotions and work attitudes can be valuable

Quality Improvement focused on end-of-life care in the ICU

1) Patient- and family-centered decision making;
2) Communication;
3) Continuity of care;
4) Emotional and practical support;
5) Symptom management and comfort care;
6) Spiritual support; and
7) Emotional and organizational support for ICU clinicians.

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Fortune Telling as Mental Health Support

- Ananya Tritipthumrongchok, MBGPH
Manager, Eubios Ethics Institute; President, AUSN Alumni Association, Thailand
Email: ananya@eubios.info

Abstract

Fortune-telling is the practice of predicting information about a person's life. People will go to see a fortune teller for advice on just about any issue, but many questions they have are related to mental health. One of the objectives of fortune telling as a practice is to seek counseling support, rather than simply belief in the accuracy of the predictions that are made. This thesis examines different types of fortune-telling, with and presents the results of interviews and a written survey of persons conducted in 2015 on 57 persons, mainly in Thailand. The attitudes that persons, who have consulted a fortune teller, and those who have not, is compared. More Thai persons stated that they prefer to see a fortune teller compared to those respondents from other countries. There were various types of fortune telling that were sought, with the most common being Tarot card reading, palm reading and birthday predictions. The reasons and questions are examined, with comparisons to attitudes people have to seeking a counselor or psychologist, who were much less commonly used. Two thirds of respondents went to see fortune tellers with a friend. Almost all believed in karma. The roles of fortune-telling in mental public health, and the ethics of the practice will be analyzed.

1. Note

This paper is based on a dissertation from the Masters in Bioethics and Global Public Health (MBGPH) Program of American University of Sovereign Nations (AUSN), United States of America (USA).

2. Fortune-telling

2.1. Fortune telling in Asia today

Throughout Asia, fortune telling – or what some call divination – is still widely practiced. Tarot cards, palm readers, and numerologists can be seen everywhere. Some of the best known diviners work out of temples. For many Western people, divination is something that has been somewhat watered down by popular culture over the past 100 years or so, and it's generally taken less seriously than it is in Asia. It may be considered simply as a novelty or a fun thing you do with friends or at a carnival, although there are certainly those who place great importance on a good reading. I propose however that for people from Japan to China to Thailand to India, divination is very much a part of daily life, and is often taken into consideration when making important decisions. The survey in this research should help answer that question.

2.2. Types of fortune-telling

2.2.1. Zodiac Signs and Astrology Signs Meanings and Characteristics

Certainly the oldest known method of divination is looking to the stars. It's hard to say exactly where the practice originated, but certainly as early as 4,000 years ago, the Babylonians (in present day Iraq) had an organized system of predicting events based on the stars. Soon after, Chinese, Indian, and Mayan systems had emerged, and the practice spread to Greece when the armies of Alexander the Great conquered what was then the known world.

If you want to find out what is your zodiac sign and which are your compatible zodiac signs, you are on the right place. Here you will find out all about zodiac sign astrology, zodiac sign compatibility and zodiac sign dates.[1] We can see some of these practices still among indigenous cultures today, although many were suppressed because there was religious prejudice against these spiritual matters among modern Christians and Muslims.

There are 12 zodiac signs, and each sign has its own strengths and weaknesses, its own specific traits, desires and attitude towards life and people. On the basis of analysis of images of the sky, or the position of the planets at the moment of birth, astrology can give us a glimpse of a person's basic characteristics, preferences, flaws and fears. We can really get to know people much better, if we know the basic characteristics of the zodiac signs.

2.2.2. Tarot cards

Many people think this practice has a mystical Asian background, but in fact they are European playing cards. The first documented tarot deck was made in Milan, Italy in the mid-1400s and even then they were simply for playing games. The divination aspect, however, didn't enter into practice until the 1780s, and clever marketing cemented the mystical divining properties just as the spiritualism movement swept through Europe in the mid-1800s. There will be further discussion of Tarot cards in the Discussion section 6.5.

[1] http://www.astrology-zodiac-signs.com/

2.2.3. Palm reading

More properly called *palmistry*, its origins are not well documented, but likely date back to Hindu astrologers in India thousands of years ago, where it spread to China, the rest of Asia, and then Europe. However, in the middle ages palmistry was suppressed by the Catholic Church, until it rose in popularity in the mid 1800's, again in the wave of interest generated from the spiritualism movement.

2.2.4. Numerology

A belief that the numbers that pertain to your life – birthday, age, time of birth, number of letters in your name, etc. – can predict certain traits or events. Numerology is based on several ancient traditions from a variety of cultures, including Chinese, Hebrew, Hindu, Egyptian and even Pythagoras, the famous mathematician who lived in ancient Greece.

2.2.5. Pulse Reading

This is important in Chinese medicine.[2] Part of being an acupuncturist involves reading pulses. In both Chinese and Japanese systems, the pulse is read – in three positions and at three depths. Each of these six positions is used to gather information about one of the six yin (and corresponding yang) organ systems. There are also qualities of the pulse as a whole that are used to diagnose more general conditions within the body-mind.

I have experienced pulse reading in Bangkok. I met a Chinese medicine practitioner by my Mom's friend's recommendation. Because she had a health condition, her sister had suggested her to see him. The Chinese medicine man put his finger on the pulse and read it. Then he could let my Mom's friend know which part of the body has a problem so they can correct her symptoms and giving her some Chinese medicine. There is something similar in indigenous people I met in Phoenix, Arizona, USA. I can report that in the case of my mother's friend it seemed to work because some weeks later, her symptoms were getting better. For my visit to this practitioner, after checking me, he reported that my organ systems are fine, but my friend has some problem, as she known. Some cases will use acupuncture to treat (See Chapter 3 on Chinese medicine).

2.2.6. Gene tests

Fortune telling with genetic testing, and diagnostic tests, and medical tests is part of the technological fix paradigm that we see after the Human Genome Project's completion. The origins go back a century though. In the 1900 that an Austrian scientist discovered the existence of different blood types, a discovery that earned Dr. Karl Landsteiner a Nobel Prize.[3] Since that discovery, scientists have gone on to figure out that different types of blood have different types of antibodies and antigens. What does this means in medical or scientific terms, but the most important thing is that immune systems react differently to different kinds of blood types.

Epigenetics is the understanding of how gene imprinting, methylation of DNA, affects gene expression. It is possible that during gestation the nutritional and environmental conditions that a pregnant mother has will affect the epigenetic imprinting of the fetus, which may have seasonal variations. This could provide a linkage to birthday and birth month fortune telling, that future research could explore.

In Japan, a person's blood type is a popularly used to determine a person's temperament, personality and compatibility with others, in much the way that some Americans use astrological signs. This is similar to how astrological signs are perceived as influencing factors in a person's life within other countries throughout the world. However, blood type plays a much more prominent role in Japanese and other East Asian countries than astrology does in other countries.

The obsession with blood types began in Japan in 1927, when a psychology professor by the name of Furukawa Takeji who worked as a high school administrator began observing the differences in temperament of the students who applied to his school.[4] Recently, manufacturers even market a wide variety of blood-type specific products, including calendars, chewing gum, colas, and condoms.

In the 1970s, this blood type craze got greater when Masahiko Nomi published a book called *Understanding Affinity by Blood Type*. The book was an instant best-seller and led to lots more books on the subject.

2.2.7. Parrot astrology

Parrot fortune-telling is a type of astrology popular among the Tamils of Tamil Nadu, Telugus in Andhra Pradesh, India and Singapore. It involves using green parakeets which are trained to pick out Tarot like fortune cards. A parrot astrologer/fortune teller typically sits beneath a tree or by the side of the road where people congregate in numbers. He has a cage which contains one or two trained parrots. The tarot like cards are either spread out or stacked in front of him. They are 27 in number representing the Indian cosmic system. Each card contains the image of a Hindu deity and some cards contain images of Buddha or Virgin Mary with Infant Jesus. When a patron sits before the fortune teller, the latter opens the cage and lets the parrot out. He instructs the parrot to pick a card for the patron. The parrot walks over to the cards, picks one from the stack or the spread with its beak and gives it to the astrologer. It then walks back inside its cage. The astrologer opens the card and based on the image tells the fortune of the patron.[5]

[2] http://en.wikipedia.org/wiki/Pulse_diagnosis

[3] http://www.tofugu.com/2011/09/21/true-blood-personality-and-blood-types-in-japan

[4] Japanese Culture 101: Personality by Blood Type, http://thegreatgeekmanual.com/blog/japanese-culture-101-personality-by-blood-type

[5] https://en.wikipedia.org/wiki/Parrot_astrology

2.2.8. Sole reading (Foot)

Foot reflexology charts show the location of reflex points on your feet. You can easily learn to read a chart that will show you where the reflex points on your feet correspond to specific areas of your body's anatomy. Highly technical foot reflexology maps are more complicated than most amateur reflexologists really need. Below are some key points to look for when reading a foot chart.[6]

2.2.9. Signature reading

Signature is a unique style of writing one's own name. It is a snapshot of your personality and discloses a lot about your character and general outlook in life. Signature is also considered as an image that the writer is willing to show to the outer world.

It reveals about your nature and temperament based on the way you write your letters, i.e, small or large, dark or light, curved or angled. Personality traits like honesty, communication abilities, creativity, emotional stability etc. can easily be determined just by analyzing a signature. Other traits like social skills, outgoing nature, confidence level and goal setting abilities can be identified by analyzing the letters used while signing. Therefore, the way you sign your name represents your personality traits enormously.[7]

2.2.10. Horoscope

A horoscope is an astrological chart or diagram representing the positions of the Sun, Moon, planets, astrological aspects, and sensitive angles at the time of an event, such as the moment of a person's birth. The word horoscope is derived from Greek words hõra and scopos meaning "time" "observer" (horoskopos, pl. horoskopoi, or "marker(s) of the hour.") Other commonly used names for the horoscope in English include "Natal Chart" astrological chart, astro-chart, celestial map, sky-map, star-chart, cosmogram, vitasphere, radical chart, radix, chart wheel, or simply chart. It is used as a method of divination regarding events relating to the point in time it represents, and it forms the basis of the horoscopic traditions of astrology.[8]

2.2.11. Birthday prediction

Birthday prediction or birthday forecast can predict about your personality and character, and also your future. What will be happen or who you can be but just your guideline to know as we can find many definition of each birthday one part is science that we can do research who born in each birthday their character will be different or some people will be born in the same day and some personality will be similar. Thais use birthday prediction for some partners, they are matched with each other or not when they want to marry or to continue relationships.

2.2.12. Life graphs

Life graph can predict a whole life since you were born until dead. Life graph is a method of calculating the destiny of another person. The idea is that the fate of our people would be up and down like a curve and if we can know in advance that during our life - down, however, would be nice if we would be prepared to solve or handle. to what might happen. Life graph is forecasting fortune with numbers, which split many ways a mathematical principles which have proven statistical accuracy is very high for a long time.

2.2.13. Communicate with spirits thought psychics

After somebody dies, if we would like to contact with their spirit, they need to contact them thought a psychic who is a person who claims to use extrasensory perception (ESP) to identify information hidden from the normal senses. The word "psychic" is also used as an adjective to describe such abilities. Psychics may be theatrical performers, such as stage magicians, who use techniques such as prestidigitation, cold reading, and hot reading to produce the appearance of such abilities.[9]

2.2.14. Number of Identity card

Another way to predict life by number of your identity card, some fortune tellers will calculate a whole number after you can get an outcome that can predict to your future, personality, love or anything else that you want to know, or some fortune will use only the 4 last numbers to predict.

2.2.15. Egg reading

Some fortune tellers predict life by the egg after break the egg, what it looks like can predict the future, find solutions, forecast about disease, physical health, financial, love, etc.

2.2.16. Tree leaf predictions

Tree leaf is a living organims like us so has the same life cycle. Our life is like a tree, most likely because there were a burgeoning growth of branches, dividends, even breathing also needing oxygen. To the water, the soil cares if he falls ill. But some people cut trees felled by a storm, so they die prematurely. Unlike some people who are born immediately before the accident was fatal. There are predictions about life in each moment depending by which leaf we get, and what it looks like.

2.2.17. Name forecasting

When we were born, our name is given which has a meaning for life. Some parents name their baby as angel or a god's name to identify the baby and hope that they will have bright future. A name forecasted by calculating numeric can predict about life and how

[6] http://www.wikihow.com/Read-a-Foot-Reflexology-Chart

[7] http://handwritinglense.com/41-Signature_Analysis__What_Does_Your_Signature_Say_About_Your_Personality.html

[8] https://en.wikipedia.org/wiki/Horoscope

[9] https://en.wikipedia.org/wiki/Psychic

much power a person will have. Does it alter the success of our life? What's our character? About your career, love or people who come to your life.

2.2.18. Poker card reading

This is another method used by fortune tellers, as a way to know your life and who you will meet. An ordinary pack of cards is used and a familiar card game, poker. The fortune may include questions like what the person is looking for, and what they propose to come to your life. Also its predicts the overall aspects of your life and identifies your life in each time. The cards can predict about your character and find the solution. Then you will be aware of your own life and things happening to you

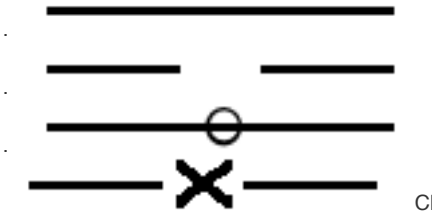
2.2.19. Monk fortune teller

Many people believe in fortune telling and rely on it so much that they get themselves into difficulty. Believe it or not, if we believe and rely on something too much, we can easily get stuck; life cannot move on. Thais will go to a monk fortune teller for advice on just about any issue, such as setting the date for their wedding to be an auspicious day, to consult on baby names, for predictions about relationships, buying a house and basically anything that is a major purchase decision in life.

2.2.20. I Ching

The I Ching as a system of divination is based on 64 hexagrams. A hexagram is returned in response to a users question or query. Traditionally the hexagram is produced by tossing three identical coins six times or by a system using 49 yarrow stalks. Each hexagram is a picture consisting of six horizontal lines.[10]

Each line can be one of four types.



This method was not mentioned by anyone in the survey conducted here, but could have been more common if the survey was conducted in China or other countries. This could be a matter for future research.

3. Fortune-telling as a Public Health Service

3.1. Love, Solidarity and Health

Love of life (Macer, 1998) is a philosophy of bioethics. As said, *"the gift that we receive when we are born into this world is love. While it is a gift that few are deprived of, a deprivation that is in itself and insult to the humanity that our flesh embodies, it is a norm for all forms of life for the new life to be given a good start."* (p.1) "Love for the Future" is why we have a desire for survival of our family, society and planet.

[10] http://ichingfortune.com/iching_info.php

Moral demands are a basis for trans-generational ethics, and basic for our survival. We have to balance our choices with those of counterparts. How do we balance the love of ourselves with love of others? This represents the traditional fight between autonomy of self and of the community, and justice for all.

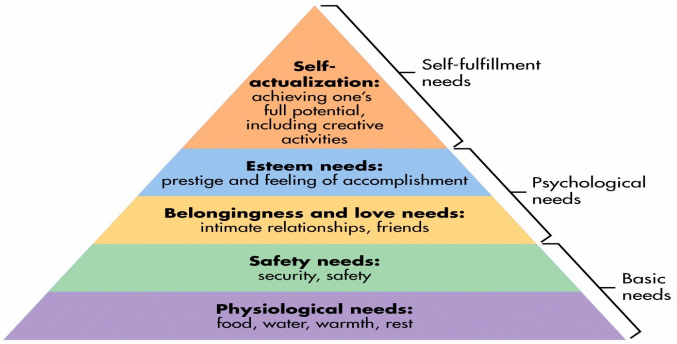


Figure 1: Maslow's pyramid

Figure 1 shows that the most fundamental and basic four layers of the pyramid contain what Maslow (YEAR in 1940-50s) called "deficiency needs" or "d-needs": esteem, friendship and love, security, and physical needs. Recently, we are in a race against time to beat deadlines and our need is increased, so we try to avoid suffering. This only seems to create more suffering in that one person's positive work can be someone else's suffering, for instance medicine, politics and so on. How do we judge? Shouldn't we just accept a certain amount of suffering and discomfort?

The World Health Organization (WHO) defines health inclusively:

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.", *"The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."* , *"The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and States."*, *"Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger."* (World Health Organization, 1995).

3.2. Fortune telling and Psychology

In my work experience, when a colleague comes to see me because they are unhappy about life and worrying about the future, if is often because someone has conflicted with their supervisor or subordinate. It might also be because someone needs to know about their love life, or somebody wants to change to a new job but is afraid to move on. How do we get success? What is success? How to be rich? , How to make life better? There are a lot of questions and demands, this is the nature of human beings, and social health is a critical component of any society.

Our experiences and feelings are mainly related to our bodies and our minds. We know from our daily

experience that mental happiness is beneficial. For instance, though two people may face the same kind of tragedy, one person may face it more easily than the others due to his or her mental attitude. Perseverance is important, as we can see in the story of Thomas Edison who developed one of the first practical light bulbs and never gave up "I have not failed. I have just found 10,000 ways. That won't work".

We can define supernatural as *"unnatural phenomena; spirits and demons, magical, mystic, occult, sacred, strange, bizarre, extreme, unexpected, fairies, fairy or act of god."* (Longdo dictionary 2015). LaMuth (2014) in *The Spiritual / Universal Realm* wrote that, *"In terms of the current spiritual/universal focus, this would amount to the positive sequence of charity, civility, faith, and providence; as well as the negative reinforcement sequence of decency, austerity, hope and liberty. Indeed, most common interactions are of a group or personal nature, with the universal perspective primarily restricted to those expressing strong religious or universal viewpoints."*

Fortune tellers are comforted by the spirit of Philosophy, who tells him that the greatest gifts are not due to Fortune, but to other forces, such as the laws of God and nature (Wu, 2006). The difference is that divination (to be inspired by a god) by seeking guidance from what can be perceived as contact with a supernatural agent.

Counseling is a psychological specialty that encompasses research and applied work in several broad domains: counseling process and outcome; supervision and training; career development and counseling; and prevention and health.[11] There are many professional degrees that people can gain to qualify them as counselors, and there are also fields such as Social Work, which are recognized as Public Health related professions.

In my opinion, "Fortune tellers" should have some capability as a Counselor to talk with people. However, there are difference definitions of Fortune tellers and Counselors. But some professional skills we expect from them are similar, as ones I used to use for supervising people in HRM such as interpersonal skills, positive thinking, emotional intelligence, influence and negotiation.

3.3 Culture in Thailand

Thailand has a population of over 60 million people with an average per capita income of around US$1500 per annum. Most Thai people are aware and experience the 'globalisation' of communication and trading, and new sciences and technologies are known to many of them. Thailand is a strongly Buddhist country, with rising living standards and a rapidly developing economy. The vitality of the Buddhist faith also does much to bridge social gaps, such as prevail between city and countryside. It is therefore of particular interest to see how attitudes bioethical dilemmas have changed over the 1990s.

[11] http://en.wikipedia.org/wiki/Counseling_psychology

In Buddhism there is a welcome attitude to fortune telling, and this is also seen among most Thais whether they be Hindu, Confucian, Christian or Muslim. Fortune tellers are commonly seen around Buddhist temples in Thailand. We will explore religions more in the next chapter.

4. Religions and Life

4.1. Buddhism

Religion serves important roles in the life of people. The Buddha's teachings can be understood on two distinct levels.[12] One is logical and conceptual and is concerned with an intellectual comprehension of man and the external universe. It is on this level that the questions asked in previous chapters are more easily answered. The second level is empirical, experiential and psychological. It concerns the ever-present and inescapable phenomena of everyday human experience, love and hate, fear and sorrow, pride and passion, frustration and elation. And most important, it explains the origins of such states of mind and prescribes the means for cultivating those states which are rewarding and wholesome, and of diminishing those which are unsatisfactory and unwholesome. It was to this second level that the Buddha gave greater emphasis and importance. All of us will pass away eventually as a part in the natural process of birth, old-age and death. The impermanence of life should always be kept in mind. We all cherish and wish to hold on to life.

Karma is a word that almost everyone has heard of, but few people know the true meaning of.[13] It's often mistakenly thought of as a punishment and reward system, and is used as a curse on those who do bad things. "You'd better watch out for Karma!" as if it's a voodoo police force of the universe. Karma is most importantly, understanding. Neither good nor bad, just whole, if a person does good deeds, helps others, and lives an honest life, they can still get whacked with "bad karma." If that person does all those things, but then judges others who they say are evil, then they will soon find themselves on the opposite side of that fence. By judging someone negatively, one is actually asking the Universe for the understanding that made that person behave that way. Common examples are in traits that are misunderstood. If a person says another is too controlling, then pretty soon, they will be accused of the same. They may not even notice, because to them, they were only being helpful, or looking out for someone, but most certainly not being controlling! Only after the karmic shoe is on the other foot do they gain the insight as to why the person they judged seemed to be acting in a controlling way.

Rebirth in traditional Buddhist cosmology these lives can be in any of a large number of states of being including the human, any kind of animal and several

[12] http://www.mahidol.ac.th/budsir/buddhism.htm

[13] Quote about living-Doe Zatamata: Khama-Book review, http://www.quotesaboutliving.com/2014/08/karma-book-preview.html

types of supernatural being.[14] "Rebirth is conditioned by the karmas (actions of body, speech and mind) of previous lives; good karmas will yield a happier rebirth, bad karmas will produce one which is more unhappy. The basic cause for this is the abiding of consciousness in ignorance, when ignorance is uprooted, rebirth ceases."

4.2. Animism

Animistic beliefs are common all around the world. We can see interesting mixes, for example, Islam in Indonesia, particularly Java, has developed a hybrid culture, which has incorporated many Animistic rituals such as sacrificing a goat and burying the remains in the foundations of new buildings.[15] Wayang kulit or shadow puppets are still very popular in Indonesia and Southern Thailand where mythical stories of supernatural powers are the main themes of performances.

4.3. Animism and Yin and Yang

Animism is also very heavily incorporated in traditional Chinese religions, as well as Taoism, and Buddhism. Many Buddhist monks are consulted because of the belief they possess the ability to see into the future. Many Chinese make pilgrimages to particular Wats or temples to get trinkets, or amulets for luck. Omens and numbers are still a part of everyday life.

Feng Shui is an age old practice based upon cosmic and geographic dimensions that is widely practiced throughout the region.[16] Literally wind, water - the art (or science if you prefer) of manipulating or judging the environment. Many will not purchase a new residence without seeing if the location and features are suitable according to Feng Shui consultants. These concepts also seem to be religiously upheld by other indigenous cultures where for example, it is not considered lucky to live at the top of a "T" intersection. In addition, many people including politicians consult the calendar to determine the best dates to do certain things.

Another science of Chinese Medicine is called Yin and Yang.[17] In Chinese medicine health is represented as a balance of yin and yang. These two forces represent the bipolar manifestation of all things in n*ature*. In terms of your personal health, if you think of how you feel when you feel really well, you might realize you don't think of wellness at all! Everything in your life just flows and moves seamlessly—in harmony. Your body, mind, emotions, and spirit can adjust and readjust to the circumstances in your life. This is precisely the state Traditional Chinese Medicine (TCM) seeks to create; that of A Theory Fundamental to TCM Practice.

The theory of Yin and Yang is fundamental to the practice of TCM in terms of understanding, diagnosing, and treating health issues. At the most basic and deep level, TCM treatment seeks to balance Yin and Yang in each person. One ancient TCM text expressed the power and importance of Yin and Yang this way: *"If you can understand Yin and Yang you can hold the universe in your hands."*

Yin and Yang can apply to any mental or physical health issues people face. Theories are interesting, but unless they have some meaning to your own experience, what's the point? First, the theory of Yin-Yang tells us that at the macro level—the largest scale imaginable—all things are always balancing and rebalancing into a state of perfect harmony. Yes, there is ceaseless change, yet this movement and flux, at its deepest level, is creating harmony, *is* perfect harmony. Yin and Yang are the two energies that embody Universal law, which ensures that all things remain in harmony.[18]

Fortune-telling is the practice of predicting information about a person's life. People will go to see a fortune teller for advice on just about any issue. In Thailand, many Thais go for predictions about relationships; the date for their wedding is an auspicious day, consulted for baby names, Investment advice, buying a house, basically anything that want to get guideline to make decision. Also, many way of Fortune telling able to predict people life, that why? I would like to do research about Fortune telling as mental health support. Let's see how it works for people through the survey!

5. Survey Methodology and Results

5.1. Objectives

This thesis will look at the practice of fortune-telling in several countries, with comparison to that in Thailand. The primary target of the survey will be Thai citizens living in Thailand and overseas, with a comparison group to persons from other countries.

5.2. Development of the questionnaire

Literature review and experience led to a questionnaire being developed. Survey forms were circulated among clients who sought fortune telling advice from me, and participants who did not request fortune telling also. Among the 70 forms circulated 82% returned the survey form in either hard copy or by email. The survey was estimated to take 20 minutes to complete.

The AUSN Institutional Review Board (IRB) approved the consent form and questionnaire (See Appendix 1). The research was self funded, and there are no conflicts of interest (except that the author is also a fortune-teller). Counseling and fortune telling require privacy protection, as normal operating practice. The names of any persons mentioned in the responses were protected, and changed in case quotations are included in the thesis or publications. The names of

[14] http://en.wikipedia.org/wiki/Rebirth_%28Buddhism%29

[15] http://english.pravda.ru/hotspots/disasters/24-03-2014/127152-animism-0/

[16] http://en.wikipedia.org/wiki/Feng_shui Chinese Medicine[13];

[17] http://www.tcmworld.org/what-is-tcm/yin-yang-theory/

[18] http://www.tcmworld.org/what-is-tcm/yin-yang-theory/

respondents were not recorded on the survey.

The survey was open to anyone who can speak/write English or Thailand, who is at least 15 years of age. There was a mix of persons who sought fortune-telling and those who did not and social network members.

5.3. Respondent Characteristics

Three quarters, 76%, of the respondents are living in Thailand, and 24% live overseas including from Dhaka, Bangladesh (1), Sydney, Australia (1), Purwokerto, Indonesia (1), Taiwan (1), New Zealand (1), Italy (1), Arizona, USA (3), Nepal (3), Cameroon (1). Most of people live in urban settings (95%), just 3 people are living in rural areas. The age of male respondents ranged from 20 years old to 54 years old (total 23% of respondents), and the 43 female (77%) were aged between 23-53 years of age.

About race/ethnic origin, 43 respondents were Thai and the rest had race/ethnic origin as Bangladesh (1), Cambodian (1), Chinese (2), European (2), Native American (1), African (1), Mexican/Spanish/Irish/English (1), Nepali (3), other Asian (1). Most, 82%, of the 56 respondents are Buddhist and 18% listed their religion as none (1), Christian (4), Moslem (3), Navajo (1), and Hindu (1).

The occupation of 56/57 respondents who answered the form are indicated in Table 1, and the educational level in Table 2.

Table 1: Occupation of respondents (Number and percentage of the total)

Student	5 (9%)
Government employee	4 (7%)
Business employee	36 (64%)
Self-employed	5 (9%)
Business Owner	4 (7%)
Other	1 (2%)
Unemployed	1 (2%)

Regarding marital status 38 (68%) respondents were single but among 2 persons had 1 child and 1 single person had 3 children. There were 14 (25%) respondents who were married and half of them have children, 4 respondents were divorced and 3 of them had 1 child.

Table 2: Educational level of respondents (Number and percentage of the total)

High School	7 (13%)
Two year college	9 (16%)
University graduate	22 (39%)
Postgraduate degree	16 (29%)
Other (Doctor of Business Administration Program)	2 (3%)
No stated	1
Total	57

Among the respondents, 12 (21%) respondents lived with their parents, 17 (30%) lived with their family and had from 2-6 family members living together, 13 (23%) live alone, 9 (16%) live with partners, 5 (9%) live with friends and 1 did not state their situation (Q24). They were also asked how many people they are responsible for (Q25). 23 persons said that they have no people to look after, 29 respondents had 1-5 people under their responsibility, one respondent needed to take care for 5-10 people and another one had more than 10 people he was responsible for.

5.4. What people think about Fortune-tellers? (Q1)

In response to Q1 which asked respondents, "What do you think about Fortune-tellers?" there were 57 comments from the 57 respondents. There were 11 (20%) who seemed to have total trust in what they say. These comments included:

"Fortune teller is somebody who can give an answer for our problems, sometimes makes me feel good, sometimes not, and sometimes can give solution to solve the problem."
"Feeling good."
"I like to see a fortune-teller when I get upset."
"Able to treat my mind"
"Feeling good"
"Sometimes, when we face the difficult circumstances, Fortune-tellers can give good advice to solve it."
"For checking fortune in each year"
"If have chance and good suggestion, I will go to see them"
"It's interesting and should try it"
"Psychology about counselling"
"Sometimes, fortune-tellers can make me feel good with their answer."

Ten percent of questionnaires mentioned that they believe / do not believe Fifty-fifty, and 3% believed some parts but not all of what they say. These comments included:

"50% half of what they tell you"
"Some believe but not all"
"Half believe"
"Half believe"
"Fifty belief"
"Fortune-tellers are the practicing of predicting information about a personal life"

There were 7% who mentioned fortune telling as mental health support for people, even though they did not believe in it themselves. For example:

"I don't believe in fortune-telling but this is helpful to people's satisfaction and pleasure to know his/her fortune"
"Some are true and predict things, but some are not"
"I think that fortune-tellers are master observers that tell their opinion based on what they have observed"
"Fascinated and always wondered if it's true"

Even if some people said they do not believe in fortune tellers, they said that they went to see them for personal mental health support, for example:

"I do not believe in fortune telling much but I usually go to see them time by time when I feel unhappy."
"Some fortune tellers use statistics to predict and someone is expert and using psychology to talk to customer"

Some others said that they can help people, but did not indicate if they themselves believed in fortune telling or not. For example:
"Can help person who have a problem."
"Fortune tellers give a suggestion but we can choose the way to do it."
"A person who tells people's fortunes"
"The person who can give advice for the problem"
"Fortune-teller is a person who predicts the fortune of other persons, maybe true or false."

Some responses were simply descriptive, for example:
"Fortune telling is profession which gives a service of telling other person's fate and fortune".
"I feel this is a good career, high income. Thai people have some beliefs in it."
"It's a good career to earn a lot of money"
"There are good earnings"
"It's an interesting idea"

One fifth 18% specifically mentioned "decision-making", for example:
"Strong advice can have an impact on decision making."
"Fortune-tellers, who learnt all information from a text and gives advice for us to judge again, sometimes correct but sometimes just guessing."
"Sometimes, I need to consult a fortune teller to remind me about living if something is not good."
"Friendly and clearing problems to give answers"
"They could be a "guider" when one's life reaches problems, obstacles."
"Fortune-teller is guide for decision marking"
"Fortune-teller is guide for many stories but need to use judgment to make decisions"
"To know or predict our future."
"They make me happy."
"They are OK. They can help a lot of people"

Among the respondents 10% of them did not think anything about fortune-tellers, for example:
"Don't know."
"Indifferent."
"Nothing special."
"Nothing special."
"Neutral"
"Indifferent and sometimes get stress."

Also some the respondents, 10% of them do not trust about fortune-tellers, for example:
"They are fetish people. I don't like fortune-tellers. It's wrong to predict the world or one's life"
"Rarely believe"
"Do not believe"
"Do not believe"
"Fortune-teller comes with guessing."
"Just guessing"

5.5. Frequency of visiting Fortune-tellers? (Q2)

There were 50 respondents who made a comment to Q2, as described in Table 3. 38% said that they consulted a fortune teller once a year and 18% went more often than that.

Table 3: How often do you consult a fortune-teller? (Q2)

Number of respondents	Percent (%)	Comment
2	4	Visit once a month to see fortune-tellers.
1	2	By internet and every 3 months.
1	2	3-4 times per year
5	10	Twice a year
19	38	Once a year
6	12	It's not specific, and depends on the situation (1); About 2 times in life (1); occasionally (1); Depends on "fate" (1); When I have suffering (1); When I'm worried (1)
7	14	Rarely
2	4	Long time ago (1), One time since 5-8 years ago (1)
7	14	Never
50	100	*[Only 50 of 57 answered this question]*

5.6. Types of Fortune-telling (Q3)

A list of five conditions was mentioned in Q4 along with a list of people who would be consulted (Table 5). Few listed fortune tellers specifically, and parents, relatives, spouses and close friends were mentioned. The figure for spouse is relatively low because a majority of participants were single.

There were 49 from 57 respondents or about 86% of respondents to Q5 (*Have you ever talked to a counselor or psychologist? How often do you visit?*) who did not say that they talked to a counselor or psychologist. Only 7 people spontaneously mentioned that they (12%) used to visit them, and 4 respondents said that they visit them less than 5 times in their life and one respondent did not state an answer.

Also, 11 respondents said they had talked to a fortune teller or a psychologist by using social network (*Have you ever talked to a fortune teller or a psychologist using social network?* (Q7)). Most, 79%, of respondents (45 persons) said that they had never talked to them in that way.

Table 5: When you are mentally confused who do you talk to (Q4)

Who is the first one you talk with?	Mentally confused topic				
	Family crisis	Financial status	Study problem	Relationship with people	Health condition
Parent/Relatives	29	18	8	12	17
%	*57%*	*40%*	*19%*	*25%*	*35%*
Close friend	20	15	31	30	10
%	*39%*	*33%*	*72%*	*63%*	*21%*
Partner/spouse	2	9	1	4	9
%	*4%*	*20%*	*2%*	*8%*	*19%*
Psychologist					3
%					*6%*
Fortune-teller				2	1
%				*4%*	*2%*
Other (Teacher, Doctor, Google)		3	3		8
%		*6%*	*7%*		*17%*
Total N	51	45	43	48	48

Table 7: Ease of Talking with a Fortune Teller or Psychologist Separated by Religion

Types	Number of respondents	Buddhist	% of N	Muslim	% of N	Christian	% of N	Other & None	% of N
Fortune-teller	34	28	61%	2	67%	1	25%	3	75%
Psychologist	11	9	20%	1	33%	1	25%		
Not stated	4	3	6%			1	25%		
Don't know	1							1	25%
Neither	6	6	13%						
Same	1					1	25%		
Total	57	46	100%	3	100%	4	100%	4	100%

Table 7: Do you think about science and technologies do more harm than good, more good than harm, or about the same of each? (Q8)

Degree	Male	% of N	Female	% of N	Total N	%	P2000** (%)	P1993** (%)
More harm	0	0	6	14%	6	11%	4.4	3
More good	7	54%	5	12%	12	21%	47.3	54
Same	4	31%	17	40%	22	39%	45.3	42
Don't know	2	15%	15	35%	17	29%	2.9	1
Total	13	100%	43	100%	57	100%		

Note: 1 person did not state their gender, select the same

** Results for general Thai public in 1993 (Macer, 1994) and from 2000 (Kachonpadungkitti and Macer, 2004).

Q10 (*What is the reason to meet a fortune teller?*) drew 53 comments from 57 respondents, and about 68% use fortune-telling to be guides in life as following.

"Want them to inform me in the situation"
"What to know the future, and what is going to happen in my life"
"It will help me when I face the problem"
"Find ways of living"
"When feeling anxiety, disappointed, uncomfortable"
"To ask prediction of my future life"
"Curious about something in the present and in the future if something happens, even though good or bad how to find the good solution to solve it?"
"Asking for a soulmate, healthy, financial status"
"Check my fortune"
"Unsolvable problems, seeking advices"
"Ask about the future"
"Curious about future and present"
"Finding the solution to solve the problem and make life better"
"For getting comfortable first and making decisions later"
"There are guidelines for living"
"Curious about persons who used to connect previously, Lucky, Fortune"
"Finding solutions"
"Curious about the future"
"For decrease worrying in something that I wonder or being guidelines to live"
"For guidelines"
"Finding solutions"
"Would like to know about life"
"Need counseling for finding solutions"
"Curious about fortune"
"Check my fortune"
"Curious about future"
"To freely discuss about the problems and concerns"
"To learn about the future"
"Finding out the unknown"
"Finding the solution to solve the problem and make life better, also feeling good"
"Many problems are the same time and difficult to find the solution"
"Needs consulting and find the solution"
"Don't want to let some secret to somebody who I know so a Fortune-teller is the one that I don't know before that why I can talk to them immediately"
"Career"
"About my career"
"It's true"

Among the respondents to Q10, 11 persons hoped to get happiness or feeling well after talking with fortune-teller. For example:

"I think the reason most people meet a fortune teller is that they want to be happy more or when they are weak."
"For peace of mind"
"Indecision, worrying"
"Suffering"
"Feeling upset"
"Face serious problem"
"I was scared when I set home and somebody is running in front of me."

Also, some people said that they had no reason to see fortune-tellers (Q10). For example:

"Friend's invitation."
"No reason, because of I don't believe in them. They merely increase one's problem in life"

Table 6: Summary of the most common topics to ask fortune tellers (Respondents gave open answers in response to Q11. Please rank the top 5 topics you ask fortune tellers about?

Ranking	**Topics**	Number of Comment	% of Respondents (N=49)
1	Career / work / Job	32	65
2	Money / Financial / Wealth	30	61
3=	Love	26	53
3=	Health	26	53
5	Family member or crisis	24	49
6	Future / Fortune	23	47
7	Relationship with people	6	12
8	Study	5	10
9=	Accident	3	6
9=	Success	3	6
9=	Partner/Lover/spouse	3	6
9=	Children	3	6
13=	Married	2	4
13=	Something gone	2	4
13=	Living	2	4
13=	traveling	2	4
13=	House/ Residential area	2	4
13=	Obstacle / Any concern	2	4
19=	Happiness	1	2
19=	Economic	1	2
19=	Travel aboard	1	2
19=	Death	1	2
19=	Unlucky	1	2
	No stated	6	
	Don't know	2	

The most commonly cited topics to ask fortune tellers are illustrated in Table 6. Q11 (*Please rank the top 5 topics you ask fortune tellers about?*). Six persons did not state a comment and two said that they don't know.

5.8. More frequent to visit Fortune-tellers than psychologists (Q6)

As can be seen in the results above, there is a preference to talk with fortune tellers rather than psychologists among the respondents (*Q6. Who is easier to talk with, a fortune teller or a psychologist?*) (Table 7).

5.9. General attitudes to science and technology

Overall most respondents saw science and technology as having more positive impacts than negative impacts (Table 8).

5.10. Views of life

Will you please express freely, in sentences and/or pictures, the images which come to mind when you hear the word "Life" and/or ideas you have on "Life" (Q9). The categories of Macer (1994) were used. In this survey a high proportion of comments were placed in "Other", including 8 comments (14%) who said life is tough.

Table 9: Images of Life

Q22. Will you please express freely, in sentences and/or pictures, the images that come to mind when you hear the word "life", and/or any ideas you have on "life". (Figures in % of total respondents, including those who did not state a comment.).

Reasons (%)	*N*	2015 %	P2000	P1993	S2000	S1993
Not stated	*10*	17.5	20.1	16.2	13.8	11.6
Beauty	*0*	0	1.9	0.3	2.4	0.9
Scenery	*0*	0	3.9	0.2	1.2	0.9
Harmony	*3*	5.3	12.4	4.7	16.2	3.0
Ecology	*1*	1.8	1.0	0.2	2.4	1.3
Picture	*3*	5.3	33.9	21.2	36.2	24.1
Encounter	*3*	5.3	9.5	7.9	12.6	8.2
God/spiritual	*4*	7.0	11.0	4.5	3.8	4.3
Action	*4*	7.0	5.3	3.8	6.5	3.9
Enjoy	*8*	12.3	7.2	15.3	2.5	14.2
To be saved	*2*	3.5	7.2	6.7	3.8	6.0
Baby	*6*	10.5	3.8	5.0	5.0	5.2
Life & Death	*13*	22.8	13.0	22.6	13.8	26.3
Natural	*1*	1.8	6.7	5.0	11.3	3.9
Health	*2*	3.5	0.5	3.9	1.2	3.4
Science/ definition	*0*	0	5.3	3.5	11.3	5.6
Animals /living things	*1*	1.8	7.6	4.7	3.8	5.2
Family & Friends	*2*	3.5	3.4	12.8	5.0	9.9
Other	*13*	22.8	0	6.4	0	5.2

Comparisons to Public (P) and Student (S) in in 1993 (Macer, 1994) and from 2000 (Kachonpadungkitti and Macer, 2004).

There were 47 comments from the 57 respondents. They can see their images or ideas of Life in different ways. One third (34%) have positive images as comments:

"My imagine seeing freedom and Happiness in my life. I don't want a 'perfect life' but I want a 'Happy life' "
"Feeling good when see my dream picture"
"High quality of life and secure future life"
"Nice picture having Mom, Dad and children with happy family"
"Living a worthy life"
"Living and quality of health"
"Life is very valuable more than other things"
"Value and responsibility"
"Life is going on with lively"
"When I hear the word life the first thing that comes to mind is smiling and happiness of people"
"Flower, Sun, lively"
"Baby born"
"Baby born"
"Future"
"Living in the Future"

Some ideas of 27% thought "Life" is pragmatic and functional, as below:

"Giving birth, Going sick, Going death"
"I saw a picture of the body and mind is very high responsibilities"
"Life is a process from being young till getting old. During the process, one ought to fulfill the expectation, social and cultural norms of their own society. For instance, one ought to go to school, get married, and have children and so on. However, life should not be viewed in such way. One life shall be distinct; one can do anything as long as it doesn't harm anyone"
"Born, Older, Sickness and Death"
"Physical"
"A process"
"Human being ex: baby born"
"Cycle of life (Birth-Old-Sick-Death), Rich-Poor, Socialize"
"Cycle of life (Birth-Old-Sick-Death), Happiness-Suffering, Love-Greed-Anger-Lust"
"Human in the earth and all sentient being"
"Running, Pulse, Birth-Older-Sick-Death"
"Family, Friend, Social, Learn to live with community"
"Myself"

Nine respondents mentioned a negative side. for example:

"Just make me feel so down"
"Be troubled and tough"
"Confusing"
"Struggle, working for living"
"The struggle and patience"
"Life is a struggle and keeping going"
"Everyone has problem"
"The struggle and fighting"
"Picture of previous life with mistaken, it's a cause of present"

Also 19% of respondents thought in various ideas, which are mixed between good and bad sides, sometimes seemingly confused, as below:

"Life is fighting, facing in many circumstances, sometimes good, sometimes bad"
"This time to survive, happiness, problem's family, society, good but experience all of that"
"Life is full of surprises. It can be cruel, selfish, wonderful, beautiful, and phenomenal, and life is an opportunity to do everything"
"Feeling about life for today and future what will happen with me and people around me? Today is happy, so how about tomorrow?"
"Sometime good, sometimes confused"
"Mixed between happiness and sadness"

"Life is moving forward, good or bad depends by thinking and action"
"Life is a struggle and a happy things if we take it in our own ways"
"Empty"

5.11. Predictions of Fortune Tellers and Follow-up

There were 46 comments from 57 respondents (Q12. Name an example of a topic where fortune-tellers' prediction came true). Most, 37 respondents (80%), mentioned that some stories were correct from fortune-teller's prediction as in the statement below:
"All were common problems, and common positive achievement of people came true."
"Having some problems in family."
"My lover has another woman."
"Romantic life."
"About work that one is real."
"Life is smooth and be calm."
"Should not move institute, if move may be cannot get success or graduate. A missing thing will come back but not be the same one and I needed time to wait."
"Love is really true."
"Getting older is better."
"Job."
"Case about education in aboard."
"Relationships."
"Having house from myself."
"In that period I cannot save money, more obstacles in work."
"Personality, behavior."
"The stories in the part, behavior."
"The stories in the part."
"Changing a career."
"Having the seniority to support, makes good get well."
"There will be some lady who is chubby, tall and white skin, she will be a good support and helper."
"I have bad luck in love."
"Career"
"There was bad luck which was correct."
"Health, illness."
"Accident."
"Obstacle, money, career."
"Changing a career."
"Health condition of a family member."
"Love"
"Travel abroad or a long journey."
"Professional life and love affairs."
"Career promotion."
"Not been in a relationship, have a good job."
"My financial status."
"What happens to me? I do not get well. I get fine after I've been to fortune tellers and I did worship to God too."
"Changing a career."
"Go aboard."

There were 7 respondents who said nothing came true from fortune-teller's prediction.
"At this moment, still nothing"
"None"
"Never truth"
"Couldn't remember"

There were 45 comments from 57 respondents to *Q14. What do you feel after meeting a fortune-teller? Please describe a few cases, with different fortune-tellers.* The comments:
"All fortune tellers, they comment in a positive and bright future about my life and it made me happy."
"Surprising."
"Feeling relieve and chill."
"I feel quite surprised when fortune tellers known exactly about my condition. I didn't say anything when I come to see her but by the time she finished she draw a tarot card. She could tell that I am in a complicated relationship with my spouse. I felt surprised at that moment and felt a bit of trust about her prediction when I left her."
"I feel it is fair for some case that he told me. My belief is 50:50 but I never refuse what he said from the predictions. I always listen to him when making decisions."
"Sometime feel good if positive prediction or I reach my expectation but sometimes I feel more concerned if there has been a different way or being negative that I don't want it to happen."
"Nothing special"
"Feeling good that moment but have to wait to see is it possible or not?"
"Love, fortune-teller said my partner is not my soulmate but I don't mind."
"After I meet a fortune teller (tarot card, Sole reading) I feel relaxed about the future"
"Usually confused but I don't have too many questions to ask. Sometimes, the fortune-tellers tell a lot of stories, but I don't think I have something special."
"Wondering whether stories from fortune-tellers will happen or not?"
"Sometime great but sometime disappointed."
"Feeling comfortable when asking about what should be done in the future."
"Feeling better and also find the solution for the future plan."
"More suffering and something is impossible."
"It's not correct and sometime is guessing."
"Unbelievable."
"If positive prediction will be happy but will not be sadness."
"Nothing true."
"Career"
"This moment, changing job will get success and supporters."
"After I met fortune tellers about a birthday reading, he mentioned that, "Life is not easy, please be patient for everything." it's truth after proving about past life."
"Can't remember"
"Some fortune-teller is reliable, someone is not"
"Feeling good when get a solution and advice from a fortune-teller."
"Nothing special."

"Too much apprehension, afraid some things will happen, such as an accident."
"Birthday prediction: can predict previous stories, Tarot card reading: can forecast future life and our expectations."
"Nothing special, because life is simple."
"Some predictions make us feel good, prediction about future just wait to see."
"Tarot card reading: if not good result we can be careful by doing merit and anything else to make the feeling better."
"Tarot card reading, card reading, talking with monk."
"Birthday prediction: in case fortune-teller said this year is good, it's ok but if not they suggested to do merit can make us feel good."
"Feeling good when they predicted a positive side but feeling bad if not."
"I feel a relief. I can only describe this feeling because I have not been to other fortune-tellers."
"Usually, I feel better."
"Excited"
"Don't know"
"Normally I have beautiful ladies telling my future and everyone loves my life."
"N/A"
"I feel relief and happy after I get fine when I was sick and medicine doesn't work at that time but after I did what the fortune teller told me it made me felt better."
"Tarot card: answer is neutral, Horoscopes: Related to merit and sin, also take in the big picture."
"Feeling better, getting solution such as I had conflict with colleague so a fortune-teller told me I should do merit and dedicate to her then everything will be better. After I did it everything is OK."

5.12. Visiting Fortune Tellers with Friends

Fortune telling is often a social event as can be seen from Q13 (*Do you like to go to a fortune-teller on your own or with friends? Why?)*. There were 50 comments from 57 respondents. Two thirds, 66%, of respondents go with friends because they can accompany each other, prevent a dangerous thing that might happen, sharing opinions how much the predictions of fortune teller will be correct, feeling safe when having friend, and helping to remember all the data. The comments were:

"With friends coz we stay together there."
"Go with friends to be my company."
"Actually not, I only consult with my close friend who is really like a fortune-teller."
"Go with friends to prevent dangerous."
"Mostly, going with a friend because I can share and prove how much the prediction of the fortune teller is true."
"Going with friend who can help to remember."
"Going with friend, since I cannot analyze alone so friend can help ."
"Friend to share and consult."
"With friends to remember what the fortune teller mentions."
"I once went with a friend. Some other things, I just went alone. Going with a friend so I could be happier and be accompanied."
"Friend"
"With friend is better than going alone."
"Friend, she can help me."
"Friend who can invite the right fortune-teller."
"Friend to ask anything else."
"Friend to ask anything else."
"Friend"
"Friend"
"Friend I am comfortable with."
"Friend who can avoid some suggestions from Fortune-teller that has to pay more money for them."
"Close friend only, I don't want to tell anyone about my secrets."
"Friend"
"Friend who is safe."
"Friend because they can help to gather some missing information."
"Friend"
"Friend to ask anything else."
"Friend to ask anything else."
"Friend to consider how much is credible."
"Friend to ask anything else."
"Friend who made me feel warm and helps me."
"Going with friend who invited me."
"With friend."

The rest thought they are comfortable to see a fortune-teller alone due to their secrets, something is privacy and they don't want to reveal secret. For example:

"By myself, I need to be private when I go to see a fortune teller."
"Alone because something is personal."

5.13. Belief in Karma and Religion

Almost all, 96%, of people (51 respondents from 53 respondents to this question) said that they believe in karma (Q15). One person mentioned what goes around comes around. Only 2 people who answered did not believed in karma. There were 42 comments from 56 respondents who believed in rebirth and 12 respondents who didn't believe in rebirth.

Regarding the term "supernatural", (*Q17. What do you think about the word "supernatural"?*), there were 47 comments from 57 respondents, including:

"Something is beyond our thought. I believe in supernatural is something that we are not yet able to comprehend due to limitation of our brain capacity."
"A man tries to use science to explain 'supernatural' but I never look down at it."
"Something that cannot be proved."

A majority of respondents considered religion to be important (*Q18. In your daily life, do you consider religion to be...?*), and it was answered with 56 responses from 57 respondents. About 60% or 34 people consider religion to be very important for their daily life, and 16 (29%) respondents though religion to

be somewhat important, also 7% or 4 respondents do not consider that religion is too important and just 2 persons consider religion is not important at all. For example one of the comments was, "I am a Christian but Christianity is not a religion."

The religiosity was measured by asking *Q19. How often do you go to church / temple / mosque, etc.? (times per month)*. Less than half, 43%, of them went to church/temple/mosque about twice per month, half of respondents went about 2-3 times a month and 20% went there more than 3 times per month. In response to *Q20. How often do you pray? (times per month),* about 57% (26 people) said that they pray less than 5 times per month, 15% (7 people) pray 5-10 times a month, also another 7% pray 11-20 times per month, the rest, about one third pray everyday.

6. Discussion

6.1. The sample

This paper has examined the practice of fortune-telling in Thailand. The primary target of the survey was Thai citizens living in Thailand and the sample numbers are too small to draw conclusions about trends in other countries. Three quarters of the respondents are living in Thailand, and 24% live overseas. However, as a pilot survey we can see some interesting comments from those in other countries, and further research could address this. Among the 70 forms circulated 82% returned the survey form, which is an acceptable response rate.

Most respondents live in urban settings (95%), and the age of male respondents ranged from 20 years old to 54 years old (total 23% of respondents), and the 43 female (77%) were aged between 23-53 years of age. The sample excludes older persons, which could be targeted in future surveys. Generally we expect older persons to be more religious. Two thirds of respondents were working in the private sector (Table 1), and two thirds were single. The sample were more educated than the general Thai population, with over 80% having a postsecondary educational qualification (Table 2). A different sampling method would be needed to contact persons from less educated groups, and possibly interview methodology would be better to employ for seeking their views.

6.2. Frequency of Visiting Fortune Tellers

Although a majority of respondents visited fortune tellers, but only 20% did so more than once a year, and 40% said about once a year. The views of visiting them were not always utopic, for example, *"Fortune teller is somebody who can give an answer for our problems, sometimes makes me feel good, sometimes not, and sometimes can give solution to solve the problem."* This idea of fortune tellers as a problem solver was common, and is relevant to the concept of bioethics to aid in decision making.

Usually people visit a fortune teller when they have a problem, for example, *"I like to see a fortune-teller when I get upset."* There were 7% who specifically mentioned fortune telling as mental health support for people, even though they did not believe in it themselves. For example,*"I don't believe in fortune-telling but this is helpful to people's satisfaction and pleasure to know his/her fortune".* Some people said they do not believe in fortune tellers, but they said that they went to see them for personal mental health support, for example,*"I do not believe in fortune telling much but I usually go to see them time by time when I feel unhappy."* One fifth specifically mentioned "decision-making", for example, *"They could be a "guider" when one's life reaches problems, obstacles.", and a "Fortune-teller is guide for decision marking".* Only 10% of respondents said that they do not trust fortune-tellers, for example, *"They are fetish people. I don't like fortune-tellers. It's wrong to predict the world or one's life".*

Many people, about 68%, use fortune-telling to be guides in life (Q10). Fortune telling is often a social event as can be seen from Q13 (*Do you like to go to a fortune-teller on your own or with friends? Why?)*. Two thirds, 66%, of respondents go with friends because they can accompany each other, prevent a dangerous thing that might happen, sharing opinions how much the predictions of fortune teller will be correct, feeling safe when having friend, and helping to remember all the data.

The frequency of visiting was not so high as the general history of visiting fortune tellers, and 38% said that they consulted a fortune teller once a year, and 18% went more often than that (Table 3). In Q4 a list of five conditions was given along with a list of people who respondents would consult, and few listed fortune tellers or psychologists specifically, rather parents, relatives, spouses and close friends were more often mentioned. The figure for spouse is relatively low because a majority of participants were single. Most, 86%, of respondents to Q5 said that they had not talked to a counselor or psychologist. Only 12% mentioned that they used to visit them. One fifth of respondents said they had talked to a fortune teller or a psychologist by using social network (Q7).

As can be seen in the results to Q6, there is a preference for fortune tellers rather than psychologists among the respondents (Table 6).

6.3. Types of Fortune-telling

There were a range of methods used for fortune telling as discussed in Chapter 2. The survey found more than half the respondents who mentioned Tarot cards and 40% mentioned palm reading. One third also mentioned birthday prediction (Table 4). Some respondents listed multiple options, and there was diversity of approaches. If the research is extended to more foreign cultures and indigenous societies there may be even more kinds that we can describe.

Most, (80%) mentioned that some stories were correct from fortune-teller's predictions. There were many comments to *Q14. What do you feel after meeting a fortune-teller?* The comments included some who appreciated a positive attitude, "All fortune tellers, they comment in a positive and bright future about my

life and it made me happy." Some mentioned their surprise that the fortune tellers apparently knew about their conditions and problems, "I feel quite surprised when fortune tellers known exactly about my condition. I didn't say anything when I come to see her but by the time she finished she draw a tarot card. She could tell that I am in a complicated relationship with my spouse. I felt surprised at that moment and felt a bit of trust about her prediction when I left her." The most commonly cited topics to ask fortune tellers (Table 6. Q11) were career, followed by money, love and health. One quarter mentioned when a family member has a crisis.

6.4. Common Belief in Karma

Almost all, 96%, of people said that they believe in karma (Q15). One person mentioned what goes around comes around. Only 2 people who answered did not believed in karma. This is despite the different religions that people have. There were 42 comments from 56 respondents who believed in rebirth and 12 respondents who didn't believe in rebirth, and most who did not believe in rebirth were not Buddhists. About 60% consider religion to be very important for their daily life, and 29% thought religion to be somewhat important, while only 11% do not consider that religion is too important or not important at all. Less than half, 43%, went to church/temple/mosque about twice per month, half of respondents went about 2-3 times a month and 20% went there more than 3 times per month. About 57% said that they pray less than 5 times per month, while 15% pray 5-10 times a month, while 7% pray 11-20 times per month, and about one third pray everyday.

The views of life were overall similar to the results of earlier surveys (Table 8) and saw a number of interesting comments. Many were brief with a few longer comments, such as, *"Life is a process from being young till getting old. During the process, one ought to fulfill the expectation, social and cultural norms of their own society. For instance, one ought to go to school, get married, and have children and so on. However, life should not be viewed in such way. One life shall be distinct; one can do anything as long as it doesn't harm anyone"*

6.5. Scientific knowledge and Belief in Fortune-telling

Overall most respondents saw science and technology as having more positive impacts than negative impacts (Table 7). There were more respondents in this sample that said that they "Don't Know" whether there is a positive or negative impact from science and technology compared to the other studies conducted in Thailand in 1993 (Macer, 1994) and from 2000 (Kachonpadungkitti and Macer, 2004).

A part of the Taiwan Social Change Survey, a nation-wide longitudinal survey conducted every five years since 1985, has investigated the beliefs and practices of fortune-telling. The data showed a fairly consistent pattern of about a third of the people having sought fortune-telling services for the past 27 years of survey research (Chiu, 2006; Fu and Tu, 2010), and about a third of the people believing that fortune-telling is accurate or predictive of the future (Chang, 2000). In analyzing the data from 1985 to 1995, Chiu (2006) found that education increased the likelihood of the use of fortune-telling services and suggested that "the kind of rationality cultivated by modern education, which generally tended to counter [fortune-telling], might fall short in countering deep, profound methods of fortune-telling."

Kuo (2009) surveyed users of online fortune-telling in China and found that the most common reason given for seeking fortune telling was questions over personal relationships. Shein et al. (2014) said that a relational and situated perspective was needed to interpret the results of their survey of 1863 adults in Taiwan to understand the relationship between scientific knowledge and fortune-telling. The findings showed that knowledge of scientific methods was negatively associated with fortune-telling beliefs. However, knowledge of scientific facts was, by and large, positively associated with engagement in fortune-telling practices, a phenomenon known as cognitive polyphasia. This study does not imply that science communication or education have no effect on promoting scientific knowledge; rather, it hopes to encourage researchers and practitioners to use a culturally sensitive lens to rethink the role of science in society and its relationship with other forms of knowledge and belief.

Shein et al. (2014) found that highly educated and city dwellers, in general, had a larger likelihood to believe in and practice fortune-telling. Higher educational attainment and closer proximity to cities indicate more social opportunities and a higher degree of uncertainty, which may explain a stronger belief in fortune-telling (Chiu, 2006; Giddens, 1991). More than 80% of the current survey respondents were urban dwellers, with more than half from Bangkok, so their strong belief in fortune-telling may be consistent with the Taiwanese studies. However, in the opinion of the author, rural Thais also belief in fortune telling, as seen in the small sample described for this study.

6.6. Tarots as a Journey through Life and Bioethical Dilemmas

The Tarot originated in Europe in the late 14th century, with a reference in 1371. The earliest known Tarot deck is the Cary-Yale deck of 1441 in Milan, Italy. The link to the occult and fortune-telling are due to 18th and 19th century trends. The Tarot are a game of cards still played in some parts of Europe. The Catholic church may have been promoting the use of these cards with spiritual messages as a alternative to some other forms of gambling. Several British and French occultists claimed that the Tarot had alleged ancient Egyptian origins. We see a reference to this in Court De Gebelin (1781) in volume VIII of *Monde Primitif (The Ancient World),* in which he included two essays claiming that the Tarot was drawn out of Egypt, but

there was no evidence presented to back up his claim (Collingwood, 2011). The fortune-telling connection was introduced by Jean-Baptiste Alliette (under his reversed surname, Etteilla), 1785, *How to Entertain Yourself with the Deck of Cards called Tarot.*

For those who follow the system of Tarot they refer to the apparent timeless ideas of spiritual truths and human behavior. For example the Wheel of Fortune Tarot trump warns of the cycle of fortune and hubris, that represents those people who have ultimate faith in pursuit of money or power, such as bankers or emperors.

The trap of secular humanism, a common proposition in modern bioethics, has led to the collapse of many human civilisations, and is represented by the Moon trump. Collingwood (2011) argues that in order to live intelligently we need to know and understand these fatal archetypal scripts so that we are aware of their presence, understand and master them and so become creators of our lives according to reason rather than be driven beings or victims. Some people blame these drivers as demons but they predict the consequences of our often irrational behaviors.

Some Tarot cards are very positive, such as the Sun and The Star, the trump of hope for a better future which has been linked to evolution. The introduction of Tarot cards as a tool for fortune telling is less than two centuries old, but we can see that among the many methods used by oracles (fortune tellers) that are seen in Table 5, Tarot cards are popular. Few users may be aware of the origins of the Tarot cards however. For example the Tarot, Fool, is modeled on the work of Dante, Divine Comedy, which traces an allegorical progression of Dante form Hell to Paradise through 22 trumps. The Fool is un-numbered allowing the "Fool" or traveller, Dante, to progress through all stages of life. There could be more written on the links between Tarot and bioethics of the progress of life. This could be a subject for further research in itself.

Sallie (1980) explored interpretation of the tarot in terms of Jungian psychology. She argued that the significance of the cards is related to personal growth and individuation. The idea is to explore a map of life, and the hero's journey becomes something that each individual can relate to the symbolism of the cards and therefore to the personal life. In a pack of 78 Tarot cards, much like the 64 hexagrams of the I Ching,[19] an entire mutant mental universe is ciphered, which can be used to form predictions. "We can predict the future," Carl Jung stated, "when we know how the present moment evolved from the past."[20] This evolution of the present is linked to the past, just as the conscious mind is subjected to the unconscious: the Tarot card or the hexagram is a visible manifestation of this connection, a type of synchronicity that forces itself to rise to the surface, but requiring, just as an oracle does, an accurate interpretation. In 1933, during a seminar, Jung spoke about Tarot (in his work Visions: Notes of the Seminar given in 1930—1934), and he stated that these cards are the predecessors of the sets we use to gamble, where red and black represent two opposites, and the division of four —spades, hearts, diamonds and clubs— also corresponds to the symbolism of individualization. They are psychological images, symbols we play with, in the same manner that the unconscious seems to play with its contents. They are combined in a certain way, and its different combinations correspond to a playful development of humankind's history.

We can see here that when people put their trust in Tarot cards, they are answering something that all people may seek, some through a psychologist and some through a fortune teller. In this research we can see three times more people seek the opinions of a fortune teller rather than a psychologist. I hope that this thesis has raised the awareness of the linkage between support for our decisions and counseling provided by fortune tellers.

7. Conclusions

Fortune-telling is the practice of counseling people who have mental doubts about some issues, and not just predicting information about a person's life. People seek guidance on their future attitudes and choices, to make better decisions. This paper has briefly reviewed different types of fortune telling including the meanings and characteristics of Zodiac Signs and Astrology Signs, Tarot cards, Palm reading, Numerology, Pulse Reading, Gene tests, Parrot astrology, Sole reading (Foot), Signature reading, Horoscope, Birthday prediction, Life graphs, Communication with spirits through psychics, Number of Identity card, Egg reading, Tree leaf predictions, Name forecasting, Poker card reading, Monk fortune teller, I Ching, and new technology.

We can consider fortune-telling as a Public Health Service. Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Fortune telling can support people from the fields of mental health, using knowledge, statistics, consulting skills to talk with people in a team of multiple religions and faiths. It also examines karma as culture in Thailand.

The survey found that people more frequently visit Fortune-tellers than they do psychologists. It also explores general attitudes to science and technology which were generally positive, and comments on the predictions of fortune tellers by the respondents. Two thirds of the respondents visited fortune tellers with friends. Almost all believed in karma and many had religious faith.

There were various types of fortune telling that were sought. The reasons and questions were examined, with comparisons to attitudes people have to seeking a counselor or psychologist. We can conclude that fortune-telling has an important role in mental health, and the ethics of the practice is fruitful grounds for further research.

[19] http://ichingfortune.com

[20] http://www.faena.com/aleph/articles/carl-jungs-tarot-alchemy-and-archetypes/

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A bioethical interpretation of Buddha's enlightenment

- Nader Ghotbi, Ph.D.
Ritsumeikan Asia Pacific University (APU), Beppu, Japan
Email: nader@apu.ac.jp

Abstract

Siddhārtha Gautama attained Buddhahood by 'awakening' or 'enlightenment'. Having spent many years in the struggle to find the truth about suffering, he was finally enlightened after spending days in meditation under a tree in *Bodh Gaya*, India. Later he started on a journey to spread his teachings, what is currently known as Buddhism with about 360 million practitioners worldwide. This paper examines the teachings of Buddhism in a bioethical perspective to hypothesize on what awakening or enlightenment meant to the Buddha. The paper argues that the concept of reincarnation, cycle of suffering, and compassion are closely knitted in Buddha's realization of enlightenment; suffering follows a cyclic pattern through life and unless the cycle is broken, it is inclined to repetition. This cycle starts with birth which is then afflicted with illness, aging and death. However, all living things are connected through the unity of life, like a river that flows. The 'truth' is that we are all but one living organism. Compassion can reduce suffering, though suffering can only be stopped when one is so overwhelmed with pure compassion that 'oneness' with all life is realized. This allows one to lose the illusion of self so that the cycle of suffering may be brought to an end. Therefore, compassion, altruism, giving and receiving are only 'natural'. Those who do not realize the truth, stay within the cyclic pattern of suffering that only changes form along the time. Purity and perfection of compassion is the key to end suffering. It can be concluded that the concept of enlightenment is based on Buddha's philosophical comprehension of the unity and connectedness of life as understood in biology today.

Keywords: Awakening, Buddha, Buddhism, Compassion, Cycle of suffering, Enlightenment.

Introduction

Buddhism started about 2500 years ago in north India through the teachings of *Siddhārtha Gautama* who found the ultimate truth through enlightenment or awakening; Buddha means the enlightened or the awakened one. Popular belief is that *Siddhārtha Gautama* was a prince and lived a comfortable life but after observing people affected with aging, illness, ignorance and death realized that there was suffering in the world; so he left the palace to find a meaning for a life that appeared to be destined to suffering and death. For many years he tried different disciplines including austerities that existed at the time but did not reach enlightenment until he sat under a tree and meditated for many days, and finally he found a complete insight into the cause of suffering, and the steps necessary to

eliminate it, meaning the four noble truths; that existence leads to suffering because of desires, and by stopping desires suffering can be stopped. Buddha taught that all things are temporary, even the self (Henslin, 2011) and suggested an eightfold path to cease suffering which includes the 'right' understanding, resolve, speech, action, livelihood, effort, mindfulness and concentration. In short, existence involves suffering which results from desires that can be fought and may be stopped. The practice of Buddhism involves exercises in meditation and spiritual training (Bowker, 2006).

Buddha did not write down his teachings but his disciples recorded them after he passed away. *Pali Canon* is the name of such a collection in *Pali* language. Later, Buddhist teachings were translated to many other languages. Many such scriptures are in the form of a dialogue between Buddha and some of his disciples. These debates are highly philosophical and explore the nature of self, feelings, senses, perceptions, formations and consciousness (Abel, 2004). Buddhism emphasizes on the concept that all things are connected in chains and dependent on each other. Also the moral law is based on *karma* which refers to the cause and effect bound with each other in a chain. Therefore freedom from any dependence, liberation from all suffering, or *Nirvana,* can be attained by fighting one's desires and attachments. The school of Buddhism called *Mahayana* or "Great Compassion" spread to China, Korea and Japan. This school believes that there is a Buddha nature in everything and therefore *Nirvana* can be attained, even suddenly, through awakening. *Nirvana* is the perfect peace of mind free from ignorance, greed, hatred and other troublesome states. *Mahayana* claims to have preserved the teachings of Buddha in the form of texts called *sutra*. These may be chanted in rituals that help attain mindfulness in meditation (Bowker, 2006).

Buddhism entered Japan about 1400 years ago and after about 500 years, a purely Japanese school developed out of the lotus *sutra*. Zen is a well-known form of Japanese Buddhism in the West. In Japanese, *zazen* refers to meditation in a sitting state which was thought to result in enlightenment. On the other hand, *tantric* Buddhism uses the power of sacred sounds known as *mantras* to help attain enlightenment in a shorter time. They use not only human voice in the form of chants but also the sound of bells in rituals that are designed for meditation (Bowker, 2006). Many new forms of Buddhism have also emerged in Japan in the last century, including *Soka Gakkai* and *Shinnyoen.*

This study is trying to find a less abstract meaning for awakening or enlightenment known as *satori* in Japanese. The argument that a rather clear meaning should exist for awakening is based on the following observations: First, Buddha's awakening did not happen during years of austerity and struggle through the hardest trainings but after a few days of meditation under a tree. Buddha himself referred to his path as the balanced way in the middle that requires understanding, not extreme austerity and physical training. Awakening can thus be about understanding the ultimate truth through thoughtful deliberation on the nature of existence and life. Second, Buddha inherited the knowledge of Hindu priests before him but deliberately challenged some of them while providing an alternative explanation for others. He accepted rebirth through many lives but rejected the rebirth of souls (*atman*) and permanence in anything. He instead believed in the sequence of new forms of appearance. He also rejected the sacrificial system in Hindu and instead asked his followers to seek their own salvation through diligence (Bowker, 2006). We can thus presume that his new insight was based on a wisdom he gained during meditation. Is it possible that bioethics as the discipline of life values can provide a scientific interpretation for the mystical language of Buddha? This is the main question that we attempt to answer in this paper.

Methodology

The bioethical interpretation of enlightenment in this study is based on the use of symbolic interactionism (Henslin, 2011) to decipher the meaning of awakening by focusing on the symbolic meanings of the story associated with Buddha's awakening under the *Bodhi* tree, the rituals associated with Buddhist meditation, and the beliefs and religious experiences of Buddhists. Therefore I have tried to refer to the symbolic meanings for these components that can associate them in a comprehensive structure. There was also extensive literature review to look at the story of the life of Buddha and his teachings until the last teaching about *Nirvana*.

Besides the literature review and exploration of contemporary Buddhist teachings, the author used an ethnographic method to explore the religious practices of a Buddhist sect in Japan known as "*Shinnyoen*". There were many reasons for selecting this special sect. First and foremost, they believe in spreading the essence of Buddhism to the masses, that everyone even lay and common people have a chance to reach enlightenment. Second, they routinely practice meditation through sessions of supervised ritual 'chants' called "*sesshin*". This practice soon turned into a mainstay of the findings of this study, as a relation between the acoustic nature of the sounds in the chants with the cyclic pattern of life and of suffering could be speculated. The third reason was about the feasibility of such research as *Shinnyoen* welcomes the presence of foreigners (non-Japanese) and facilitates their participation in religious ceremonies with modest requirements which eased the ethnographic nature of the study. The study was done in two centers, a formal temple building in Oita city and a house in Beppu city, Japan, and continued for two years in the form of biweekly visits to the temple plus daily visits to the house in Beppu during the annual period of intensive meditation called "winter training".

Also interviews were done with two of the dedicated members of the sect for qualitative research. The topics of discussion included the concepts of compassion and lovingkindness, the nature of

enlightenment, and the significance of *sesshin* meditation as well as some other issues that will be explained and also discussed further in the part of discussion.

Findings & Discussion

Siddhārtha Gautama was meditating underneath a '*peepal'* fig tree known as *Ficus religiosa*. The tree is known for its large heart shaped leaves that move continuously even with no wind, for uniquely releasing oxygen in both day and night, and for a huge trunk the diameter of which can be up to 3 meters. These qualities provide for a special symbolic value for this tree. In life science today, it is common to speak of the "tree of life" in reference to the unity and connectedness of all diverse life forms (Campbell, 2005).

The *Bodhi* tree was located on the bank of a river (called *Nairanjana*); a drawing in a temple near *Bodh Gaya* shows Buddha sitting calmly underneath a large tree with water flowing in waves inside the nearby river (Figure 1). Buddha was offered a bowl of rice-milk porridge prior to meditation by which he regained the lost physical strength (Sato, 2013). It is said that through meditation he gained an insight first into the future and then into the past whereby he realized the causes of conditions that result in suffering. He also realized that the root cause of suffering was ignorance and illusions.

Figure 1: A drawing in a temple near *Bodh Gaya* (which literally means place of enlightenment) shows Buddha sitting calmly underneath a large tree while being offered a bowl of porridge, with water flowing in waves inside the nearby river (Sato, 2013). There are many symbolic meanings in this drawing: Buddha's calmness under the tree (of life), Buddha receiving nourishment offerings from a woman, the flow of various wave forms (reincarnation) that appear at the surface of the river, with the background lightened up by the bright light of the sun, birds flying in the air, and flowers growing along the river. Symbolic interactionism suggests that such representations of events and objects were commonly used for communication among humans especially on religious and philosophical matters (Henslin, 2011).

By taking the components of this image as symbolic units that refer to a less abstract knowledge within the story, one may assume that Buddha realized how he was on the receiving end of a relationship among all the living which is the fundamental reason of life. All animals including humans depend on plants that absorb energy from the sun, water from the soil and the breath in the air to produce food for all. In fact, there is a web of life that connects all life forms and is built on the surplus produce of the plants, as described by the modern science of biology and ecology.

The flow of water can be a symbolic reference to the flow of time which brings about different forms of life like the waveform in the water; some waves are larger, some are small, some drops are at the top, and some are down, but it is all just water in an ever-changing form. On the one hand, Buddha realized that all life was connected and that all depended on one another; no one could live without the others. On the other hand, it connects the past, present and future, as it is one stream of life that flows over time into different forms rising at different times.

With all life being connected and interdependent, compassion would be nothing other than 'natural'. Buddha received the porridge offering as naturally as he received support from the tree. Human compassion can learn a lesson from the tree that naturally serves and protects. The birds, the tree, the flowers, and Buddha are all taking and receiving what they need naturally. Compassion becomes lovingkindness and therefore altruism loses its contrast with it. We are all one!

Now let's assume that on the ripples of water flowing in the river, Buddha could see the periodic cycles of suffering, the impermanence of formations, and the illusion of self and its permanence. After all, it is a wave progressing through the river and moving some of the water down and some other up at every moment, moving the drops of water to different spots. One may feel suffering when falling, and to desire to move up, and feel pleasure when moving up; however, any movement up is followed by falling down (suffering). Nothing is permanent and one needs to be mindful to realize that. But compassion can help overcome emotions such as anger, hatred, greed, selfishness, etc. However, if desires are not subdued, they can take over compassion and love.

Buddha would relate and connect information in the nature of the world around him, similar to methods in the study of complex systems in contemporary life science. In a way, Buddha could have used a philosophical insight into the nature of life, and suffering, by relating his mindfulness of the

environment around him into one complex system to explain all life, at present, future and the past. Furthermore, *Siddhārtha Gautama* lived at a place and time when many violent conflicts between different tribes happened periodically. He could see how the violence persisted in disguise between the attacks, in the form of tense emotions of hatred and enmity; the cycle of violence would be repeated as long as it was not fully broken. However, enlightenment can only happen when the cycle of violence can be stooped. The *Pali* version of the *Nirvana sutra* asserts that the person who offered food to Buddha was not responsible for his death. In the *Mahayana* version, Buddha's passing away after accepting a food offering is paralleled with his awakening/enlightenment after accepting the food offering under the *Bodha* tree (Ito, 2013). After all, in both instances, before enlightenment and before passing away, the receiving of an offer by Buddha was followed by a peaceful *Niravana* state.

Findings of the qualitative interview with the two Buddhist members of *Shinnyoen* in Oita, Japan include interesting points that have been italicized in the following paragraph in their original quotes: The two followers were attracted to this particular school of Buddhism for the "*spiritual need"* they felt in their lives. Over the years, they had *"accumulated merits"* and therefore felt *"gratitude".* They had especially learned the value of *"altruism"* and *"compassion"*; one interviewee described it as intimate as *"giving one's flesh to feed others"*. To the question of why they chose *Shinnyoen* among various schools of Buddhism in Japan, they answered: The founder appeared to be "*spiritually connected*", was *"willing to lead"* others to the truth, and was also willing to teach *"ordinary"* people. Therefore the teachings of Buddha could reach *"all people"*. This school emphasized on Buddha's *"last teaching, Nirvana sutra"* which included *"secrets"* to achieve the "*nirvana state"*. As for their beliefs regarding the issue of suffering, the interviewees believed that "*doing good deeds can reduce suffering*" and such good deeds can also be "*accumulated through one's offspring"*. Being asked about their beliefs on reincarnation, they mentioned that people may be "*reincarnated in different levels based on their deeds in a previous life*", and "*it is possible to gradually move up through these levels*". Asked to describe 'awakening', they stressed a *"purified state"* that one is "*freed from greed, selfishness, and other negative emotions*" and thus can *"in practice, act for the benefit of others"* and "*prioritize the happiness of others".* An awakened person would "*feel very peaceful"* and would be able to "*interpret events in a spiritual manner*" without suffering from negative emotions because of the *"lack of wants"* or any experienced *"losses"*. Finally, asked about their main religious practice to achieve that peaceful state, they emphasized on "*sesshin*" as a form of meditation where a "*medium*" helps them to "*receive spiritual messages"* that can help set them free. This is done while they are reciting chants monitored by the higher rank (in a spiritual sense) "*medium*". However, the majority of practitioners are ordinary people from all various sorts of livelihood. A common slogan among the followers is that "*we share one heart*".

Finally, Buddhist rituals commonly include the chanting of *mantras* which are believed to help with the empowerment needed for awakening. These chants have a specific acoustic quality that may be described as similar to the "Gregorian chants" in Christianity. In September 2015, Japanese media reported that a CD of Buddhist monks reciting sutras published in June 2015 was already among the top 10 selling albums in Japan. The media report referred to the *"many virtues and even health benefits of listening to the soothing sounds of sutras (called "okyou" in Japanese) being read aloud by groups of monks".* The CD contains the sounds of bells and the harmonious reading of sutras by Buddhist monks; the accompanying book recommends listening to it for "*calming the nerves, helping one sleep, and a soothing effect on the heart and body, relaxing tension in the body and maybe even helping one feel better when ill or heartbroken"*.

Conclusion

Symbolic interactionism provides a methodological tool to explore the mystical concepts in Buddhism especially the concept of awakening or enlightenment. The texts, drawings and other art form that was made after Buddha's death include symbolic meanings that can be explored in order to provide a less abstract interpretation of the mystical vocabulary common in Buddhist teachings. I have studied one of the newer schools of Buddhism in Japan who aspire to present a path to enlightenment for all people from all groups. Ordinary people are asked to participate in spiritual sessions where they recite harmonious chants, practice meditation, control their negative emotions and conduct practical lessons in altruism, compassion and lovingkindness. Using symbolic interactionism on the stories in the sutras, the beliefs, and the spiritual practices of ordinary followers, and the rituals of their religious ceremonies helped with defining a more or less clear idea of what awakening/enlightenment means.

It appears that the concept of reincarnation, the cycle of suffering, and compassion are closely knitted in Buddha's realization of enlightenment. Life starts with birth which is accompanied by suffering because of aging, illnesses and inevitable death. But this is not about the life of one individual because all life is connected; all living things, not just humans, but other animals, trees and the living environment are all interconnected. Thus suffering of an individual may continue in the life of another living thing. This is how suffering also follows a cyclic pattern and unless the cycle is broken, it is inclined to repetition. Living things are all connected even through time, and along the many generations, for the unity of life flows in changing waveforms, just like a river.

The 'truth' is that we are all but one living organism. So to have compassion to others, and to be altruistic, is only 'natural'. Pure compassion can reduce

suffering, but suffering can only be stopped when one is so overwhelmed with pure compassion that he practices oneness with all life. To believe in self is thus an illusion, and awakening can open the eyes of the enlightened ones to the illusion of self, of desires and of wants that an individual follows for "him/herself". They may remain within the cycle of suffering that only changes form. Compassion can save them but it needs to be perfected by practice; the key to end suffering is the purity and perfection of compassion. Finally, it can be concluded that the concept of awakening/enlightenment of the Buddha is based on his philosophical comprehension of the unity and connectedness of life as understood in biology today. Such interpretation of enlightenment is very close to the concept of "love of all life" in bioethics.

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