

THE EXPERIENCE OF MALAYSIAN NEUROSURGEONS WITH PHYSICIAN-PATIENT CONFLICT
IN THE AFTERMATH OF ADVERSE MEDICAL EVENTS – A HEURISTIC STUDY

by

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of the Requirements for the Degree of

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University of Victoria

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ABSTRACT

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This research examines the experiences of Malaysian Neurosurgeons in managing communications with patients and their families in the aftermath of adverse medical events. These experiences were interpreted from a conflict avoidance and management perspective and the data from the research was analyzed using heuristic methodology. (Douglass and Moustakas 1985) The field of Neurosurgery in Malaysia was chosen firstly as a model of a high-risk medical specialty and secondly because of the researcher's lived experience with the phenomenon being studied. Participants in the research were eleven Malaysian Neurosurgeons with at least ten years of independent clinical practice as specialists. Qualitative data was obtained through semi-structured in-depth interviews that were subsequently transcribed and analyzed heuristically, looking for different conflict management and patient-physician communication themes.

The observations indicate that adverse medical events precipitate a major shift in the focus of tacit conflict management skill sets applied by the participants. The patient-Neurosurgeon relationship is abruptly transformed from one of high trust to one imbued with patient anxiety and suspicion of malpractice or medical error, and physician defensiveness. The observations also indicate that in multicultural Malaysia physician-family relationships were prioritized more than would be expected in a Western context. This may have implications for humanistic and interactive skills training for medical students and residents.

TABLE OF CONTENTS

SUPERVISORY COMMITTEE	II
ABSTRACT	III
TABLE OF CONTENTS	IV
ACKNOWLEDGMENTS	VI
DEDICATION.....	VII
CHAPTER 1: INTRODUCTION.....	1
Brief summary of research focus.....	1
Significance of the study.....	1
Research design.....	2
CHAPTER 2: BACKGROUND INFORMATION.....	3
Context of research – Malaysia	3
Healthcare systems	3
Multiculturalism	5
Urbanization	6
Medicolegal environment	6
Autobiographical elements	7
CHAPTER 3: LITERATURE REVIEW	8
The patient-physician relationship	8
Trust.....	8
Conflict in the patient-physician relationship.....	10
Adverse medical events.....	12
Error disclosure.....	13
Apology.....	16
Physician Factors in the patient-physician relationship	17
Cultural considerations in patient-physician interactions	20
CHAPTER 4: THEORETICAL FOUNDATIONS.....	23
Research aims and questions	23
Theory and conceptual framework	27
High-risk.....	27
Medical error, adverse events and malpractice litigation	28
‘Tacit knowing’ and conflict management by physicians	29
Heuristic Inquiry	30
CHAPTER 5: RESEARCH	36
Overview of chapter	36
Data collection method	36
Recruitment of participants.....	39

Interview questions	40
Data collection	40
Confidentiality protection	42
CHAPTER 6: DATA ANALYSIS.....	43
Central components of analysis.....	43
Process of analysis	44
CHAPTER 7: OBSERVATIONS	45
Introduction and overview of main theme.....	45
Individual Depictions	46
Composite depictions and thematic elements of the experience of conflict management.	52
A. Strategies for communication with family members	55
B. Socio-cultural factors.....	60
C. Impact of local medicolegal discourse and risk of negative publicity.....	62
D. Fee waivers and discounts	66
Illustrative portraits	67
Summary.....	73
CHAPTER 8: SUMMARY AND DISCUSSION	74
Overview.....	74
Socio-cultural ‘diagnoses’ of patients and families and the nature of physician communication skills	74
Impact of the local medicolegal discourse on Malaysian Neurosurgeons.....	79
Finances, fee waivers.....	85
Heuristic inquiry and tacit knowledge	86
Implications of observations	88
Conclusions.....	90
BIBLIOGRAPHY	92
APPENDIX	109
Appendix A: Request and Introductory letter to President of Neurosurgical Association of Malaysia	109
Appendix B: Participant consent form.....	113
Appendix C: Sample interview questions	118
Appendix D: Short pre-interview questionnaire.....	120
Appendix E – Neurosurgical training and practice in Canada and Malaysia.....	122
Appendix F ‘Tacit knowing’ and conflict management by physicians.....	126

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DEDICATION

For my wife Kiran, and my children Priya, Roshni and Arin, who have had to tolerate my absences through all of my studying, research and writing for this project.

Thank you for making this possible.

CHAPTER 1: INTRODUCTION

Brief summary of research focus

The conflict between physicians and their patients or their families in the aftermath of an adverse medical event requires skillful management, which if successful, generates satisfaction while reducing the risk of litigation. Experienced clinicians especially in high risk medical fields are likely to possess skills and knowledge that help them navigate the challenges of conflict with patients and their families. The main aim of this study has been to examine the experiences of Malaysian Neurosurgeons in managing communications with patients and their families in the aftermath of adverse medical events. These experiences will be interpreted from a conflict avoidance and management perspective.

Significance of the study

Results from studies in this field of research may be valuable in informing the training in humanistic and interactive skills for medical students, residents and even established practitioners. The value of medicolegal and bioethics training has been widely recognized. Information from my research may be likely to be of use in preparing guidelines for physicians about conforming to regulatory measures that govern their practices, be they legal or ethical in origin.

The skills used to manage conflict as a clinician are largely tacit and are reflexively applied and recognized variously as 'bedside manners', communication skills, or physician compassion. These nuanced skills warrant detailed description and translation

into interactional skills training for medical students and young doctors. Training in these 'soft' skills is usually delivered within medical education curricula as medical ethics and medical law courses. It is my belief that this integral component of medical education may be more effectively reframed as 'conflict management' training.

Research design

A qualitative methodology was used, applying heuristic analysis of the data derived from a series of in-depth interviews of the 11 candidates who are specialist Neurosurgeons in Malaysia, all with at least 10 years of independent practice. A 'high risk' medical specialty where the experience of adverse medical events was more likely was chosen for the research because of the opportunity to obtain richer data. Neurosurgery was chosen as an example of a high-risk medical specialty and the research was conducted with Malaysian Neurosurgeons as participants because of my own professional background.

CHAPTER 2: BACKGROUND INFORMATION

Context of research – Malaysia

Healthcare systems

A dual healthcare system with both private and public health services exists in Malaysia, serving a population in 2008 of 27.73 Million (0-14 yr: 8.87 million, 15-64 yr: 17.62 million, above 65 yrs: 1.23 million)¹. Although the development of the private medical sector is encouraged, the government has also invested in an extensive public healthcare system to cater for citizens unable to afford private care.

The quality of the Malaysian health care system has been improving over time and a higher health status has been achieved. For example, throughout the period of 1990 to 2005, life expectancy at birth increased significantly (males from 69.0 years to 71.8 years, females from 73.5 years to 76.2 years), the infant mortality rate fell (from 13.5 to 5.1 per 1,000 live births), whilst maternal mortality rate remained steady (at 30 per 100,000 live births). (Yu, Whynes, and Sach 2008)

In the public sector, the government provides health care services through a network of public hospitals and clinics nationwide with a total of 30,021 beds in 2005. (Yu, Whynes, and Sach 2008) The main provider is the Ministry of Health (MOH) and services provided are comprehensive, ranging from primary to tertiary care. Access to specialist services in the public system is via a national system of referral and these

¹ Source: Department of Statistics Malaysia Official Website. <http://www.statistics.gov.my/eng/index.php>

services are provided at designated hospitals usually in the state capitals or national capital Kuala Lumpur.

To allow an open door policy, public health services are heavily subsidized by the government; for example primary care services at health clinics are delivered almost free of charge. Each patient is charged a nominal fee of RM 1 (equivalent to US\$0.28 in 2009) for an outpatient visit. (Chee 2008). ²

Secondary and tertiary care services provided at hospital facilities are also highly subsidized. A total of RM 7.8 billion (equivalent to US\$2.4 billion) was allocated to the MOH for funding the public health services in 2005. (Yu, Whynes, and Sach 2008)

As to the private sector, there are 178 private hospitals (with a total of 11,118 beds), and approximately 5,000 private general practitioners in Malaysia. The development of the private health sector has been driven by the demands of the affluent. As a result private hospitals and practitioners compete to offer high quality health services, personalized care and ultramodern medical technology. They charge user fees to patients utilizing health services in order to operate and maintain their facilities.

As may be expected, the private sector offers the possibility of much higher earnings to medical practitioners compared to the public system. This results in an

² Gross National Income (GNI) per capita for Malaysia 2008: US\$ 13,230. Source: World Bank Group
 Website: http://ddp-ext.worldbank.org/ext/ddpreports/ViewSharedReport?&CF=1&REPORT_ID=9147&REQUEST_TYPE=VIEW_ADVANCED&HF=N&WSP=N
 Accessed 2 Nov 2009

internal brain drain as doctors leave public service after a compulsory 4-year period of government service.

Private facilities are monitored and regulated by the Malaysian government to ensure quality of service and standardization of fee structures. The regulatory environment was strengthened by the implementation of a Private Health Care Facilities and Services Act 1998. The Act expresses specific requirements for facility standards and the assurance of quality services in accordance with a National Quality Assurance Programme.

Patients have reasonably free access to specialists in the private sector, depending on ability to pay directly or through a system of medical insurance. A system of self referral or referral by private sector family practitioners generates competitiveness between specialists as well as private sector hospitals.

Overall, neurosurgical services are offered by 40 Neurosurgeons; 10 in public practice, 4 in University practice, and 26 in private medical practice with mixed training backgrounds and serving a population of about 27 million. All neurosurgeons are males. Most surgeons have a component of local specialist training with additional training in countries such as the United Kingdom or Ireland, Belgium, Singapore or Australia.

Multiculturalism

Malaysia, a former British colony is made up of three major ethnic groups; the majority Malay-Muslims, Chinese, Indians and smaller groups of diverse tribal ethnic groups in the East Malaysian states of Sabah and Sarawak on Borneo Island. Religious

freedom is enshrined in the constitution and as a result most major world religions are represented in the country. Malay is the national language and *lingua franca*, although English is widely spoken together with several Chinese and Indian dialects as well as a variety of other ethnic languages. (Gill 2005)

Urbanization

The foundations for the modern urban system in Malaysia were laid during British colonialism (1786-1957). After gaining independence from Britain in 1957, the rate of urbanization in Malaysia increased, from approximately 25% in 1960 to 65% in 2005 and is expected to exceed 70% by 2020. (Ho 2008) Influences of western culture, international travel and ready access to global media have significantly raised the healthcare expectations of the Malaysian public. (Yu, Whynes, and Sach 2008)

Medicolegal environment

Medical negligence law in Malaysia is tort-based and derived to a large extent from the English legal system. Cases from Commonwealth jurisdictions remain influential, while Malaysian case law in the field of medical malpractice has continued to develop over the last 20 years. (Kassim 2003) Most conflicts have been settled through court proceedings. However, options for alternative dispute resolution such as arbitration or mediation for medical negligence disputes are currently being explored³.

³ On July 24-25 2009 an ADR Conference on Medical Negligence was held at the Ahmad Ibrahim Kulliyah of Laws, International Islamic University, Malaysia. Conference Title: *New Directions in Solving Medical Disputes in Malaysia: is ADR a Viable Option?*

Autobiographical elements

I practiced medicine continuously from 1976 to 2004. My personal experience with patient-physician conflict has come from the clinical experience in a high-stress field, academic legal training and involvement with medicolegal concerns of doctors as the co-founder of a Malaysian Medical Defence Organization (MDO)⁴. This MDO currently provides indemnity and peer support for several hundred physicians in Malaysia.

During the course of my legal studies and in dealing with lawyers, the court systems, insurance companies, and medical organizations, I realized that the adversarial tort system of resolving medical malpractice conflicts was inefficient, expensive and damaging to the medical professionals involved while the only compensation for successful plaintiffs was monetary in nature.

I recognized the importance of preventing conflict escalation in the aftermath of adverse events, and that the knowledge that forms the basis for skilled conflict management outside of the legal setting is tacit, subliminal and applied reflexively. Successful conflict management requires the physician to incorporate a practical understanding of ethical and legal standards that govern medical practice, coupled with competent communication and interactive skills and empathy.

⁴ Medical Defence Malaysia Ltd <www.mdm.org.my>

CHAPTER 3: LITERATURE REVIEW

Most of the literature that addresses processes which form components of conflict management after adverse medical events either deals with the issues indirectly within the genres of 'error disclosure and apology', or variously as 'cultural competence', medicolegal literature, clinical communications skills training or the 'hidden curriculum' in medical education. There is a paucity of literature that directly addresses the phenomenon of conflict management by physicians.

The relevant literature for this project will be described under the following headings:

- a) The patient-physician relationship
- b) Error disclosure
- c) Apology
- d) Cultural considerations in patient-physician interactions

The patient-physician relationship

Trust

The perception of physician availability instills a profound sense of security and firms up the patient-physician relationship. The period after an adverse medical event where relationships are strained challenges the level of attachment and trust in that relationship to varying degrees. (Gerretsen and Myers 2008) Chalmers Clark in his 2002 review of the concept of trust in patient-physician relationships (Clark 2002)

summarized the challenges to trust that parallel the problems facing the medical profession in many countries; a heightened malpractice environment and a legalistic atmosphere surrounding treatment, commercialization of medical care, 'pay-before-we-treat' policies, depersonalization of treatment and a retreat from general to specialty practice. To this one may add the global challenge to the medical profession posed by the rising expectations of an increasingly educated patient. (Neuberger 2001)

The patient-physician relationship has evolved from the model of marked asymmetry in power and knowledge between a compliant patient and a paternalistic physician to a model of shared decision-making with greater patient control, reduced physician dominance centered mainly in the purely technical aspects of medicine and one which is described commonly as a patient-centered approach. (Beauchamp 2003; Childress and Siegler 2005; Kaba and Sooriakumaran 2007; Heritage and Maynard 2006)

The nature of physician reimbursement may also have an impact on the level of trust that a patient has in the physician. In a study by Kao *et al* the extent to which methods of physician payment affected patient trust were evaluated. In their study there seemed to be a significantly higher level of trust with patients who said they did not know how their physicians were paid. (Kao et al. 1998)

Several authors have addressed the issue of truth telling in medicine, exploring justification for withholding the truth and delayed or staged revelation of details of a patient's actual condition. (Berry 2008) The ethics of truth telling in medicine and the principles that should govern dialogues with families at times of critical illnesses of the patient where the prognosis is poor have been described extensively, particularly in the

nursing literature. (Anthony G Tuckett 2004; Carlos Henrique Martins Da Silva et al. 2004; White et al. 2007; Johansson, Fridlund, and Hildingh 2005)

Conflict in the patient-physician relationship

Conflict in medical settings has been defined as a dispute or disagreement or difference of opinion related to the management of a patient involving more than one individual and requiring some decision or action and the literature indicates that this appears to be a frequent occurrence. (Studdert et al. 2003; Breen et al. 2001)

Unresolved conflict with patients and their families over issues provoked by unwanted treatment outcomes is a recognized trigger for medical malpractice claims against healthcare professionals or institutions. (Vincent CA 1994) Conflict of various forms in the health arena is also an area of policy concern and has in recent times been recognized as a priority in physician training. (Saulo 2000; Saltman, O'Dea, and Kidd 2006)

The importance of correct strategies in dealing with communications with patients and families in the event of medical error has been recognized. (Hebert, Levin, and G. Robertson 2001) It has been recognized that physicians need to be responsive to their patients' and their families' desires for information, offer an apology if indicated, and provide assurance that appropriate steps have been taken to prevent others from being similarly harmed. (Liebman C 2004)

Physicians dealing with patients and families should consider factors such as culture, education level and language. (Hyun 2002; Hyun 2003; Jecker and Carrese 1995)

As global societies become increasingly multicultural, these are becoming crucial in the conflict management process and therefore more research in this field is justified.

The decline in physician dominance in decision-making is due in part to the evolution of the doctrine of informed consent, from being based primarily on a standard determined by the medical profession to one respectful of patient autonomy and based on a so called reasonable patient standard. (Faden *et al* 1981) In the US a change in the “system of alignments” between different parties in the health care system has been noted. Actions of consumers, coupled with the power of health care administrators and expansion of managed care, separately challenge physician dominance and also work together to intensify the challenge to physician dominance. (Hartley 2002)

Healthcare providers tend to initially respond to conflict using an avoidance response, shift to forcing if the conflict continues and resorting to problem solving as the last resort. (Rogers and Lingard 2006) In light of past experiences, it has been recognized that surgeons need to be capable managers of conflict partly because there is evidence that poorly managed conflict is responsible for some errors that result in adverse patient outcomes. (Gawande et al. 2003) Increasingly there are calls to pay attention to the role of empathy on the part of physicians when there is conflict arising from treatment complications. Studies show that the practice of medicine calls for physicians to learn to control their own feelings of anger and frustration. (Halpern 2007)

It is generally assumed by physicians that conflict is undesirable and destructive, yet if handled well, conflict, even in the healthcare environment can be productive. The positive outcome resulting can lead to clearer decision making and greater family,

patient and clinician satisfaction in the care of the seriously ill. (Back and Arnold 2005)

Several alternative dispute resolution (ADR) approaches to this form of conflict have been described, mostly in the context of avoiding a malpractice suit. (Holbrook 2008)

The literature also indicates that in a multicultural setting such as Malaysia, 'face' concerns may play a large role in the way patient-physician conflicts are avoided or negotiated. (Oetzel and Ting-Toomey 2003; Raduan Che Rose, et al 2007) Patient anger at physicians for a variety of reasons calls for a look at communications approaches in such situations. (McCord 2002)

An important account of the patient-physician interaction as a negotiation model respecting autonomy of both patient and physicians was by described by Childress and Siegler. This is a model that is relevant to this project, particularly in the context of specialized medicine in a pluralistic society where the physician and patient are relative strangers rather than intimates in the interaction. The ability to build trust in this type of relationship is contingent on certain procedural values being respected in the negotiation process. These values include adequate disclosure by both parties and voluntariness. (Childress JF and Siegler 2005)

Adverse medical events

An adverse event is defined as an "injury resulting from a medical intervention, not the underlying condition of the patient". (Kohn 1999) The challenge to the patient-physician relationship caused by adverse events is not always a result of medical error. However, the literature about adverse events in the last 10 years appears to be

predominantly about the legal position of open disclosure of error, institutional policies about error disclosure and attitudes, management and clinical practicalities about this practice.

Adverse events in Canada appear to occur at incidences of about 7.5% of which about 40% are potentially preventable. (Baker et al. 2004) There are no statistics available currently for the incidence of adverse medical events in Malaysia but given that it is a developing country there is no reason to suspect that it would be any lower.

Error disclosure

Error disclosure may mean different things to clinicians, administrators and patients and there are obvious discrepancies between the beliefs and behaviours of the various stakeholders. (Fein et al. 2007) Because there are legal implications that flow from error disclosure, there has been much debate about the repercussions and legal position of the various forms of disclosure by physicians or institutions. (Calvert et al. 2008; Straumanis 2007)

There is a genre of reports that offer advice about appropriate error disclosure techniques, incorporating ideas around communications skills training as well as the use of mediation skills. (Gallagher, Garbutt, et al. 2006; Liebman C 2004; Cohen 2004; Fallowfield 2003) Chan and co-workers in 2005 studied a group of surgeons in Toronto exploring how they disclosed errors to patients using standardized patients. They found that significant gaps existed between how surgeons disclosed errors and what patients preferred. (Chan et al. 2005)

The legal and ethical requirements for error disclosure have been explored in terms of the positive impacts that the timely exercise of disclosure would have on the patient's recovery and future treatment. With this information it then becomes possible to design preventative education and strategies to help institutional learning regarding patient safety. (Dickens 2003)

Several workers have also studied patients' and families' expectations and responses to error disclosure in detail. The form of disclosure appears to be a relevant factor, from the patient's perspective; a combination of open disclosure with apology and a clear articulation for a plan of follow up to deal with the problem was most acceptable to patients. (Bernstein M, Potvin, D, and D.K. Martin 2004; Iedema et al. 2008)

The 'shame and blame' culture in medicine, the law and polity still remains and that remains an obstacle in the patient safety movement, of which acknowledgement and disclosure of error plays an integral part. A systems approach to error disclosure has been promulgated in several US hospitals, with the hope that the patient-physician partnership is enhanced by the articulation of clear policies that allow for venting, apology and flexibility to promote resolution of any conflict. (Liang 2002).

It is now clear to healthcare providers and institutions in western societies that open disclosure remains on balance the best approach to dealing with patients and families in the aftermath of a medical error. (Hebert, Levin, and Robertson 2001; Fallowfield 2003; Lamb 2004; Gallagher and Levinson 2005) The situation in Malaysia with regards to open disclosure policies for medical error has not been established.

Whilst much has been written about the importance of error disclosure, little attention has been paid to the impact that errors have on physicians. There is evidence that physicians often deal with errors in dysfunctional ways (Goldberg et al. 2002) and that a vast majority of physicians, whilst admitting that error disclosure is an important practice, find that the disclosure of a serious error is a very difficult task because of issues of shame, legal risk and fear of losing the patient's trust. (Rowe 2004)

Comparative studies between US and Canadian physicians have shown that error disclosure experiences are similar despite marked differences in the malpractice environment. Feelings about error disclosure are mixed and barriers to transparency within the culture of medicine and surgery should be addressed. (Gallagher, T.H., Waterman, A.D. et al. 2006)

In a recent US study it was demonstrated that brief educational intervention led to statistically improved performance on a general understanding of medical errors. There was also an apparent dearth of baseline knowledge amongst a set of surveyed medical students about the subject of error, reinforcing the awareness for the need for this specific training in medical curricula. (Paxton and Rubinfeld 2009) Teachers at the School of Medicine at Johns Hopkins University now propose that the medical error recognition and disclosure be recognized as a 'seventh core competency' and suggest that residency programs should develop competence training in this area. (Christmas and Ziegelstein 2009)

Apology

The issue of apologizing to patients and their families in the aftermath of an adverse medical event due possibly to a medical error remains a controversial area. The predominant fear of apology is the risk of medicolegal consequences from the admission of liability in the course of the apology. (Creamer 2007) There are significant differences in the positions taken by physicians and malpractice defense lawyers with regards to the value and safety of apologizing for a mistake made in the care of a patient. These differences in opinion contribute to the confusion surrounding this topic. (J.I. Ausman 2006)

Recent studies demonstrate that patients will probably respond more favourably to physicians who apologize and accept responsibility for medical errors than those who do not apologize or give ambiguous responses. Patient perceptions of what is said during the 'apology' by the physician may be more important than what is actually said. The desire to sue may not be affected despite a full apology and acceptance of responsibility. (Wu et al. 2009; Robbennolt 2009)

Apology laws designed to reduce concerns about legal implications of disclosure and apology emerged in the United States in the 1990s as part of efforts to enhance medical error reporting and patient safety. Since then, physicians and hospitals have become more transparent, honest and open with early explanation of unforeseen outcomes. This, as well as early settlement offers by hospitals, has led to a dramatic decrease in malpractice claims. (Wei 2007; MacDonald and Attaran 2009; McDonnell and Guenther 2008)

Under Canada's constitution the provinces and territories are responsible for liability laws. The first Canadian apology legislation (Apology Act, SBC 2006, c 19) was passed by British Columbia in 2006 and this was followed by similar legislation in Saskatchewan, and later Manitoba, Ontario and Alberta. (MacDonald and Attaran 2009)

Physician Factors in the patient-physician relationship

Several factors have been described as being contributory to the reasons why physicians often find themselves the targets of criticism. Physicians are not trained in negotiation and are reluctant to admit that they need assistance in areas outside of medicine such as public relations or marketing. Egoism, sensitivity to criticism and perfectionism are widely encountered traits that contribute to the difficulty experienced with navigating medicolegal challenges. (Ausman 2003)

The stresses of lawsuits on physicians are heightened by unwillingness to tell people who support them. The result is a higher incidence of drug abuse and alcoholism, preoccupation and proneness to making errors amongst doctors who are sued. (Ausman 2003)

The need to support patients and their families in the aftermath of an adverse event is well acknowledged. Communication timeliness and quality have been recognized as being important influences on patients' responses to adverse medical events. Confronting an adverse medical event collaboratively has been found to help patients, families and providers with the emotional, physical and financial trauma and

minimize the anger and frustration that is often experienced in such situations.

(Duclos et al. 2005) Much less has been written about the need to support physicians in these situations both personally and professionally in terms of their emotional states as well as the institutional and personal process of learning from mistakes. (Manser and Staender 2005; van Pelt 2008; Meier, Back, and Morrison 2001)

Attention has been paid to job stresses amongst physicians arising from a combination of challenges in personal relationships together with the physical and emotional stresses precipitated by having to deal with unwanted outcomes of treatment and difficult interactions with patients and families. Mid-career burnout and dissatisfaction amongst specialists has been analyzed and described. (Spickard, Gabbe, and Christensen 2002; Zuger 2004; Falkum and Vaglum 2005) The ability to accept criticism from colleagues while feeling responsible for adverse medical events has been examined, (Aasland and Forde 2005) and the psychological impacts of physicians of experiencing a medicolegal matter have been studied. (Nash et al. 2007)

The challenges in contemporary academic neurosurgery are vast. They arise from a diverse range of sources from increasing regulatory control, malpractice insurance costs, decreasing reimbursement and the demands of teaching, added to challenges in patient-physician relationships arising from increasingly high expectations. (Black 2006)

Much attention has been paid to the humanistic and interactive qualities of physicians in the last 10 years, from both the clinical practice as well physician-training perspectives. Physicians are increasingly being encouraged to grow past merely being adept with patient-centered communication to the development of firm and diverse

conflict management skills. Patients' opinions are being researched to better understand what qualities are valued in order for them to consider a physician a 'good' physician. (Zandbelt et al. 2006; Schattner, Rudin, and Jellin 2004)

Physician empathy is a topic that has received much research attention, being described as a core component of patient-centeredness in clinical practice. A major thrust in the research has been the development of an innovative conceptual model of empathy that is based on a psychosocial conception of attitude. In fact the role of empathy has become iconic in the growing medical humanities movement in the USA and UK, its role being elevated to one of the accredited "skills" required for the American Council for Graduate Education. (Irving and Dickson 2004; Kim, Kaplowitz, and Johnston 2004; Larson and Yao 2005; Halpern 2007; Macnaughton 2009)

Communications challenges occur between physicians and patients for a variety of reasons, from differences in opinions about the nature and treatment of illness, to the occurrence of severe complications and unexpected deaths. The value of training of physicians (even experienced ones) in communications skills has been recognized and written about extensively. (Lau 2000; Vanderford et al. 2001; Back et al. 2005; Anselm et al. 2005)

Competence in the delivery of bad news has also been described widely in the last 10 years by many authors. (Gillotti, Thompson, and McNeilis 2002) The personality profiles of physicians and ability to be mindful obviously have a bearing on the effectiveness of communication skills training. (Epstein 1999; Clack et al. 2004) More recently physicians' humanistic skills have been described as 'emotional intelligence'

that informs the quality of communication in the patient-physician relationship.

(Weng et al. 2008)

The application and the dynamic of tacit knowledge in medical practice has been recognized and described by several authors (Thornton 2006; Sturmberg and Martin 2008). It is increasingly recognized that much of medical progress in modern times can be attributed to “an evolution from tacit to explicit knowledge, and its sharing by other groups including patients and the public”. (Wyatt 2001)

Learning of humanistic skills by students has been delivered in an erratic and inconsistent manner by the observation of mentors in what has been called the ‘hidden curriculum’ in medical education. (Suchman 2007; Spencer 2004; Schuwirth and Cantillon 2004) Calls have been made to enhance this hidden curriculum by incorporating ‘explicit’ interactive skills training in medical schools. (Hafferty 1998; Cottingham et al. 2008; Branch et al. 2001)

Cultural considerations in patient-physician interactions

The impact of culture on the practice of clinical medicine has been explored extensively from several perspectives. The prominent discourse in the literature appears to be from the perspective of clinical practice in environments where English is the language of medicine and where race, ethnicity and language of minority groups influence the quality of patient-physician relationships and access to healthcare. (Orr 1996; Ferguson 2002; Ells 2002; Barr 2004)

Cultural differences between patients and families and their physicians are a potential source of conflict in a variety of clinical settings and there is a genre of literature that addresses these areas of conflict. Much attention has been paid to the need to train and orientate physicians in cultural sensitivity and competence as they navigate their way through relatively “uncharted territory”. (Gorlin R 2001) Writing in this medical field has been influenced significantly by anthropologic and cross-cultural research. (Kleinman 1978; Jecker and Carrese 1995; Doescher et al. 2000; Marshall 2004; Paasche-Orlow 2004; Bowman 2004)

The role of the family in medical decision-making has been addressed in a variety of healthcare contexts, from family practice, to end-of-life decision-making and informed consent. From a cultural conflict perspective the role of the family is seen often as a complicating factor in the considerations that involve patient autonomy. (Hardwig 1990; Hyun 2002; Charles et al. 2006; Schäfer et al. 2006) This is especially prominent in non-western cultures and therefore notions of decision-making based on autonomy especially in the aftermath of adverse events has been recognized as an important field worthy of further exploration. (Moazam 2000; Hyun 2003; Hanneke de Haes 2006; Ho 2008; LeBlanc et al. 2009)

Several researchers have found that cultural considerations figure prominently in the patient-physician relationship when end-of-life decision-making is called for and culturally effective approaches are therefore of value. (Crawley et al. 2002; Bowman and Richard 2004; Searight and Gafford 2005) Family conferencing to address end-of-life decision-making calls for a high degree of cultural awareness and sensitivity on the part

of healthcare providers (J.R. Curtis et al. 2005; Lautrette et al. 2006) especially if this form of interaction requires the disclosure of medical errors. (Berlinger and Wu 2005) Avoiding future patient-physician-family conflict by an ethically and legally sound consent-taking process is necessarily informed by appropriate cultural considerations and incorporation of the opinion of family. (Kuczewski 1996; Marta 1998; Kuczewski M. 2001; Klitzman 2006).

In Asian countries and amongst immigrant Asian cultures in a western setting, several authors have described contextual and culture-specific adaptations to the understanding of the doctrine of informed consent. (Pang 1999; Fan 2004; Cong 2004) Comparisons of US and Japanese attitudes to the doctrine of informed consent have also been described. (Annas and Miller 1994; Asai 1996; Akabayashi and Fetters 2000; Ohnishi et al. 2002; Akabayashi and Slingsby 2006). The contextual considerations of informed consent in Malaysia have also been addressed by several authors. (Kassim 2003; Che Ngah 2005, Yousuf et al. 2007)

CHAPTER 4: THEORETICAL FOUNDATIONS

Research aims and questions

As noted earlier one of the main aims of the study was to examine the communication skills used by specialist Neurosurgeons in Malaysia in dealing with patient-physician conflict in the aftermath of adverse medical events.

The following key questions stem from the research aims:

- a) What are the factors that Malaysian Neurosurgeons take into consideration when dealing with patients and families in the aftermath of adverse medical events?
- b) What is the influence of the overarching local medicolegal discourse on the manner in which patient-physician conflict is managed?
- c) Are there a range of tacit conflict management skill sets utilized by medical specialists, and if so, will their description better inform the knowledge base for the training of medical students and physicians in humanistic and interactive skills?

a) What are the factors that Malaysian Neurosurgeons take into consideration when dealing with patients and families in the aftermath of adverse medical events?

The focus of this question is to explore and to understand the factors considered consciously and subliminally by Malaysian neurosurgeons when dealing with the

complex range of responses of patients and their families when unexpected treatment complications occur. These complications may be the result of errors or remain unexplained, but cause major changes and tensions in the patient-physician relationship. This relationship which is built on trust and the physician's fiduciary responsibility for the patient is abruptly challenged by the disappointing clinical outcome and compounded by the suspicion of negligent care and the threat of medicolegal consequences.

b) What is the influence of the overarching local medicolegal discourse on the manner in which patient-physician conflict is managed?

A degree of fear and uncertainty exists amongst physicians regarding the medicolegal 'safety' of dialogues following adverse medical events. The uncertainty about the legal consequences of error disclosure and apology in these circumstances may arise from anxiety that such dialogues may be construed as an admission of liability. The uncertainty is often reinforced by the standard 'gag orders' delivered by legal advisors of hospitals and physician defence organizations. (McCullough 1999; Goodman 2005) The result of this anxiety may well be the truncation and limiting of communication and engagement with patients their families precisely at a time when empathic dialogues could contribute to prevention of conflict escalation. Rather than encourage collaborative decision-making about future steps in the treatment plan, the patient-physician relationship now strained by litigation anxiety on the part of the

physician may result in lost opportunities for conflict resolution in the early aftermath of adverse events.

c) Is there a range of tacit conflict management skill sets utilized by medical specialists, and if so, will its description improve the knowledge base for the training of medical students and physicians in humanistic and interactive skills?

Some physicians are clearly able to navigate the consequences of adverse medical events better than others. Physician personality, number of years in practice, personal experience with medicolegal matters and type of specialty are some of the more predictable factors. However there are skills that are conventionally labeled as ‘communication’ skills or broadly as ‘empathy’ that are tacit and applied subliminally, which do not fall clearly into the latter categories.

For a comparison of the profiles of Neurosurgical training and practice in Canada and Malaysia please see Appendix E

Nature of Neurosurgeon-patient/family relationships in Malaysia

Expectations of the public for perfect outcomes of treatment are a challenge to neurosurgeons as with most other surgical specialists. (Hoff 2004; Grewal and Singh 2008) Neurosurgery has remained at the forefront of scientific innovation in the last 20 years with improvements of imaging that have simplified the diagnosis of brain and spine conditions, and technological advances contributing to safer and more efficient operative surgery. (Apuzzo, Elder, and Liu 2009)

These developments however come with raised public expectations for results of the treatment of a spectrum of nervous system conditions that still remain essentially complex and life threatening. These high expectations with the risks of not being able to fulfill them have meant that practitioners are being called to pay serious attention to risk warnings and the process of obtaining valid informed consent. (Lemaire 2006; Schmitz and Reinacher 2006)

In Malaysia medical decision-making by patients is often made jointly with family, and this societal characteristic may be related to the common practice of depending on better-educated family members for interpretation of medical information. This form of decision-making may on occasion challenge the physician's need to respect patient autonomy, as family members frequently attempt to dictate whether the explicit description of the patient's condition, prognosis or seriousness of the operation is withheld from the patient himself or herself. Waiver of the right to consent by deference to the young and educated in the family is a common phenomenon. (Hyun 2002; Hyun 2003)

A high-trust patient-physician relationship in a Malaysian context implies an equally strong relationship with the family members and this becomes particularly evident when the care of the patient is complicated by adverse medical events or decision-making for end-of-life issues. The quality of a patient-physician relationship may be inseparable from the quality of a patient/family-physician relationship.

Theory and conceptual framework

High-risk

The expression 'high risk' to describe certain fields of medicine is used in several contexts. In medical malpractice insurance terms, specialties are labeled "high risk" on the basis of the risk of litigation as assessed by their claims experience. Those most commonly classified thus are emergency medicine, general surgery, neurosurgery, obstetrics/gynaecology, orthopaedic surgery and thoracic surgery. (Pyscoty 1990; Studdert et al. 2005) Over the last two decades malpractice premiums or membership of medical protection organizations for Malaysian physicians has increased steadily and there seems to have been a disconnect between the level of premiums paid by doctors and the local medicolegal claims experience.⁵ The Medical Protection Society of the United Kingdom rates Neurosurgery alongside Plastic Surgery in the second highest category of medical litigation risk, below the 'highest-risk' field of obstetrics.⁶ It may be expected therefore that medical practitioners in that field are likely to experience adverse events and associated conflict with patients and families more than those practising in lower risk specialties.

⁵ Source: Website of Medical Defence Malaysia, accessed on 26 Aug 2009.
<http://mdm.org.my/areas.php>

⁶ Medical Protection Society of United Kingdom Specialty Groupings
 Internet source: downloaded 14 May 2008
<http://www.medicalprotection.org/adx/adxGetMedia.aspx?DocID=391,74,62,11,Documents&MediaID=4708&Filename=UK+Hospital+Doctors+and+Private+Specialists+subscription+rates.pdf>

In clinical terms however, a high-risk specialty may be described as one in which the range of medical conditions treated carry a particularly increased risk of complications that may be limb or life threatening. Neurosurgery represents a medical specialty that epitomizes both these understandings of the expression 'high-risk'.

Medical error, adverse events and malpractice litigation

At this point no single definition of medical error commands universal acceptance (Dovey and Phillips 2004) but one of the most widely applied definitions is the formulation issued by the Institute of Medicine (IOM) in 1999. (Kohn 1999) A medical error was defined as "the failure of a planned action to be completed as intended (error of execution) or the use of a wrong plan to achieve an aim (error of planning)". Because of potential complexity of the facts of any case, it can be very difficult to pinpoint a specific medical error as a cause of an adverse event soon after it occurs. Differing interpretations of what went wrong and when, the patient's pre-existing health conditions, and multi-disciplinary management of patients together add different diagnostic complexity to establishing the cause of any error.

Several researchers have documented the relationship between poor physician-patient communication and litigation. (Hickson et al. 1992) However, their findings on the factors that put physicians at risk of being sued are contrary to what common sense would indicate. It appears that it is not the quality of the medical care or the quality of chart documentation or negligent treatment per se that most often leads to litigation but rather, ineffective communication with patients. (Levinson et al. 1997)

The chief factors leading patients or their families to sue physicians include the families' perception that the doctor was not completely honest and the inability of the patient or family members to get information or to have their questions answered about what really caused the adverse event. It has also been demonstrated that the families that sue have often been told by someone (such as a health care professional but rarely a lawyer), that they should seek legal redress. (Hickson et al. 2002) In a 2001 German study, Krause and co-workers analyzed the causes of patient discontent leading to litigation and found that the majority of lawsuits in their series were triggered by misunderstandings between patients and doctors rather than treatment errors *per se*. (Krause, Bremerich, and Rustemeyer 2001)

Research also shows a mismatch between what patients want and what physicians provide following an adverse event or medical error. (Gallagher 2003) Contrary to the understanding of many physicians, patients do indeed expect basic information about the adverse event or assurances that they will not suffer financially because of it. Some want an apology or reassurances that similar events or errors would not occur in the future.

‘Tacit knowing’ and conflict management by physicians

[Please see Appendix F for a relevant discussion of tacit knowledge as may be applied to conflict management by physicians]

Heuristic Inquiry

This research project addresses a specific area of doctor-patient interactions, namely the phenomenon of conflict management in the event of adverse medical events, including those related to possible error on the part of the Neurosurgeon and his or her team.

Qualitative methodology was deemed the best-suited approach to the research, since the primary focus was to analyze the essential structures and meanings of a lived experience (Polanyi 1976) of patient-physician conflict from a perspective of having practised as a Neurosurgeon in Malaysia. This methodology allowed me to explain rather than predict, and pose understanding rather than solve problems. I was attracted by the philosophical ideal of “searching for the essential, invariant structure or essence” (Creswell 1998) by describing in depth, the experience of co-researchers with very similar lived experiences.

There is a tendency in a grounded theory approach to assume that there is an objective truth waiting to be revealed and that another researcher given the same data will find the same truth. It was felt that this assumption was probably not true for the type of research I planned to conduct, given the topic and the characteristics of the participants I interviewed. I wished to capitalize on the deep connection to the experiences of the Malaysian Neurosurgeons whom I studied and the need to bracket my experiences in the process of a grounded theory approach appeared to risk failure to capture data comprehensively. It appeared to be wasteful to have to disregard any information that emerged during intersubjective moments in my conversations with the

participants. A grounded theory would potentially have required discarding of potentially significant data acquired as a result of such interactions.

The research was conducted in a mixed cultural environment. Interviews, although conducted in primarily in English, involved the use of local language/s, colloquialisms, jargon, and a mixed bag of nuanced slang, medical humour, and an element of non-verbal expressions. Because of these variants I had reservations about using a grounded theory approach and with it the breaking down of the potentially rich and complex data into small codes (that too, *only* in English). I feared that I would lose some of the nuances in the conversations because of difficulty in coding caused by inaccurate or incomplete translation. I also feared that consciousness of the rules of the grounded theory approach would influence the structure and direction of my conversations with the candidates in such a way as to elicit the sort of data that would ultimately be more easily handled at the time of data analysis using this methodology.

At the level of magnification that I chose to look at conflict management it seemed necessary to remain open to the structures inherent in the participants' 'tacit knowledge' itself, and to express those in the very terms that this tacit knowledge⁷ suggested. This would be preferable to starting with a coding schema on the presumption that all data must ultimately be satisfactorily accounted for by it.

⁷ Tacit knowledge is one of two main categories of knowledge, the other being explicit knowledge. Tacit knowledge or rather 'tacit knowing' is a process rather than a static form of knowledge. Tacit knowledge has been described as being highly personal, non-linguistic and deeply rooted in individual experiences, ideas, emotions, and values

Heuristic inquiry is an adaptation of phenomenological inquiry but explicitly acknowledges the experience of the researcher to the extent that the lived experiences of the researcher become the main focus of the research. The transformative effect of the inquiry on the experience of the researcher becomes explicit in the process of heuristic inquiry. (Hiles 2001) In this form of research the investigator must have had a "...direct, personal encounter with the phenomenon being investigated. There must have been actual autobiographical connections." (Moustakas 1990)

Patton credits Clark Moustakas, a humanistic psychologist, psychotherapist and scholar for having developed 'heuristic enquiry'. (Patton 1990) Heuristic inquiry allows the personal experiences and reflections of the researcher to validly influence the research questions and method. (Douglass and Moustakas 1985; Moustakas 1990) This approach yields no hypotheses, but rather a subjective concept validated by the participants in the study. As Moustakas stated, "The power of heuristic inquiry lies in its potential for disclosing truth. Through exhaustive self search, dialogue with others, and creative depictions of experience, a comprehensive knowledge is generated... passionate yet disciplined commitment is vital." (Douglass and Moustakas 1985)

Heuristic inquiry bears some resemblance to the idea of 'lived inquiry' developed by John Heron. (Heron 1998)

The word heuristic comes from the Greek word *heuretikos*, which means, “I find” and is related to the word “eureka”⁸. (Craig 1978) The nature of my pursuit to cast light on a focused problem is intimate and authentic and the data that has been recorded is original and has autobiographical elements to it. It accurately describes the textures and structures of my lived experience.

As Douglas and Moustakas describe further, heuristic enquiry is not concerned about measurements but with meanings, with essence and not appearance, with experience and not behaviour and with quality and not quantity. (Douglass and Moustakas 1985) Many of the goals of heuristic enquiry described in the preceding paragraphs may seem to fall under the description of phenomenological enquiry.

According to Douglas and Moustakas however, there are several important differences:

1. Whereas phenomenology encourages a kind of detachment from the phenomenon being investigated, heuristics emphasizes connectedness and relationship.
2. Whereas phenomenology permits the researcher to conclude with definitive descriptions of the structures of experience, heuristics leads to depiction of essential meanings and portrayal of the intrigue and personal significance that imbue the search to know.
3. Whereas phenomenological research generally concludes with a presentation of the distilled structures of experience, heuristics may involve reintegration of derived knowledge that itself is an act of creative discovery, a synthesis that includes intuition and tacit understanding.
4. Whereas phenomenology loses the persons in the process of descriptive analysis, in heuristics the research participants remain visible in the examination of the data and continue to be portrayed as whole persons. Phenomenology ends with the essence of the experience; heuristics retains the essence of the person in experience.

⁸ Etymology: Greek *heurēka* I have found, from *heuriskein* to find; from the exclamation attributed to Archimedes on discovering a method for determining the purity of gold (Merriam-Webster Online Dictionary, accessed 26 Aug 2009)

(Douglass and Moustakas 1985)(Douglass and Moustakas 1985)(Douglass and Moustakas 1985)

Heuristic enquiry offers an approach that has a design, a methodology and an application that is acceptable in human science research. A heuristic research approach has allowed me to reintegrate the knowledge obtained and produce an amalgamation of my observations, which include knowledge held by the participants as 'gut feeling' or intuition. It therefore allowed me to explore the 'tacit dimension' (one that is felt but is difficult to put into words) within the participants and myself. (Polanyi 1966)

I approached the participants in the research with a "disposition to search for certain themes" (Oakley 2000) and later to immerse myself in the data during the phase of analysis. This approach enabled me to hear meanings in the words and stories emerging from the material I recorded during interviews, which for this reason were only partially structured. The view of this research field was co-created and understood in depth by me as I was actively engaged in it by including my own internal processes. I ultimately understood the meaning of the phenomenon as tacit knowledge. (West 2001)

Moustakas (Moustakas 1990) described certain 'core processes' in heuristic enquiry, which I have reflected upon. Heuristic enquiry involves the examination and discovery of the essence and themes of the phenomenon that is being researched. Unlike quantitative research where there is a linear progression from data collection to analysis, heuristic data collection and analysis are simultaneous and run in parallel.

The first phase of heuristic research involves an immersion with deep interest in the phenomenon that was fascinating to a researcher. My first interest in studying this

phenomenon arose during the times of difficulty in dealing with conflict with patients after adverse medical events and also while observing colleagues go through medicolegal challenge and adverse media publicity. I began to shift my focus from the technicalities of medicolegal defence to alternative dispute resolution systems and later to conflict management skill development.

Physicians like everyone else, have different behaviours in different conflict situations, as described by Thomas and Kilmann in their conflict mode instrument. (Thomas and Kilmann 1974) These differences in conflict management behaviour impact the degree of success in navigating the different forms of conflict in clinical practice. There is value in scientific analysis of the experience of conflict in clinical practice primarily because much of medical training fails to prepare physicians for what could be a significant determinant of their effectiveness and holistic success as a clinician.

CHAPTER 5: RESEARCH

Overview of chapter

The contents of this chapter will be presented under the following sections:

- Data collection method with a note on limitations of the method
- Recruitment of participants
- Interview questions
- Data collection
- Confidentiality protection
- Ethical considerations

Data collection method

In-depth semi-structured individual interviews of 11 Malaysian Neurosurgeons were conducted. Of the 11 surgeons, 7 practiced in the nation's capital Kuala Lumpur and the rest in Penang, an island off the west coast of northern Malaysia.

The clinical practice contexts of the participants is summarized as follows:

Neurosurgeons in private practice alone	8
Neurosurgeons in public practice alone	1
Neurosurgeons in public teaching hospital practice with in-house private practice privileges	1
Neurosurgeons in private practice with teaching hospital privileges	1

Open-ended questions were asked and the conversations were recorded on a digital recording device with an analogue 'back-up'. This approach created the opportunity to best communicate the phenomenon being researched. Because of my professional background in Malaysia it was not difficult for me to demonstrate confidence with the topic, quickly engage in the conversation and to elicit full cooperation of the participants. In all the interviews we operated in an atmosphere of open and comfortable collegial dialogue, wherein the participants had minimal or no anxiety with expressing themselves freely.

I took into consideration the approach described by Oakley (Oakley 1981) where the interviews were allowed to become guided conversations in which the participants and I both shared information and contributed to the research process. Personal attitudes of the participants to a variety of patient and family profiles were thus elicited, and also a measure of the impact of the law on dialogues was discussed with a degree of openness.

This sort of data was unlikely to be obtainable by other forms of data gathering such as written surveys. With the interview method, unique opportunities were created for me to enter into these 'margins' of medical experience in order to best obtain information about the skill-sets in play. This approach allowed the participants and me to engage in what was for us, a unique experience of reflecting on our own behaviours and attitudes in the aftermath of dreaded adverse medical events in Neurosurgical practice.

A combination of semi-structured interviews and interactive spontaneous questioning (Kirby 1989) served my research purposes well. The flexibility produced by such a format allowed opportunities for the participant to influence the interaction positively, while at the same time maintaining the focus of the research. I discovered that this open form of interaction was the most productive of ideas and insights, given my understanding of the personality types of the participants and my professional relationship with them. This method also allowed the participants the freedom to withdraw from or to postpone the interview at any point, and also to reflect further whether to address certain questions.

Limitations of this method

This research method had some limitations. A western, scientific medical model defined the knowledge base and medical lenses of the participants and the interviewer. The participants practiced in a medico-legal milieu significantly influenced by the English legal system and this determines to a degree the legal standards of risk disclosure, error disclosure and apology.

The heuristic method of research unfortunately does not allow generalization, and this is likely to be the main constraint to be expected in my project. Additionally, as I have been passionately involved with the subject matter and was searching for others with similar experiences as my own, being objective was recognized as a potential challenge throughout the process of gathering and analyzing the data.

Recruitment of participants

A letter was sent to the President of the Neurosurgical Association of Malaysia (NAM) requesting his introduction of suitable participants for the research including their email addresses and other contact details. (See Appendix A) Permission was also obtained from him for me to contact the recommended participants directly. One of the criteria for selection was that the participants would have at least 10 years of independent clinical practice as a Neurosurgeon.

Once permission was secured from the NAM, an introductory email that contained my resume and relevant introductory details about my research project was sent out to the participants. Upon obtaining indication of willingness to participate in the project an interview guide was next sent to them.

The interview guide contained a detailed overview of the research focus that described the phenomenon being investigated, provided a list of the interview questions, relevant disclosure information and the consent documentation that they would be required to sign. (See Appendix B) An indication about the participant's comfort with audio recording and note taking as recording methods was obtained, and assurances of anonymity were given. Preparation of the physician in this way allowed the participant to think about the research questions in some depth prior to the interview.

Interview questions

A set of structured interview questions was designed to engage the participant in a discussion about factors taken into consideration in the interactions with patients and families in the aftermath of adverse events, framing as clearly as possible the context of the phenomenon I was investigating. (See Appendix C) The Neurosurgeons who agreed to participate were sent a short pre-interview questionnaire to obtain some basic data by email. This measure was aimed at saving time for information collection at the actual interview. (See Appendix D)

Data collection

Interviews of 11 Neurosurgeons were conducted in Malaysia over a 12-day period in July of 2008. Signatures on the research consent forms were collected from the participants immediately prior to the commencement of the interview sessions. Data was recorded by gathering personal notes and observations and by transcribing the recordings of the interview, and also keeping field notes and memoirs that identified themes and patterns. I transcribed the interviews personally upon return to Canada, managing the security of the electronic data as detailed in the participant consent form in Appendix B.

The average time for each interview session was in the region of 90 minutes. A choice of different interview settings was offered to each participant, creating as much flexibility as possible to ensure that the participant was unencumbered by constraints of work pressure or interruptions. The interviews were conducted in the surgeons' clinics

(6), hotel rooms where I was staying (4), and in an outdoor restaurant in only one instance.

Participants were encouraged to feel free to introduce areas of conflict for consideration. At the end of the interview they were asked a general question about the types of conflict encountered in their practices, quite apart from the conflict that was the subject of this project. This helped me identify areas for future research in conflict management as applied by physicians in high-risk medical fields.

My role as a researcher and not as a senior professional colleague needed to be established clearly in the beginning of the interviews. Ensuring that the participants understood this, coupled with the assurances of confidentiality contributed to the atmosphere of trust in the interaction. This trust allowed us to explore some personal experiences that had a high emotional content - areas that these Neurosurgeons would probably rarely engage in conversations about, even with other practicing Neurosurgeons.

Dialogues with the participants were kept as informal as possible and this allowed for kindling of ideas and introduction of other scenarios of conflict experience in our discussion. It also allowed our conversations to flow freely to explore deeper aspects of personal insights on their part and of mine as well.

Confidentiality protection

Approval for this project was obtained from the Human Research and Ethics Board of the University of Victoria, and protection of participant confidentiality was ensured according to the Board's regulations. All the interviews were conducted in a private setting and all attempts were made to level the status of researcher and participant. . There was no patient participation in this study. The information gathered was easily deidentified and there was no human experimental element incorporated in the study design.

Participants were assigned a pseudonym and the master-list of pseudonyms was destroyed at completion of the data analysis. Analogue voice recordings made as a back-up were erased once the digital recordings were successfully uploaded onto the researcher's computer and password protected. The files on the digital recording device were then deleted. Transcription and coding was carried out with all identifying features removed. All audio files were kept under lock and key and hard copies of all interview notes and transcriptions were shredded. Data from this study in electronic form remains under the control of the researcher and has not been stored in an institutional or electronic storage system with public access. At the completion of the project all electronic data will be deleted.

CHAPTER 6: DATA ANALYSIS

As anticipated, the data (notes, jottings, and the audio-recorded interviews) were of large volume and diverse, given the participant selection as well as the subjective nature of the responses to interview questions. A system of filing and coding the various components of data and groups of data was devised, to allow for efficient recall and relocation.

Central to the organization of the data was the basic information about the phenomenon that the research aimed to reveal, which was the conflict that individuals amongst this group of surgeons experienced in a specified type of clinical interaction with patients and their families.

Central components of analysis

Individual depictions of the 11 Neurosurgeons interviewed were developed and two of these are presented with other research findings in the next chapter. These will be presented in narrative form with a view to preserving the individuality of the picture of each surgeon while meticulously protecting privacy.

Formulation of composite depictions was the next step in the process where the individual depictions were built up around common themes and patterns. This composite contains narratives and commentaries and verbatim quotations that highlighted the vitality of the individual experiences.

As recommended by Moustakas, two 'exemplary portraits' were selected which best described the essential profile of the group. (Moustakas 1990) These differ from

the individual portraits in that the focus is on the participant as a unique individual and as a member of the group who experienced the same phenomenon. The individual depiction answers the question, “What is the personal experience?” whereas the exemplary portrait describes who the person is, behind the experience.

Process of analysis

Individual depictions were developed on the basis of the interview conversations that were transcribed and coded for themes. Field notes were taken before and after each interview and the unique backgrounds of the participants including their training backgrounds and professional practice settings were considered.

Interviews were transcribed by me personally and later coded according to the broad themes that were derived from the sets of questions asked, as well as the general gist of the responses that I obtained. For example, one of the major features that affected the Neurosurgeon’s approaches to conflict was whether he had experienced any medicolegal challenge in the past.

Developing the composite depiction followed upon the exercise of searching for interrelations and patterns between the narrower, focal elements themselves as well as their relationships to the broader themes.

CHAPTER 7: OBSERVATIONS

Introduction and overview of main theme

This chapter provides the results of the data analysis described in the previous chapter. The components include individual depictions, a composite depiction and illustrative portraits. Together they illustrate the heuristic research process, as well as the experience of conflict as experienced by Malaysian Neurosurgeons after adverse medical events.

Overall, the results of this study indicate that when an adverse medical event occurs a key shift in the balance and tone of the patient-physician relationship occurs.

Conflict management takes place in this new context:

A high-trust relationship characterized by confidence of the patient and family in the physician

- abruptly transforms into:

A relationship injected with doubt, anxiety, loss of confidence, suspicion of mismanagement or error, and adversarial posturing

- demanding different set of skills and new ethical/legal considerations to manage all future communications with the patient and family

The observations of the research are located in the context of this unexpected and precipitous shift in the patient/family-physician relationship. The key theme and

thematic elements will be discussed in detail in the composite depiction but also in the individual depictions.

Individual Depictions

These depictions are a summation of the participants' experience of the phenomenon being investigated. The function of the individual depiction is to collect the mosaic of data that is obtained from individual participants and therefore these depictions are working documents from which a final analysis is based. Moustakas (Moustakas 1990) does not view it as necessary to include the individual depictions in the final report.

I have however chosen to include 2 individual depictions from a total of 11 to provide a common idea of the overall heuristic process. They are derived from the interviews, written in the first person to retain proximity and although verified by the participants, are framed and interpreted by me. Fictitious names are used.

The intensity and impact of the change in patient-physician relationship

The following two individual depictions highlight the changes to the dynamics of patient-physician communications after adverse medical events. .

KL01's story

Sometimes I tell the family....you trust me, have faith in me and many times when you do that there are very little or less complications. The only problem I find is complications come when you are treating doctors, or friends who are very anxious and highly strung...you know....somehow or other things don't go well then. I don't know why but it is a common

thing....the more difficult the relatives are, then you worry, then you start protecting yourself. But one cannot be too arrogant or too tight about this.

I think we have not only to study the patient - we have to study the relatives. You cannot make a decision about them too easily...it takes time. When things go wrong it is usually not a problem handling the patient, you know....it's handling the relatives. If it's good times, no problem, it's ok. "You are the best!". In our field Neurosurgery we have a lot of morbidities and mortalities, it is different.

After my bad experiences I consider that everyone can potentially sue, even your best of friends. For example, this patient whom you know about. I went to his house and had lunch and his wife asked me "Do you have insurance?" Of course I said I have insurance, and she said, "Ok then we will sue you".

Yes it seems like no offence was meant but when your name goes from up there (gestures to ceiling) to years of lawyers and meetings and reports...it is a pain.

Sometimes it is not the family – it is the people who 'cucuk' (Malay word for 'provoke'), the instigators, the family members who know a bit of medicine or have some law background or some smart ass, they will ask, "Did the doctor tell you this?". These are some external factors that you don't know about.

The problem comes if you do not emphasize all these potential complications....before major surgery for a big tumour for example, the whole night before I will be very anxious. It's like golf – you hit a good hole, get a birdie and in the next hole you may be in the water! Previous successful surgery does not mean a thing. So keep on repeating, keep on repeating. It's no point telling them I've done thousands of these – it's just that you have more experience, but still things can happen. Anything can happen. Even before pushing the patient to the operating theatre I will talk to the wife or husband or the closest person who is present. I will say, "Now it is the time to go". For the Muslims I will say, "Hope for the best, pray and we'll try our best, and hope for the best". I prepare them.

I think the most important thing is communication with the patient and the family – you have to do some trust-building and communicate. The more complex the situation the slower you should move towards surgery and also offer some names for a second opinion. A lot of times they say, "OK doctor, carry on". Communication is very important – you need to

make time to communicate, and give them options. If you start in the beginning it prevents a lot of problems.

I ignore any directions from medical defence organizations regarding not apologizing. As you learn, I think the most important is the communication with the patient and the family. If there is a problem I apologize – it is not because of my negligence or guilt. I don't have a problem apologizing. If it is a Muslim family I say, "Minta maaf" (I ask for your forgiveness). God can forgive. I have to ask for forgiveness from other human beings. Religion comes in here – I ask for forgiveness and a few times I have visited the home of the patient before the funeral as a sign of respect not guilt. I am careful not to go over the limit. I have visited a Buddhist family once even though they were quite bitter. As a mark of respect.

When asked whether having been sued had coloured his life he said:

Of course I lost my confidence. One or two such cases are enough to destroy your confidence. You are human. You may remember that patient – I did not charge a single cent because he was a fellow professional, whatever the result. I would not have charged anyway, whether or not there were complications. Money was not the issue here – I was doing it in good faith. That case shook me.

KL06's story

KL06 was asked how he would deal with the different voices in the family of a patient when a complication has arisen.

I have not had a problem about not knowing whom I should speak to. I would imagine if there was a problem like this at some point instead of having to fend off a lot of voices and questions, that if you know there are voices that are dominant you could identify them and concentrate on talking with those people. At the same time you cannot ignore the other people. If you only talk to these people and ignore the rest you could potentially excite more problems.

I have had plenty of experience of those scenarios where you have just finished talking to the family explaining at length what has gone wrong and another family member arrives from abroad and wants an explanation too. Certainly when I reach my breaking point or when I think it is going to happen I would tell the family "Your family is actually quite big and it is going to be difficult for me to deal with everybody and so I

would appreciate it if one or two family representatives come forward and I will deal with them and via them the information can be disseminated to the rest of the family.

I would try but it is going to be very difficult because of my time and my work, and if somebody new turns up and wants to speak to me I am sorry I cannot work in that fashion. Especially when there is a big family at an early stage I will set the rules – that the family has to come up with the one whom they want me to talk to – those are the reps I would speak to in detail, because of the time factor and various reasons. Certainly that is how I would deal with it – I would not deal with everyone who comes with questions. I would say I have already explained to somebody else in detail, and ask him or her to check with that person.

I would say that the Malays are the easiest to deal with because of the religion – if anything goes wrong they tend to say, “It is God’s will”. I think they perhaps are the easiest to deal with. They seem to accept tragedy and anything else that has gone wrong better than any other race. The Chinese and the Indians are probably about the same culturally – Indians are more difficult sometimes in terms of – they tend to be less satisfied – more symptoms, multiple symptoms – you sort out one thing and something else comes up, you know. In terms of acceptance of things going wrong in disasters probably the Malays would be the easiest.

It is hard to pinpoint what the cues are to identify potential litigiousness in families. Sometimes you get the gut feeling that “oh this is going to be difficult”. The family is going to be rather difficult. I suppose one of the cues you get is if they start asking detailed questions – “Why is it like that”.

Generally speaking I have not had so much of those kinds of problems fortunately. Partly because in the consent taking I would mention risk in detail at some point – “you could have a stroke or it may result in death but the risks are really quite small”. Having mentioned that in the consent part of the procedure certainly helps you get out of trouble subsequently. There was one where was a spine operation – you do not expect someone to die from a lumbar spine operation – so in my normal consent taking I would not mention that risk. In this particular case it actually happened. It was a pulmonary embolism, which you normally do not expect most of the time. But thankfully that also did not end up in a lawsuit – after having explained and got the colleagues involved, the cardiologist involved who actually explained it and at the end of the day I think they accepted it although it was tragic.

When asked to comment about situations where an adverse medical event is not due to the surgical treatment per se but probably due to a non-surgical factor such as a metabolic or anesthetic event for which a fellow professional is responsible, he had this to say;

Normally I would not try to blame anyone and explain to the family that unfortunately such things happen at times and it is nobody's fault. I do not try to put the blame on anyone else and deflect it off me in that sense. Say if the situation gets worse and the family realizes that there is somebody that they are actually targeting, I think sometimes you can defend a colleague only to a certain extent but I think you certainly do not want to blame them; you want to be as supportive of each other as possible but I think you can do it to a certain extent.

Sometimes there is a situation where there are a lot of doctors looking after one patient; often there are one, or two doctors the family is targeting. Sometimes if you are not in the picture you say, "I'm sorry I have no comment to make about that". If I am the principal guy involved I would not try and shield and get anyone into trouble like that. Carry responsibility. I have heard of some situations where this one person they are after you know, and potentially they have a case for that. You can only protect up to a point and perhaps the best way is to say I don't know about that I don't have any comments to make about that. These things progress with time. – I think initially the best thing is not to blame anyone and just do your best, and carry on and not to blame anybody. But it may progress and get worse – the situation – but hopefully if the initial management is ok you do not have problems after that.

Second opinion – generally speaking in that scenario it is very useful. In the situation where the family is very angry and you are trying to explain to them you are not at fault, they are welcome to have a second opinion. Sometimes I would recommend it to stress that point. Because if somebody else comes and says the same thing it kind of deflects the pressure – I would offer that the family should get a second opinion. Again it depends on how antagonistic they are at that stage – if they are at a stage where they only want an explanation, and they don't feel as if I am trying to get away with some malpractice, I would offer a second opinion and offer them the choice, whoever they want. I think if it is a scenario where relationship has broken down where there is mistrust I think they are not going to take that advice from me. I can make recommendations.

They can take scans away, whatever, by all means – that is not a problem for me. So second opinions are useful. Definitely useful.

With regard to full disclosure of error – in all the places I have worked there has been no such policy. As a consultant I have not experienced this problem. As a registrar in the UK assisting a spine case the drill slipped and tore some nerves – our policy at the time was that we should not hide this, we should disclose it. At the end of the operation my consultant and I... in fact my consultant was trying to shield me asking if he should go and talk to the family but I insisted that I would talk to them and in fact the two of us went to disclose it... what exactly happened about the drill. Lawyers wanted me to give a report – we corresponded. What happened in the end I do not know.

The scenario where I had to hide something has not arisen. In the sense now I am carrying the can. If that scenario arises I am not sure what I would do. I have not had to think about it. Now that I have to think about it – say I have done that to another patient I would probably come clean – this is what happened. To me this is not necessarily negligence – this is one complication of surgery. In that sense I don't feel so guilty about it. Unfortunately that happened, it was a complication.

The most common cause of conflict between doctors and family? I think number one is consent taking – complications were not explained – not having experienced that – from what I hear – I think consent is often the issue, patients say how come this has happened, we were never told this could happen. Sometimes you know it is the personality of the doctor involved – they are difficult and don't take questions, they don't like to answer questions – the personality has something to do with it. Instead of being calm and explaining, they don't speak to relatives they avoid it they don't see them you know.

In both these cases the surgeons demonstrated that families are important stakeholders in conflict management. The surgeons expressed a personal responsibility for the management of the events in the aftermath of adverse medical events and the stresses inherent in this process became evident.

Composite depictions and thematic elements of the experience of conflict management.

Overview

The composite depiction (Moustakas 1990) that follows is derived from an analysis of the entire collection of the 11 individual Neurosurgeons' depictions to generate a comprehensive account. Key themes and sub-themes within the entire experience with conflict of the whole group are hence described.

The composite depiction

The key theme that emerged from this study is that the challenges in the aftermath of adverse medical events pose a stressful, personal demand in trying to create satisfaction for the patient and family. The participants expressed awareness that an adverse medical event caused an abrupt shift in the dynamics of the patient/family-physician relationship from a high-trust state, to one with adversarial elements.

The thematic elements depict the cultural characteristics taken into consideration by the Neurosurgeons that underpin the complex and often unpredictable responses of patients and families to the news of an adverse medical event. These families experience disappointment, frustration, anxiety about loss of a loved one and at times financial stresses due to unpredicted escalation of the cost of medical treatment.

What became evident was the distinct difference between the focus and competencies required to manage relationships with the patient and family before an adverse medical event occurred, and those applicable after complications had occurred.

The priority before an adverse medical event was trust-building and risk warnings centered on an exhibition of the surgeon's competence.

After an adverse medical event the focus of the patient/family-physician relationship dramatically shifted. Defensive posturing, apologetic dialogues, consciousness of the influence and roles of different individuals in the family and intra-family dynamics and the prospects of legal threat came to the forefront.

The thinly articulated but perceptible assumption was that being sued for malpractice was the worst outcome of any adverse medical event. Being named in a malpractice suit conjured up the spectre of negative publicity, protracted dealings with lawyers and the legal system, distraction from the care of other patients and personal loss of confidence.

The Neurosurgeons uniformly placed a high value on pre-emption of future conflict through the process of obtaining informed consent. Risk warnings as part of the informed consent process were viewed primarily as a critical legally defensive measure rather than an ethical obligation in respecting patient autonomy and facilitating informed choice.

The process of obtaining informed consent was seen to involve more than paper documentation on a signed consent form. All the participants placed high value in family members being present during the risk disclosure process and this phenomenon of active creation of witnesses will be discussed in detail later in this chapter.

The Neurosurgeons showed differences in their positions with respect to the role of apology in the aftermath of medical error or an adverse medical event where the

cause had not yet been established. The participants viewed the process of conflict management in this period as essentially an exercise in creating satisfaction within families by providing them with sufficient information and support, with a hope that this would reduce the risk of a formal complaint or legal action against the physician or institution.

The key theme contains four thematic elements and sub-themes as summarized below:

THEMATIC ELEMENTS

A	STRATEGIES FOR COMMUNICATION WITH PATIENTS AND FAMILY MEMBERS	- Identification of dominant family members and creation of 'allies' within family group - Risk disclosure; a defensive strategy and the active creation of 'witnesses' of the process - Clues to recognizing potential litigiousness within family members - Transitions from a high-trust to an adversarial relationship
B	SOCIO-CULTURAL FACTORS	- Early cultural analysis of patient and family - The effect of spiritual /religious positions of patients and families in communications after adverse medical events
C	IMPACT OF LOCAL MEDICOLEGAL DISCOURSE AND RISK OF NEGATIVE PUBLICITY	- Support of fellow team members after adverse medical events – Neurosurgeon as team leader responsible for conflict management. - Attitudes to open disclosure of medical errors and to apologies - influence of defence lawyers' directives - The impact of litigation against doctors and defensive medical practice. - Second opinions as a defensive measure

D	FEE WAIVERS AND DISCOUNTS	- Fee waivers after adverse medical events
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A. Strategies for communication with family members

Identification of dominant family members and creation of ‘allies’ within the family group

Identifying one or two key individuals within the family group with whom to build the closest rapport with seemed to be a practice that most of the Neurosurgeons in the group employed. As expected the key individual would usually be closest next of kin such as the spouse of the patient. However it was recognized that often there was a key person in the family other than the spouse who appeared to be more knowledgeable or medically educated than the others and more understanding of the physician’s struggles at the time there is an adverse medical event.

Neurosurgeon KL02 called such a person the “lawyer of the family” and would always consider inviting him or her in for all discussions with the next of kin. *“...and if Mr. Lawyer is convinced, I think he will convince the rest of the family and they would take what Mr. Lawyer says as the gospel truth because they think the father or the mother or the wife is too distressed about it (the adverse outcome).”* Such a person would become the primary interpreter of medical information for the rest of the family and it would be much more practical to deal with such a person throughout the crisis. One of the participants said, *“in Malaysia everybody is a family member!”*

All the participants described the stress of repeating explanations about the adverse medical event to individual members of the family. Neurosurgeon PEN1 was of the opinion that all medical students should be taught about identifying family members who are most influential in the decision-making, the most dominant voice. This is especially *“....when things go wrong. When things go right this is not an issue”*.

Neurosurgeon PEN04 related a story of having to deal with intra-family conflict; *“...my experience with an angry family was that there was two camps, and one was trying to placate the other – doing my work for me! I did not want to go into it myself – violence nearly erupted!”*

The experience of this group of Malaysian Neurosurgeons reinforces the understanding that in cultures where medical decision-making is primarily collectivist, family-weighted approaches to communications and collaborative decision-making are paramount. (Hyun 2003)

Communications with family were uniformly noted by the surgeons as being very important in trust building right from the outset of the patient-physician relationship. As one surgeon noted;

“..I want to come across as a doctor who is really caring and indicate that I have done my level best, doing everything possible, showing that I am open and not hiding anything from them...and if things go wrong, at family meetings someone may say that they think I am doing a good job, doing my best and things like this happen.”

Risk disclosure; a defensive strategy and the active recruitment of ‘witnesses’ of the process

Disclosure of material risks in the process of obtaining informed consent is established as a key requirement of ethically sound and legally valid consent. (Kluge 2005, *Reibl v Hughes* 1980) Without exception, the Neurosurgeons I interviewed ensured that in high-risk cases there was always at least one close family member or an appointed person present during the risk disclosure process, before a signature on a consent form was obtained..

One surgeon’s practice was to warn about the risk of death explicitly prior to any high-risk surgery because “...if they can get to grips with the concept that a relative might die, the rest is fairly easy to handle”. This approach regarding death-risk warning as a means of preventing a later accusation of failure to warn was not uniform amongst the Neurosurgeons interviewed. Some of the surgeons stated that they would not be as direct about the prospects of the patient potentially dying, but would couch this form of communication in culturally sensitive terms, avoiding upsetting or scaring the family excessively.

Clues to recognizing potential litigiousness within family members

Neurosurgeon KL05 said, “Basically you are caught by a voice behind you that suddenly asks the questions out of the blue; my mood just shifts from being in a position where I am just explaining something to awareness that something is coming at me!”

A common clue that a family may be potentially litigious was described as the change in the nature and tone of the questions being asked about the details regarding the adverse event. The Neurosurgeons called this an *“aggressive nature of questioning”*, or an authoritative form of questioning of the doctor, *“as if they have lost respect for the patient-physician relationship”*.

Another menacing sign was the appearance at the discussion of a family member or friend who had *not* been part of the initial informed consent process. This was especially so if the person persisted in asking the same questions repeatedly or probingly about the possible causes of the adverse medical event. The persons who the Neurosurgeons felt were more likely to instigate the family to seek legal action may sometimes be the persons who initially appeared to be the more accepting of the bad outcomes; *“.... the one that might bite you may be the one that is nicest to you”*.

In dealing with an aggressive set of family members after an adverse medical event the surgeons identified the following dilemma: although it is mentally and physically draining to the surgeon to attempt to satisfy the questioning of the family members at a time when emotions were running high, it was also risky to brush off any family members who insisted on being provided repeated explanations on a regular basis. The denial of requests for separate discussions with the physician about treatment complications would have been construed as arrogance on the part of the physician.

In the event of a death of the patient there were chances that the family would be likely to remember the doctor's attitude *“over days and weeks after the funeral”*. A

fear was the possibility that sensitive family members who were offended by this perception of physician arrogance might trigger future legal action.

Transitions from a high-trust to an adversarial relationship

One of the concerns of the Neurosurgeons in their interactions with patients was to be able to establish a relationship of trust through which the patient became confident enough to place his or her life in the hands of a person who was essentially a stranger. (Kluge 2005) This process would involve competent conduct of the consent-taking procedure with appropriate risk warnings that do not result in creating additional anxiety in the patient or the family.

Establishing a good quality of communication with the family prior to surgery was uniformly viewed as a valuable trust-building exercise especially in view of the fact that in Neurosurgical practice most operations carry a significant degree of risk of adverse events. A high level of trust was seen to be crucial in weathering the family members' reactions to an adverse event: *"Hopefully in the background they are having a family meeting and considering that I have done a really good job and that I am doing my best and things (adverse events) like this just happen sometimes"*.

Neurosurgeons in the group emphasized the importance of risk warnings with witnesses present, prior to undertaking surgical treatment in order to diminish the risk of accusations of malpractice and to thus reduce conflict with family members in the aftermath of an adverse medical event. As mentioned above, the risk warning process

appeared to become a defensive measure rather than an effort on the physician to ensure autonomous, informed decision-making by the patient.

B. Socio-cultural factors

Early cultural analysis of patient and family

Without exception, the Neurosurgeons felt that Malay (Muslim) patients and families were the easiest to deal with in the aftermath of adverse medical events compared to the members of other ethnic groups. Recognition of the ethnicity of the family gave the surgeons better anticipation of the reaction to expect. What was also clear was that it was not ethnicity alone that was a determinant about the risk of future conflict but also the education level of the family and the degree of sophistication associated with urbanization.

At the same time, the influence of western medical dramas on television was cited as a reason that patients and families had unrealistic expectation from their physicians in this day and age; *“... everything is supposed to be perfect and you can’t have an operation that goes wrong”*. The combination of urbanization, education, awareness of patient rights, ready access to medical information on the Internet and exposure to the media appeared to have raised the expectations of patients and families for greater involvement in collaborative medical decision-making and for the standard of communication by medical professionals.

Another factor cited was that in order to remain competitive in an open market system of private healthcare where patients are able to self-refer to specialists,

Neurosurgeons in Malaysia must be able to market their skills, protect their reputations and retain a steady recruitment of patients whether it is by word-of-mouth or by peer-referral. This appeared to be less of a concern to the surgeons in the public system because of the system of referral and the consequent heavy patient load. The manner in which adverse medical events are managed and the conflict management styles of surgeons are hence important considerations.

The effect of spiritual /religious positions of patients and families in communications after adverse medical events

The nature of the family's spiritual position rather than religion per se was seen to be an important factor informing the Neurosurgeon's approach to breaking bad news or navigating events in the aftermath of adverse medical events. Being able to sense the family's spiritual character or strength seemed to influence how the Neurosurgeon would frame difficult conversations about potential complications and the possibility of death of the patient. As KL02 described, *"Religious people speak from the heart you know... from their personal experiences... not from the mind. From the mind sometimes they don't understand. The connection – the heart to heart connection is better than the mind to mind connection"*

When asked whether it was advisable that a Neurosurgeon should be able to identify this dimension in a family, KL03 was very certain about it:

"It is important, it is. It takes a lot of burden off you. You know you have done your best, and things don't turn out the way they should be, the family understands these are the possible complications and they accept it, it helps a lot. It's not the thing you read in books – seek out the spiritual

dimension. In your daily dealings with them you know that they are inclined to seek God's guidance, and accept what God has given, you know? And in fact even with devout Christians if they are inclined to go along that path I would employ the same sort of strategy as I do with Muslims, the same thing. We are talking about common ground here".

Making a conscious 'cultural diagnosis' of the patient and family at first contact and understanding the implications of this assessment, appeared to be a practice of all the surgeons interviewed. The ability to engage with families from different cultural groups appeared to be independent of the ethnic background of the surgeons themselves.

C. Impact of local medicolegal discourse and risk of negative publicity

All the surgeons interviewed belonged to a medical malpractice defence organization or an indemnity insurance system. These surgeons were therefore subject to these defence organizations' regulations and received advice from their legal experts in the event of legal threat. The surgeons were required to contact these legal experts directly or through the defence organization to obtain advice or directives regarding documentation, incident reports or future communications with the family.

Attitudes to open disclosure of medical errors and to apologies - influence of defence lawyers' directives.

The Neurosurgeons expressed some tension between a natural tendency to apologize or express regret to families after complications of treatment arose and the directives from medical defence organizations against this measure. Generally the surgeons were inclined to heed their lawyers' advice while acknowledging that being

circumspect about error disclosure or apologies to families could paradoxically lead to an increase in dissatisfaction and suspicion of malpractice. As Neurosurgeon KL06 stated;

“What you are saying then is if you want information then you sue me. That is essentially what you are telling them – it becomes more confrontational; to a certain extent you have to heed your lawyer’s advice and at the same time if they (the family) wish to talk to you there is no harm talking to them going over perhaps things you have explained to them before. Just to give them answers to certain questions, short of actually admitting you are at fault.”

The positions of the Neurosurgeons regarding open disclosure of medical error were not uniformly clear. Practices therefore varied considerably, with some apologizing without hesitation and even asking for forgiveness from the family, to never ever apologizing. Neurosurgeon PEN2 felt that perhaps an apology was not what the family desired in some situations, but rather information about what actually went wrong and what steps were being taken to address the situation. Most of the Neurosurgeons indicated that they would certainly express some form of regret for a disappointing outcome of treatment but this would not amount to an actual apology.

Support of fellow team members after adverse medical events – Neurosurgeon as team leader responsible for conflict management.

The Neurosurgeons were presented with a scenario in which an operation was successful conducted but where the patient subsequently suffered from a complication for which another specialist or junior or nurse was responsible. An example would be an

anesthetic mishap in the postoperative period after a brain operation, leading to haemorrhage, or brain damage of some form.

In this situation the Neurosurgeons uniformly indicated that as the 'captain' of the team they would not shrug off the responsibility for the complication by shifting blame to a colleague or other healthcare worker. Such dialogues were uniformly identified as being very difficult in a sense that inaptly worded explanations by the surgeon could raise the suspicion of negligence on the part of another medical professional.

The need to work with the same colleagues in the future was cited as a major reason for Neurosurgeons being wary about shifting blame for adverse medical events to other team members. As the primary physician who obtained informed consent, the surgeons felt responsible for bearing the conflict burden of any adverse medical events even if the fault possibly lay elsewhere.

The impact of litigation against doctors and defensive medical practice.

The Neurosurgeons felt that over the years the risk of being sued had gradually risen and that this had possibly resulted in reluctance to undertake treatment of high-risk cases. This prudence found its expression in several forms; referral of patients for a second opinion, referral from the private sector to the public sector services, exhaustive risk warnings, recruiting a second Neurosurgeon to assist with surgery, and opting to offer simpler treatment options whenever possible. A common theme was careful documentation and ensuring that risk warnings were witnessed.

The impact of actually having been sued was described by two of the Neurosurgeons. The descriptions of the experience were intense and at times emotional; transient loss of confidence and intense anger and periods of depression were the most significant effects. These surgeons indicated that they were as a result much more inclined to defer surgery until the family members had had sufficient discussions amongst themselves or with friends and wherever possible obtained a second medical opinion.

Fear of personal financial loss was not the reason for the Neurosurgeons dreading a malpractice action since all had adequate malpractice insurance coverage. The main reasons cited were the inconvenience of legal communications and paperwork, the potential loss of reputation from adverse media and word-of-mouth publicity and the effect of anxiety on their professional confidence and their families' wellbeing.

Second opinions as a defensive measure.

Patients and families were encouraged by the Neurosurgeons to obtain second opinions whenever they sensed that the families were either not satisfied with explanations of the risk and also whenever risk was high. Rather than being a source of an alternative clinical opinion, second opinions from other surgeons were considered a conflict-reduction measure in providing reassurance for the family and patient.

D. Fee waivers and discounts

This measure was only relevant to the private sector practitioners and not the surgeons in public or university practice and that too only when the patient and/or family bore the cost of medical treatment. This did not apply to situations where third party payers were involved.

In all circumstances in private practice the Neurosurgeon retained the options of waiving or reducing his or her fees. This gesture was volunteered by the doctor or by the private medical institution or requested by the family. Less frequently was the fee reduction demanded by the family as a form of threat or insisted on by the hospital

Each Neurosurgeon's policy towards fee discounts was considered in the interviews because of the potential for this measure to have an influence on the affected family's level of satisfaction in the event of an adverse outcome. Fee waiver or fee reduction was a measure that was approached with caution because of the potential inferences that the family could make from it. The Neurosurgeons had some concerns that the willingness of a private practitioner to waive or reduce his or her fees when an adverse event occurred would be perceived by the families as an admission of professional wrongdoing in some form.

The Neurosurgeons however varied in their positions regarding this issue. Some were adamant about not ever considering fee reduction or waiver because of their belief that such an act would be perceived as an admission of culpability. Others were willing to offer this gesture entirely on compassionate grounds. The latter were careful

to indicate that they would not do so under duress but only if they could establish that they were being charitable to the family.

One Neurosurgeon would respond to a demand for a fee waiver on the grounds that an integral feature of private medical practice was keeping patients and families satisfied. Thus if a fee waiver would prevent conflict, he would not hesitate to offer one. On the other hand, one of the Neurosurgeons indicated that in such situations he would refuse any aggressive demand for a fee waiver but instead ask for medicolegal support.

It was evident that there was no consistent pattern of attitudes towards the measure of fee discounts or waivers amongst the Neurosurgeons interviewed except that most of the surgeons would certainly not offer a waiver as a means of responding to a potential threat of legal action.

Illustrative portraits

An illustrative portrait offers additional intricacy to the individual and composite descriptions and is constructed after the composite depiction has been created.

I have selected two portraits that illustrate the range of conflict sources and forms and the measures taken by the Neurosurgeons to deal with them. Pseudonyms will be used in this description. Dr. Asean and Dr. Malsing are both Neurosurgeons with more than 15 years of independent practice who have experienced the effects of a malpractice action against them.

A portrait of Dr. Asean

Dr. Asean is a private practitioner who had worked in the public system for several years before opting for private practice in a large multidisciplinary hospital. He received his specialist training in Malaysia and in Australia and offers general Neurosurgical services without any particular area of sub-specialization.

I ask them who the spokesperson is, because in the beginning many people may come up and everybody will try to be important, you know. I think that if everything goes fine that's good, but if something goes wrong not only do they have problems with the doctor but also amongst themselves. They will blame each other, for example saying "you should have got another doctor" or "you should not have been operated on." So nowadays I wait until the whole family gets consensus. That conclusion is a result of all that I have gone through. That is the way to go.

I wait – amongst the relatives some of them will appear to be interested and after the second or third day they will disappear...there are always regular ones that are really close. I don't talk to friends of the patient – I refer them to the family members.

I think we not only have to study the patient, we have to study the relatives. You cannot make a decision about them too easily – it takes time. When things go wrong it is usually not a problem handling the patient, you know...it's handling the relatives. If it's good times, there's no problem, "you're the best". I don't always deal with the most outspoken family member. I try to deal with the family members who were present when I took consent. After all when things are going well the most outspoken person is not present usually.

In our field Neurosurgery we have a lot of morbidities and mortalities – things are different. It is not only the physical stress on the surgeon, it is also the mental thing – every time you do a big case it takes something out of you. Being a consultant puts a big burden on us, we take the responsibility. We have to be hands-on as surgeons. Sometimes when I think back of all the operations I have done in the past I am amazed. Nowadays I am a bit cautious and if the case is complicated I get another surgeon to help me or refer them to specialists who have more specific expertise. Life is short!

He then described his experience of being involved in a medicolegal claim;

After my bad experience with that one case I nowadays consider that everyone can potentially sue you. Even your best of friends. For years I had to deal with lawyers, meetings, reports...it was quite damaging, quite difficult. When I started my practice long ago, it was different.

The problem comes if you don't emphasize all these complications. Before major surgery like a big acoustic⁹ or a big brain tumour, I am usually anxious the whole night before...previous experience with this surgery does not mean that you won't have problems. So keep on repeating, keep on repeating (the risk warnings). Anything can happen...you do your best...these things shake you, that's it. It's bloody hell, you know!"

Nowadays I always emphasize the risks a lot – the 'not good' side of things. The families sometimes say, "Wow this doctor is not optimistic at all" and if there is a risk of death I emphasize this strongly. So, because I have emphasized these risks, the doctor to whom they go for a second opinion has an easier time. Actually at the end of the day we as doctors want the patient to be well whoever does the treatment. Initially when we were young Neurosurgeons we might say "I am the best" but nowadays I say, "Come on, it does not matter in whose hands the patient is treated – if he or she gets well, thank God".

With regard the directives from medical defence organizations or lawyers about apology to patients or families he had this to say:

I ignore them. As you learn, I think the most important thing is the communication with the family. You have to build trust and communicate. There are many types of doctors – some who are overly concerned until they are personally involved with patients and families and some who have no qualms. Some are in-between, who empathize or sympathize and are not totally cut off. The balance is very hard to achieve. You 'get it' when you are in your forties or fifties I think, not as a brash younger, egoistic, arrogant surgeon! Confidence can appear to be arrogance! Supreme confidence is risky – there will be a fall sooner or later!

⁹ An acoustic neuroma is a benign tumour located in the base of the brain, often intimately related to cranial nerves, blood vessels and the brain stem structures that if damaged during surgery could threaten life.

A portrait of Dr. Malsing

Dr. Malsing, a private sector surgeon had been experiencing major conflict with a family of one of his patients at the time of the interview. The conflict had escalated to the point where complaints were filed against him by a family member who was responsible for the financing of the treatment of a young female patient. There was even press coverage of the events in the aftermath of the adverse medical event. The patient's next of kin had recently filed a medicolegal claim against him.

There are family members who're genuinely understanding and see all perspectives and want to mediate and reduce the damage so to speak and most of them may be quite reasonable. There are domineering family members and these are domineering even amongst their own family members and so in conflict situations the rest of the family backs off. When this domineering person expresses himself the best they can do is try to hold him back, but they also avoid taking your side.

There is always a family dynamic. This is something to learn that is not emphasized in our medical training curriculum, that we should identify members of the family that have a big say and are making the decisions. Sometimes you can't predict it – the grandfather or the uncle may show up when things go wrong, having not been there in the beginning. To you that becomes the surprise element because you had got used to dealing with certain family members from the start.

Ever since this current case against me started I have taken the position never to agree to do an operation at first instance – I insist that the patient and accompanying persons return to their families or anyone else for a discussion first. I refuse to do an operation on the first go. So nowadays I'd rather lose a patient by doing this, because they may go somewhere else...I would rather be on the safe side than be on the other end of a big stick, so to speak!

It is very difficult to say which families would potentially go to a lawyer (after an adverse medical event). There are some people who will come to you with a list of 10 or 20 questions and you answer them and nothing happens. Sometimes it is not legal redress that they seek but financial

compensation because of their financial state. Maybe that's fair – it is not anger.

In the case I am now dealing with I indicated to the medical defence organization that they should settle the claim but they insist on defending it in the courts. As a result I have to go through the process – from a situation where I think there was no anger towards me, it is going to end up like that, simply because I am going to defend, and also perhaps block them from their justice. But it is not me, it is the medical defence organization.

Fee waivers? I don't think we should comply with any demands for this. To me I have done the job as best as I can. If there is an untoward incident unfortunately the fees have been paid. If I know the family is in financial difficulty it is not an issue to give a discount. I won't give a discount simply because I think you won't hit me so hard or if you are threatening me. I feel that is not right. Having said that, sometimes we shouldn't aggravate the situation by sending a lawyer's letter to the family that has not paid the whole bill. It provokes them. I don't think we should escalate the situation – it is not as if we don't earn enough! On compassionate grounds I would definitely give a discount – if on a face-to-face you shouted at me, I would tell you to go and see whomever you have to. If I found out that they haven't paid their bills fully, I would not instruct the hospital admin to chase after them till they pay – usually the differential is not much. But you have no control – the hospital does it automatically.

When working as a team I don't shift the blame to another doctor when things go wrong. I find that 'no explanation' is a bad explanation. Most of us are geared up to cause and effect. You must give a reason for a complication. It has to be something that people can recognize. We have to work as a team – we may have to work with the same people for the rest of our working years. I always emphasize that we are a team. I tell the others if I am disappointed, and they know, they may feel sorry.

Surprisingly the team members rally with a united front – we don't send one person to deal with the family. When the family sees that the team is trying to salvage the situation it helps – we are not at a complete loss- it is important for them to see the team trying. You have to go through the motions, to give a reasonable time for the family to go through it.

If it is my fault I would apologize – I would say I am sorry I made a mistake. I don't care what the medical defence organization thinks about it! It is

because I am a believer¹⁰ – you have to think about what it is in life that is important. Secondly it is the decent thing to do. They can sue you but they can't take away your honour. I would not lie – it has to be a case where I was 100% certain that I was in the wrong. It also depends on why you would apologize – not to get out of a situation but when I am genuinely sorry I did something wrong. I would not apologize if there was an intra-operative rupture¹¹ because that is something inherent with the disease.

I would express sorrow and regret. It is not to grovel. I disagree with the medical defence organizations instructions never to apologize. I think you have to say sorry when you have made a mistake otherwise it aggravates things. Sometimes you have to describe what the situation is and state that we are trying to reduce the damage, that kind of thing.

I used to tell my junior doctors that the patient may be the enemy, be careful, watch your back. But now as I have grown older I have become more sympathetic. I don't see the patient as my enemy but then I forget! There is something we have to remember as doctors; we get many good patients and we also get many bad ones. There are bad people out there.... I don't think we should blame ourselves for bad people. There are people who may look at doctors as people you can get money out of or people you can take revenge on.

I would like to retire early but being a doctor is the only thing I know – I am a skilled labourer! There is nothing else I can do to earn a decent living doing what I am trained for, something that earns a decent income. I have toyed with this idea – it has a lot to do with this case I am going through now. I think society will have to pay for it at a certain point – doctors retiring early. We are seeing more and more doctors' names in the newspapers – sometimes the allegations are pure rubbish. Without a doubt – I don't want this kind of life when you get a lawyer's letter.

I remind myself that I have saved more people than I have harmed.

¹⁰ The Neurosurgeon makes a reference to his religion

¹¹ Refers to the devastating haemorrhage that may occur during brain aneurysm surgery

Summary

The intensity of the anxieties, fears, frustrations and emotional burden that Neurosurgeons may face in dealing with the conflict in the aftermath of an adverse medical event has been described. As Studdert and co-workers (Studdert et al. 2005) concluded in their study of defensive medicine among high-risk specialist physicians in a volatile malpractice environment,

“Efforts to reduce defensive medicine should concentrate on educating patients and physicians regarding appropriate care in the clinical situations that most commonly prompt defensive medicine, disseminating clinical guidelines, that target common defensive practices and reducing the financial and psychological vulnerability of individual physicians in high-risk specialties to shocks to the liability system”.

The experience of facing a medicolegal action appeared to significantly influence the manner in which patient/family-physician relationships are managed. This finding is in keeping with the descriptions of psychological morbidity in physicians who face a current or past medicolegal matter. (Nash et al. 2006; Nash et al. 2007). Mello, in 2004 described widespread discontent among physicians practicing in high-liability environments and concluded that physicians' perceptions do matter, because perceptions influence behaviour with respect to the practice environment and clinical decision-making. (Mello et al. 2004)

CHAPTER 8: SUMMARY AND DISCUSSION

Overview

In this chapter the observations made during the study are summarized and discussed. The main aim of this study was to examine the experiences of Malaysian neurosurgeons in managing communications with patients and their families in the aftermath of adverse medical events. These experiences were interpreted from a conflict avoidance and management perspective, and in so doing, it was hoped that elements of the tacit knowledge applied by these neurosurgeons would be captured.

Socio-cultural 'diagnoses' of patients and families and the nature of physician communication skills

Summary of observations

The observations made during this study indicate that in the aftermath of an adverse medical event, the Malaysian Neurosurgeon's communication skills are more likely to be taxed by the dealings with family members than with the patient him/herself. The surgeons interviewed uniformly expressed the importance therefore of building relationships of trust not just with the patient but also with family members. The Neurosurgeons recognized the strategic value of identifying dominant voices or family spokespersons who could act as translators and perhaps function as 'allies' whenever difficulty is encountered in the surgeon's interactions with family members. This measure appeared to be a more effective means of conveying bad news and

helping the family make decisions, than by attempting to address different individuals in the family directly.

The educational and socio-religious status of the patient and family appeared to be a significant tacit assessment made by the Neurosurgeons when preparing to deal with each case. This allowed them to better anticipate the family's reactions to adverse medical events. The participants uniformly and readily acknowledged that the Muslim Malay families were the least likely to pose communication challenges, from a perspective of contentiousness of dialogues or unwillingness to accept negative outcomes. This impression was attributed to the experience of observing that Malay families were more inclined to explain negative outcomes of medical treatment to the "Will of God". The Neurosurgeons also felt that it was not just the specific religious affiliation of the families that mattered but the general depth of the spiritual 'character' or orientation of a family in these circumstances.

Some of the participants described several cues that indicated that stakeholders were potentially litigious after adverse medical events. One of these cues was a shift in the manner of questioning of the physician. Some of the Neurosurgeons stated that they became aware of increasing dissatisfaction whenever family members or friends of the patient begin to press for detailed answers, repeatedly or authoritatively or even aggressively. The participants recognized that those were indications of breakdown of trust and of fractures emerging within the patient/family-physician relationship.

The definitions of the patient-physician and the family-physician relationship are inherently distinct, but in the context of Malaysian culture both these types of

relationships appear to be intimately interwoven. For practical reasons they may, in physician communication terms, be approached as a single entity.

In Malaysian law as with common law in Commonwealth jurisdictions there is no legal obligation for the physicians to obtain the family's assent in the consent taking process. For that matter there is no legal obligation for the physician to apply a legally defined standard of communication with the family after an adverse medical event including death of the patient. This suggests that it is prudence and "common sense" that underlie the practice of involving the family in the consent process, rather than compliance with ethical or legal requirements.

Relationship of research observations to literature

The participants generally felt that the nature of the patient/family-Neurosurgeon relationship in terms of expectations and power balances had shifted in Malaysia as it has in other countries over the last 15 years or so. This was attributed to greater access to information on the Internet, improved education levels and possibly urbanization.

The participants uniformly were of the opinion that it was important after an adverse medical event for a surgeon to not avoid facing the family directly out of fear of their anger or frustration. It was considered important to keep them informed about developments. None of the surgeons would delegate this task to a junior or associate primarily because they felt it was their moral responsibility to deal directly with the family. One surgeon indicated that often families rather be told about the details of the

complication rather than be merely offered an apology. Five of the participants indicated that on occasion there was one individual amongst family members that was more influential than the others and that there was benefit in recognizing and addressing this person early in the interaction with the family.

Gerretsen and Myers (Gerretsen and Myers 2008) utilize 'attachment theory' to explain why the perception of the physician's availability instills a profound sense of security for the patient and family. (Bowlby 1988) The sense that the physician is readily available to the family may contribute significantly to patient and family satisfaction and this phenomenon warrants further investigation. (Shiozaki et al. 2005; Vohra, Brazil, and Szala-Meneok 2006; Coulter 2005)

The observations of this study reinforce the claims of several workers of the vital importance of cultural awareness and sensitivity and the role of the family in medical decision-making. The literature however is predominantly framed in terms of cultural competence in medical scenarios such as end-of-life decision-making and informed consent, rather than the management of events after adverse medical events. (Bowman and Richard 2004; Searight and Gafford 2005)

In the literature the role of the family is sometimes viewed as a complicating factor in considerations that involve patient autonomy. (Charles et al. 2006; Schäfer et al. 2006) The observations during this study however indicate that in the Malaysian environment, family clearly played a primary role in decision-making and were treated as key stakeholders especially if patient-physician conflict was involved after treatment

complications. In such situations the patient him/herself was often not party to the negotiations because of brain dysfunction, coma or death.

The patient-centered culture in medical practice has come under some criticism as being deficient in several aspects. Family members are significant stakeholders in the outcomes of treatment of a patient because of their responsibility to carry several burdens related to healthcare of the patient. These range from financial, rehabilitation and long term care to emotional costs. (Hyun 2003) In this research project the participants were uniformly of the opinion that physicians should develop viable and supportive patient/family-physician relationships as early as possible in their interactions. The surgeons interviewed were most able to appreciate the value of their prior investment in building strong relationships with family members in the event that complications of treatment occurred.

Truth telling in the aftermath of adverse medical events appeared to be an important means of maintaining trust although there was no uniform consensus amongst the surgeons about open disclosure of medical error or of the value of apology in those circumstances. If an apology was in order because of a mistake, one surgeon indicated that families would readily observe from body language and eye contact whether the apology from the doctor came "*from the heart*". He felt that anything with doubtful sincerity would not be acceptable to the family.

The Neurosurgeons interviewed did not express much certainty about the legal position of these communications locally, although they were aware that this topic has been debated and systematized to varying degrees in North American and European

medical practice. (T.H. Gallagher, Garbutt, et al. 2006; Gallagher, Waterman, et al. 2006; Straumanis 2007; Calvert et al. 2008) Uncertainty amongst the Malaysian Neurosurgeons surrounding the topic of open disclosure of error was as pronounced as amongst North American physicians. (Ausman 2006)

A significant difference in the Neurosurgeons' approaches to legal threat was found amongst the participants who had personally experienced a medicolegal issue. The resultant attitudes bordered on severe cynicism and mistrust of the families' intentions in one case. Patients and families were viewed as potential litigants or adversaries in the event of an unwanted outcome, particularly if there were indications that malpractice was suspected.

It has been recognized that the practice of medicine in general requires surgeons to learn to control their own feelings of anger and frustration (Halpern 2007) and in this study, the surgeons confirmed that the ability to do so was critical in clinical practice. The observations in this study concur with the emphasis on competent management of conflict by surgeons, as this produces clearer decision-making, generation of greater patient and family satisfaction and contributes to the avoidance of malpractice suits. (Back and Arnold 2005; Holbrook 2008)

Impact of the local medicolegal discourse on Malaysian Neurosurgeons

This section discusses observations made of the influence of the local medicolegal discourse on the manner in which the Neurosurgeons conducted interactions with the patient and family.

Summary of observations

Wherever possible, family members or other representatives were drawn into the process of obtaining informed consent for reasons of translation but mainly as a means of ensuring that the process was officially witnessed. There was some uncertainty amongst the surgeons about the legal position of physician apologies and open disclosure of error. The Neurosurgeons varied in their attitudes to restrictive directives from legal advisers or insurers when it came to entering into dialogues regarding adverse events.

Some surgeons dismissed these directives outright, indicating the importance of apologetic dialogues if warranted, in order to keep trust-based relationships intact. Others were less inclined to ignore legal advice. The majority of the surgeons distinguished between apology for a negative outcome of treatment and admission of fault, and maintained that they would generally not admit fault in the immediate aftermath of an adverse medical event.

The surgeons who were undergoing a medicolegal matter at the time of the interview or in the recent past had a much more cynical view of their role of patients' families. They demonstrated greater defensiveness, exemplified by the emphasis of their risk warnings on dire outcomes, by their policy of recruitment of family members into a drawn-out decision-making process where possible, and by case selectivity. These surgeons admitted to not wanting to take on high-risk cases, preferring to refer patients elsewhere for treatment.

Suggesting that patients and families obtain a second opinion or actual referral to other Neurosurgeons appeared to be a common approach used by the surgeons in this group. This measure was viewed as a means of assisting the family to shore up confidence in the primary surgeon's treatment recommendations and also as a means to better prepare the patient and family for the potential complications of surgery. This may be viewed as an extension of a risk warning process that defers surgery until such time the patient and family are able to move forward with a decision they feel confident with.

In the aftermath of an adverse medical event, a recommendation for a second opinion was viewed as a measure to reassure the family that all interventions that were available to rectify a situation or save a life had been considered. The surgeons appeared to be willing to encourage this but in some cases expressed anxiety about the risk of family confusion and loss of trust if second opinions were contrary to theirs.

Without exception, the Neurosurgeons interviewed confirmed that they would not directly or indirectly shift the blame for a complication to a colleague who was co-managing the patient. They viewed themselves as leaders of a treatment team and ultimately responsible for a patient's treatment outcome even though the cause of the adverse medical event was clearly not their direct responsibility. This meant that the surgeon would bear the entire responsibility of breaking bad news to the family as well as for navigating the later consequences of the event.

Relationship of research observations to the literature

The principle that the physician is ethically and legally obliged to adequately warn patients of treatment risks in order for consent to be validly obtained is now widely established in the Malaysian context (Yousuf et al. 2007) as it is in most Commonwealth and US jurisdictions. (Kluge 1999; Mazur 2003). The Neurosurgeons in this study were uniformly aware of these obligations but as discussed earlier, appeared rather to frame this process as a defensive, blame-avoidance measure that would hopefully protect them from accusations of wrongdoing should declared risks materialize.

The differences in the Neurosurgeons policies to error disclosure and apology appeared to stem from uncertainties about the legal consequences of such measures. To a large extent this was a reflection of the absence of Malaysian legislation governing open disclosure of error or apology for medical mistakes. The debate amongst Malaysian physicians and medicolegal experts regarding the issue apology for medical error was essentially no different from that amongst physicians in other countries. (Ausman 2006; Creamer 2007)

Canadian researchers have found similar findings of gaps between theory, clinical practice and patient preferences. (Chan et al. 2005) At the time of the study there was no literature to indicate what Malaysian patients and families would prefer regarding the disclosure of errors. The Neurosurgeons proceeded in these circumstances by basing their instincts on the cultural make-up of the family, relying on the degree of trust that had been established and their having warned the patient and

family of the possibility of complications. Most of the Neurosurgeons interviewed were wary of direct admission of error and this is in keeping with the experience of physicians in many other jurisdictions. (Mello et al. 2004)

The fear of litigation was a thread that ran through the interviews but the impact of having faced a medicolegal action was clearly evidenced by the bitterness with which three of the Neurosurgeons related their experiences. The literature indicates that there is clearly an elevated risk of psychological morbidity amongst physicians who have faced a medical malpractice action. Nash and co-workers studying a group of Australian physicians identified forms of psychological disability and additionally, potentially hazardous drinking amongst family practitioners as one of the effects of experiencing a medicolegal matter. (Nash et al. 2006; Nash et al. 2007)

The Neurosurgeons interviewed in this study who had personally experienced a legal action against them had become prone to viewing most patients and families as potential litigants and had adapted aspects of their practices to avoid or mitigate this risk. This observation is not surprising and is in keeping with the literature describing such effects on physicians who work in challenging malpractice environments. (Heshusius 1994) Referring patients for second opinions whenever there appeared to be cues of potentially litigiousness of family members was a form of defensive practice common to the group and not restricted to the Neurosurgeons who had been sued.

Studies indicate that there is a high prevalence of defensive medicine amongst specialists which include avoidance of procedures and patients that are seen as high risk

for litigation and restricting practices to eliminate procedures prone to complications. (Studdert et al. 2005; Chawla and Gunderman 2008) The effects of the medical liability system on medical practice have been analyzed and there appears to be systemic evidence of defensive medicine. (Kessler, Summerton, and Graham 2006) Malpractice litigation is considered to be a serious problem specifically in neurosurgical practice. (Fager 2006)

The case of *Chester v Afshar* (Chester v Afshar [2004]) involved a British Neurosurgeon and established the principle that failure to adequately warn a patient of risks of treatment would be considered to be negligent. (Samuels 2003) The importance of informed consent in medicine has been extensively written about, from a bioethical as well as legal perspective. (Freedman 1975; Mazur and Hickam 1997; Mazur 2003; G Robertson 1991; Robertson 2003; Hassan 2008) including the significance of physician practice profiles in that particular process. (Kluge 1999)

In spite of the lessons learned internationally from landmark cases that involved failure to adequately warn the patient about risks (Skene and Smallwood 2002), gaps appear to remain between the theory of informed consent and actual clinical practice. (Bogardus Jr 1999; Katz 1984; Veerapen 2007) For the Malaysian Neurosurgeons interviewed however, the attention to details of the informed consent process was clearly a high priority. This process was considered a key conflict avoidance measure. This awareness may be due in part to the fact that health care professionals, researchers and the courts in Malaysia have actively been involved in interpreting the issue of consent in recent years. (Che Ngah 2005; Yousuf et al. 2007)

Finances, fee waivers

The prerogative to reduce or waive the surgeon's fees for operating on a patient was relevant only to private sector Neurosurgeons or those in university practice with limited private practice privileges. Only a limited number of patients would be "cash-paying" patients who relied on personal savings or contributions from family members to cover treatment costs in a private hospital. The rest would either have personal hospitalization insurance or would have healthcare coverage through their employers.

In the aftermath of adverse medical events, especially where the complications resulted in a severe injury or death, treatment cost escalation was the norm. Insistence on full payment by "cash-paying" patients in such circumstances presents a further stress on the family, over and above that resulting from the adverse medical outcome.

The Neurosurgeons I interviewed had differing policies and opinions regarding the role, value and pitfalls of reducing or waiving their fees after adverse medical events. Fee reductions were either offered voluntarily for charitable reasons, or requested by the patient and/or family members. Rarely were there demands for fee reductions by family members, and these demands were often associated with direct or subtle threats of potential legal action in view of the possibility of medical malpractice.

The surgeons who were comfortable with forgoing some of their fees after adverse medical events stated compassionate reasons to help reduce the financial burden of families. They were careful to note that they did so after clearly explaining the reasons for their gesture to the family, hoping that the patient or family would not take the offer of a fee reduction to indicate an admission of a mistake or error on the part of

the surgeon. These were precisely the reasons why some of the Neurosurgeons interviewed did not entertain such a policy, whereas the surgeons who did, felt that refusal to reduce their fees could provoke even greater frustration and anger and disappointment amongst family members.

Heuristic inquiry and tacit knowledge

Tacit knowledge is one of two main categories of knowledge, the other being explicit knowledge which is much easier to capture and code especially in organizations. Tacit knowledge or rather 'tacit knowing' (Nonaka 2007) is a process rather than a static form of knowledge and in patient/family-physician conflict tacit 'knowing' on the part of the physician is arguably a critical 'survival skill'.

The research observations indicate that many of the skills applied and considerations made by the Neurosurgeons in managing communications with patients and families could better described as an application of 'know-how' rather than explicit knowledge. They largely did not acknowledge the use of well defined or commonly accepted rules or instructions, and became aware during the interviews of their own use of communication and negotiation skills for which they were not specifically trained. Their strategies appeared to draw on a combination of past experience, cultural awareness and empathy, all along remaining cognizant of their ethical, legal and leadership obligations as professionals ultimately responsible for their patients' well being.

Workers such as Nonaka and Takeuchi (Hildreth and Kimble 2002) have described tacit knowledge as being highly personal, non-linguistic and deeply rooted in individual experiences, ideas, emotions, and values. The skills in managing dialogues with families in situations of litigation risk that my co-researchers applied appeared to fit this description very well.

There is intrinsic difficulty in attempting to capture and translate tacit knowing from its existing form into explicit knowledge (Ikujiro Nonaka 1994) and therein lies the potential difficulty in accurately translating the information in my data about tacit processes, into content for training of other physicians or students. The practical benefit of understanding tacit knowledge lies primarily in the possibility of it being 'externalized' by a process of conversion into explicit knowledge. (Ambrosini 2001)

Hence Ambrosini (Eden 1992) proposes that

"The expression 'tacit knowledge' should be replaced by 'tacit skills', skills implying 'doing'. Drawing the distinction between tacit skills and tacit knowledge helps us make explicit that tacit knowledge is not about 'knowing about', knowing in the abstract, but that it is about action, doing. Tacit knowledge is practical."

The detailed methodology that could facilitate the capture and description of the tacit skills used by physicians such as in this project, is complex and beyond the scope of this analysis. It appears that the use of a combination of several qualitative methodologies such cognitive mapping (Ambrosini 2001) and causal mapping (Goldie 2000) may be used to objectively define tacit skills that are used by any physicians in managing patient/family-physician conflict and this could be a topic for future research.

Implications of observations

Implications for training of medical students and physicians

This research indicates that it is rare for physicians to have received formal training as medical students or trainee surgeons which could have prepared them with the skills needed to deal with conflict after adverse medical events. Medical ethics and law teaching have not been prioritized in medical curricula until relatively recently. None of the 11 surgeons interviewed had received formal communication skills training. 7 of the surgeons interviewed specifically indicated that they felt that more rigorous training in the interactive skills needed to deal with patients and families would have made them better clinical risk managers.

In 1998 the General Medical Council (UK) declared that ethics and law should constitute one of the core components of the medical curriculum, but debate still continues about learning and teaching methods. (Mattick and Bligh 2006) There may be insufficient integration of ethical theory and medicolegal knowledge into practical skills for the management of ethical dilemma situations or for facing legal challenge, that is to say, conflict management training.

Ethics and law training is often isolated into 'modules' rather than having them integrated, then woven into clinical teaching over the whole medical course. An identified reason for the dissatisfaction with the current general approach is that the widespread use of summative rather than formative assessment does not allow close enough monitoring of the progressive development of skills. (Mattick and Bligh 2006)

Implications for system development in hospitals for conflict management

In many of the scenarios discussed by the Neurosurgeons, there were often confounding systemic factors in the practice environment that contributed to the precipitation or escalation of conflict. One example would be the insistence by the hospital administration to collect unpaid bills from the family after a patient had died after treatment at the hospital. Other examples would be complications arising as a result of a lapse in management by an anesthetic colleague, or mistakes made by nurses in the intensive care unit.

In all these cases the Neurosurgeons stated that as the team leader responsible for the patient's welfare they would be the lead person in the conflict management process in the aftermath of the adverse medical event. This raises the question whether healthcare institutions should always consider the development of in-house conflict management protocols such that a mediation model or other protocols of error disclosure and communications with dissatisfied patients and families are systematized. (Liebman 2004) This systems-approach would also contribute to patient safety via institutional learning from adverse medical events.

Implications for research and practice

The observations in this project have pointed to several areas of potential research which would be useful for improving individual as well as healthcare institutional competence in creating satisfaction for patients and families. At a time when the economics of healthcare continues to be intensively debated, the cost to

society of poorly managed or unresolved conflict with consumers of healthcare has become especially pertinent.

An area for future research is the apparent disconnection between the legal position and moral rights of the family in medical decision-making and how these are expressed in everyday experience. (Hyun 2003) The physician is not legally obliged to consider the family members' interests in medical decision-making and is not legally obliged to consider the family's opinion or position with respect to an adverse medical event. However, the observations during this project have demonstrated that at least in the Malaysian context, the family is often a key stakeholder in the patient/family-physician relationship and oftentimes becomes the main or only remaining stakeholder if conflict or disputes develop. Better understanding of the family's role in the navigation through conflict is critical for physicians.

Conclusions

This study has explored heuristically several dimensions of conflict in the aftermath of adverse medical events as experienced by group of Malaysian Neurosurgeons. The study discovered that the skills in navigating the challenges to the patient-physician relationship were nuanced and tacit and based on experience, sensitivity, cultural awareness and empathy. The study also demonstrated that the quality of the relationship between the Neurosurgeons and the family of the patient in the Malaysian context, was probably as important as the physician's relationship with the patient himself or herself.

The challenge to trust in the Neurosurgeon precipitated by an adverse medical event tested the quality of this relationship. Failure of conflict management measures raised the possibility of dreaded malpractice litigation against the surgeon and highlighted the importance of adequate skills training for this dimension of clinical practice.

The value of humanistic and interactional skills training has perhaps been insufficiently articulated or recognized by physicians because the skill sets involved are 'soft' skills (compared to technical clinical skills). Training in these skills has historically been viewed as merely incidental to the process of producing competent medical professionals but this position has changed in recent years.

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APPENDIX

Appendix A: Request and Introductory letter to President of Neurosurgical Association of Malaysia

Date: 8 June 2008

Dr. Richard Veerapen FRCSEd (Surgical Neurology)
MA in Dispute Resolution Candidate,
Institute for Dispute Resolution,
School of Public Administration
University of Victoria,
PO Box 1700 STN CSC
Victoria, BC V8W 2Y2
Canada

To,

Dr. Chee Chee Pin
Consultant Neurosurgeon
President,
Neurosurgical Association of Malaysia
Unit Neurosurgeri,
Hospital Universiti Sains Malaysia,
16150 Kubang Kerian, Kelantan
Malaysia

Dear Dr. Chee,

Re: Request for Assistance with Recruitment of Research Candidates

I am a Masters student at the University of Victoria, BC, Canada undertaking a qualitative MA in Dispute Resolution research project titled *"Neurosurgeons, High-Risk Medical Practices And Conflict Management"*.

As you know I am by training a medical doctor and have practiced Neurosurgery in the United Kingdom and in Malaysia since 1982. Currently I do not practice medicine but am a full time graduate student. A brief summary of the rationale for my research project is attached for your examination.

I seek your assistance in the recruitment of twelve Neurosurgeons who belong to your Association, who may be willing to be candidates for an in-depth interview conducted by me, which will take approximately 1.5 hours.

The candidates will have had at least 10 years of post-residency clinical practice in Neurosurgery.

In order to obtain a wide spectrum of information about the experience of conflict management in clinical practice I hope to be able to recruit one candidate from each of the following clinical practice environments, although this will not be crucial:

1. Predominantly private practice
2. Predominantly University/teaching hospital practice
3. Predominantly Public hospital practice

I welcome your advice about how I could transmit the information about my study and an invitation, to appropriate members of your association. If you feel that I could write directly to your members I would be grateful for a list of contact details.

However if you feel that in the interest of privacy concerns it would be preferable for your association to forward my request to suitable members or advertise my request on your association's website I would be most grateful if this could be facilitated by your office.

Should you require more clarifications please contact me by email or phone.

Thank you.

Richard Veerapen

Email: drv8@uvic.ca

Phone: +1 250 658 3094

PROJECT SUMMARY

Dr. Veerapen is a Masters in Dispute Resolution student at the Institute for Dispute Resolution at the University of Victoria, BC, Canada and you may contact him if you have further questions by email at drv8@uvic.ca, or telephone +1 250.658 3094. or +1 250 217 5884 (Cell).

As a graduate student, Dr. Veerapen is required to conduct research as part of the requirements for an MA in Dispute Resolution degree. It is being conducted under the

supervision of Dr. Eike-Henner KLUGE PhD, Dr. Peter STEPHENSON PhD and Dr. Patricia MACKENZIE PhD.

You may contact his supervisors at +1 250. 721-7519 (Dr. Kluge) / 250. 721-7351 (Dr. Stephenson) and 250. 721 8036 (Dr MacKenzie).

Purpose and Objectives

The purpose of this research project is the investigation of the skill sets applied by specialist Neurosurgeons in the management of conflict encountered in clinical practice. The areas of concentration will be of conflict situations as they arise in relation to adverse medical events and error disclosure.

Factors that influence clinical conflict management styles include training backgrounds of the clinicians, the seniority and experience of the doctor, cultural differences, and the extant medico-legal environment in which a Neurosurgeon functions.

To consider the influence of these diverse factors Dr. Veerapen plans to research physicians in Malaysia, in order to research conflict management skills within both private and public healthcare systems in the cultural and medicolegal environment of Malaysia.

Importance of this Research

Clinicians by and large acquire skills used to manage conflict in clinical practice in an erratic and unpredictable manner. Conflict escalation attributable to sub-optimally managed early-stage conflict in healthcare has significant economic costs especially if it results in litigation, defensive medical practices, and loss of skilled professionals through early retirement and changing occupation.

Analysis and description of the conflict management skills that experienced specialist physicians possess may have value in graduate as well as post-graduate medical training. This is especially so given the changing nature of healthcare expectations of the public not only in Canada but worldwide.

Results of Dr. Veerapen's research will complement the existing training of doctors in the fields of biomedical ethics and medical law, by presenting skill sets framed as conflict management methods.

Participant Selection

Candidates are being asked to participate in this study because of their experience as practising Neurosurgeons and upon the recommendation of the leadership of the Neurosurgical Association of Malaysia, to which they belong.

Dr. Veerapen has chosen to interview surgeons with at least 10 years of clinical experience because of the likelihood that these doctors will have experienced a wider variety of conflict in practice than their juniors in the profession.

Dr. Veerapen also seeks to study surgeons in different practice environments to enrich the research data. Experiences with conflict differ depending on whether the surgeon's practice is public or university practice or mainly private practice, or a combination of these.

Candidates in an Asian context practice in a unique medicolegal environment and their conflict management styles and restrictions will be determined significantly by the local legal discourse.

Appendix B: Participant consent form

You are invited to participate in a study entitled “**NEUROSURGEONS, HIGH-RISK MEDICAL PRACTICE AND CONFLICT MANAGEMENT**” that is being conducted by Dr. Richard Veerapen, FRCSEd (Surgical Neurology)

Dr. Veerapen is a Masters in Dispute Resolution (MADR) student of the Institute for Dispute Resolution at the University of Victoria, BC, Canada and you may contact him if you have further questions by email at drv8@uvic.ca, or telephone +1 250.658 3094. or +1 250 217 5884 (Cell).

As a graduate student, Dr. Veerapen is required to conduct research as part of the requirements for an MA in Dispute Resolution degree. It is being conducted under the supervision of Dr. Eike-Henner KLUGE PhD, Dr. Peter STEPHENSON PhD and Dr. Patricia MACKENZIE PhD.

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Factors that influence clinical conflict management styles include training backgrounds of the clinicians, the seniority and experience of the doctor, cultural differences, and the extant medico-legal environment in which a Neurosurgeon functions.

To consider the influence of these diverse factors Dr. Veerapen plans to research physicians in Malaysia, in order to research conflict management skills within both private and public healthcare systems in the cultural and medicolegal environment of Malaysia.

Importance of this Research

Clinicians by and large acquire skills used to manage conflict in clinical practice in an erratic and unpredictable manner. Conflict escalation attributable to sub-optimally managed early-stage conflict in healthcare has significant economic costs especially if it results in litigation, defensive medical practices, and loss of skilled professionals through early retirement and changing occupation.

Analysis and description of the conflict management skills that experienced specialist physicians possess may have value in graduate as well as post-graduate medical

training. This is especially so given the changing nature of healthcare expectations of the public not only in Canada but worldwide.

Results of Dr. Veerapen's research will complement the existing training of doctors in the fields of biomedical ethics and medical law, by presenting skill sets framed as conflict management methods.

Participant Selection

You are being asked to participate in this study because of your experience as a practising Neurosurgeon and upon the recommendation of the leadership of the Neurosurgical Association of Malaysia, to which you belong.

I have chosen to interview surgeons with at least 10 years of clinical experience because of the likelihood that these doctors will have experienced a wider variety of conflict in practice than their juniors in the profession.

I also seek to study surgeons in different practice environments to enrich the research data. Experiences with conflict differ depending on whether the surgeon's practice is public or university practice or mainly private practice, or a combination of these.

Candidates in an Asian context practice in a unique medicolegal environment and their conflict management styles and restrictions will be determined significantly by the local legal discourse.

What is involved?

If you agree to voluntarily participate in this research, your participation will include an interview by Dr. Veerapen who will use a framework of questions which will be sent to you at least 2 weeks ahead of the interview date.

It is estimated that the interview process will take approximately 1.5 hours. The interview will be recorded by Dr. Veerapen on voice recording systems [analogue and digital].

Venue of interview: a location of your choice preferably not within a hospital facility. Additional questions may arise during our conversation which will allow exploration of your unique experiences with conflict.

You will be free to introduce and discuss areas of conflict not covered in the researcher's questions which you think are important to address.

If at any time you wish to terminate the interview for any reason, you will be free to do so.

You should not feel pressured or obliged to participate in this study because you may have been a former peer of Dr. Veerapen.

If you have had a previous affiliation with Dr. Veerapen as a peer, and for this reason will feel uncomfortable or find your freedom to discuss conflict fettered in any way, you should decline the invitation to be a candidate in this research project.

Candidates for this project will all be Neurosurgeons with at least 10 years of independent practice. Measures will be taken to protect the identity of participants and confidentiality of recorded interviews as outlined in the section on confidentiality below.

In spite of these measures there is a small possibility that you may still be identified because of small numbers of neurosurgeons in your professional association that have 10 years or more of clinical experience.

Inconvenience

Participation in this study may cause some inconvenience to you, including the dedication of time for the interview and a provocation of recall of conflict experiences that you may be uncomfortable or unwilling to discuss.

You will be free at all times to steer the conversation to the next or other topic in the event that you are uncomfortable with any aspect of the interview.

Risks

There are no known or anticipated risks to you by participating in this research

Benefits

The potential benefits of your participation in this research include an opportunity to describe with confidentiality, the nature of conflict you have encountered as a practising clinician, to a non-practising Neurosurgeon who will use an academic approach to the theoretical evaluation of healthcare conflict management experience.

By analyzing conflict management skills and the impact of the medicolegal environment on yours and other participant Neurosurgeons' practices, Dr. Veerapen hopes to contribute to the understanding of an integral component of clinical practice.

This information has important applications in graduate as well as post-graduate medical training and may contribute to the development of a relatively new field in professional education; conflict management training for physicians.

Voluntary Participation

Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data will not be used.

Anonymity

In terms of protecting your anonymity any identifying information regarding you personally, your patients, your employing or affiliated institution will not appear in the results of the research.

Confidentiality

Participants will be assigned a pseudonym and the master-list of pseudonyms will be held only by the researcher electronically in his personal computer. The master list will be destroyed at completion of the data analysis.

Analogue voice recordings made as a back-up will be erased once the digital recordings are successfully uploaded onto the researcher's computer and password protected. The files on the digital recording device will then also be deleted.

The password protected digital voice recordings will be transcribed and the transcriptions returned to the researcher coded with all identifying features removed.

All audio files will be kept under lock and key. This includes the securely stored and password-protected back-up files and coding list, which will then be deleted from the researcher's computer and the back-up location.

Dissemination of Results

It is anticipated that the results of this study will be shared with others in the following ways:

- Dr. Veerapen's Masters thesis
- Publication in peer-reviewed journals.
- Paper presented at scholarly meeting.

Storage and Disposal of Data

Deletion of electronic data and shredding of notes and other material if any, on hard copy. Data from this study will remain in electronic form, under the control of Dr. Veerapen and will not be stored in an institutional or electronic storage system with public access.

Contacts

Individuals that may be contacted regarding this study are as detailed on the first page of this form.

In addition, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Associate Vice-President, Research at the University of Victoria (250-472-4545).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers.

Name of Participant

Signature

Date

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Appendix C: Sample interview questions

Purposes of the in-depth interview:

- To allow the participants to articulate their experiences with pre-empting or managing emerging conflict with patients and their families in a specified clinical scenario of adverse medical events or medical error. Identification of the major factors taken into consideration when dealing with such conflict.
- To obtain information about areas of conflict that high-risk practitioners feel inadequately trained for or which they feel are beginning to become significant challenges for professionals in their field as well as in high-risk medical practices in general.
- To evaluate the influence that institutional or malpractice insurance discourses have on a physician's capacity and freedom to engage in explanatory, healing dialogues after adverse medical events including apology.
- To form ideas for future research projects in addition to training program content in the field of conflict management for physicians.

The following areas will be covered:

A. Medico-Legal Environment – Impact On Conflict Management [secondary area]

- The degree to which medicolegal considerations influence decisions about error disclosure and apology if relevant.
- To what degree has the medicolegal litigation risk environment caused the doctor to consider patients as adversaries
- To what degree has the litigation environment affected/restricted the doctor's
 - Willingness to undertake complex surgery with the attendant risk of causing medical injury or death
 - Future plans regarding length of their individual working life
 - Ability to apply his/her full range of surgical skills
 - Satisfaction and fulfillment derived from Neurosurgical practice

B. The influence of the family

- The influence of the *family* – to what degree is this evaluated – how is it evaluated –

- Managing intra-family conflict
 - Identifying dominant voices in the family
 - Why is family's input important – is this a conflict avoidance measure?
 - The family as adversary – selection of spokesperson – delegation of communication to junior staff or nurses
- Cultural considerations – how important to consider
 - Identifying the potentially litigious patient or family – prior, or post-event
 - How a potentially litigious family or patient is identified – verbal cues, body language etc.
 - Financial considerations – fee waivers
 - Ethical considerations – how predominant
 - Logistics and resource allocation
 - Ventilators, brain death management, termination of life support
 - Dealing with colleagues across disciplines

D. ADVERSE EVENTS; ERRORS, SURGICAL OR OTHER TREATMENT COMPLICATIONS **[Primary focus]**

- How dominant are institutional or MDO protocols – compliance – are these protocols a cause for distancing the parties – dichotomy- positions
- Is there an impression of lost opportunity in the first 'window' for conflict resolution – how can this *problem* be addressed – is it a real problem?
- Apology:
 - What would be the furthest you would go to ignore prescribed medicolegal protocols and disclose and/or apologize to patients
 - Form that apology takes
 - Content
- Delegation of error disclosure dialogues
- Timing of error disclosure
- Reconciling adverse events with risk disclosure
- What are the causes of conflict escalation after adverse events

Appendix D: Short pre-interview questionnaire

INTRODUCTION

Title of Study: *“Neurosurgeons, High-Risk Medical Practices And Conflict Management”.*

Researcher: Dr. Richard Veerapen

Thank you for agreeing to participate in this study.

The purpose of this questionnaire is to obtain basic information about your practice environment and your experiences with conflict in clinical practice. It will help me to be aware ahead of the interview about areas to concentrate on or to avoid while conducting the interview.

Availability of this information will help reduce the time taken for preliminaries during the interview and allow us to get focused early.

Should you be uncomfortable or apprehensive about answering any of these following questions please leave the section blank and opt to address these areas at the time of the interview if preferable.

QUESTIONS

1. Type of practice (please tick one or more)

- ☐ Public Hospital only
- ☐ Public Hospital + Private Practice within Public Hospital
- ☐ Public Hospital + Private Practice outside of Public Hospital
- ☐ Private Practice in Private Hospital Only
- ☐ Teaching Institution + Private Practice within home Institution
- ☐ Teaching Institution + Private Practice in outside Institution

2. Have you ever been named as one of the defendants in a medicolegal claim?

- ☐ Yes

☐ No

3. If the answer to Q2 is Yes, please indicate whether:

☐ The claim/s went on to court trial

☐ 'Out of court' settlement was reached in any of the cases

☐ The verdict of the trial was found in favour of the plaintiff in any of the cases

4. During the interview this 'conflict areas' will be addressed:

- Adverse events and errors

In addition to this area which of the following conflict sources do you feel have *significantly* impacted your time and energy in your clinical practice; (please tick)

☐ Nurse-physician relationships [includes individual nurses or nursing administration]

☐ Physician-Administration conflict

☐ Physician-Insurance/HMO/Other payors

☐ Other sources of conflict:

5. Year of completion of Neurosurgical Board Examinations or other End-of Training Examinations prior to independent practice as Attending Surgeon or Consultant:

6. Do you feel that conflict in clinical practice (in all forms, whether legal or not) has influenced your decision about

☐ Prospects of Early retirement? Yes/No

☐ Restricting your practice to lower risk operations? Yes/No

☐ Recommending Neurosurgery as a preferred field of specialty to young doctors?

Appendix E – Neurosurgical training and practice in Canada and Malaysia

Perspective A – the profile of Neurosurgical Training and practice (Canada)

[Sources: Royal College of Physicians and Surgeons of Canada and Pathway Evaluation Program, National Physician Survey Canada, 2004 & 2007]

The specialty of Neurosurgery focuses on the central, peripheral and autonomic nervous systems. Practitioners make diagnoses with physical examination and with the aid of tools such as Magnetic Resonance Imaging (MRI), Computerized Tomography (CT) scans, and laboratory test. Frequently they are called upon to offer surgical treatment of conditions that affect the brain and its coverings, the spine including trauma. Many conditions are acute and present to the Neurosurgery after hours and with life threatening situations. It is a challenging but rewarding career.

On average a Canadian Neurosurgeon work 62 hours a week on professional activities, excluding on-call duties. Most of the time is spent on direct patient care, the rest being on indirect patient care (making appointments with other specialists), charting, meetings with patients' families and administration. On average a Canadian Neurosurgeon spends 176 hours a month on call. More than 76% report being very or somewhat satisfied with their professional lives and only 51% report being satisfied with finding a balance between personal and professional commitments.

More than one-third of Canadian Neurosurgeons receive 90% of their income from fee-for-service arrangements and 23% receive it through a blended source, that is

a combination of 2 or more payment arrangements). Most Neurosurgeons (68%) in Canada work in an academic health sciences centre. Intellectual challenge and stimulation of this specialty is cited as the single most important career choice factor.

To protect their income Neurosurgeons take out medical liability coverage and the average annual cost for this is as high as \$32,028 in Ontario and in the rest of Canada, approximately \$11,600.

Perspective B: Neurosurgical practice in Malaysia

There are currently 40 Neurosurgeons practising in Malaysia with a mixture of training backgrounds. Public service physicians receive fixed salaries based on their public service category, whereas a University service Neurosurgeons receive earnings from a combination of fixed wages and fee-for-service private practice arrangement. Private medical practitioners are reimbursed by a combination of cash-payments from private patients or through a third party payment scheme involving employers or insurance companies. (Chee 2008)

Neurosurgeons in Malaysian public sector hospitals receive patient referrals primarily along the pyramidal structure of the network of Ministry of Health administered hospitals as well as from private sector physicians. The situation is similar for University-based practitioners. Private sector surgeons however receive self-referrals, referrals from private sector physicians and specialists as well as occasional referrals from public sector physicians at the patient's or family's request. In most

instances the private sector surgeon is an independent consultant and therefore not an agent or employee of the hospital.

Competition for patients is innate in private medical practice. Specialist physicians in that sector depend on their reputations and a network of colleagues to secure consistent patient referral sources. As may be expected, this sensitizes them to the deleterious effects of any form of negative publicity whether it is through mainstream media reports that sensationalize patient grievances, or court cases against them for alleged malpractice. Their reputations that are painstakingly built by word-of-mouth are vulnerably by adverse publicity of any form including negative outcomes of interactions with their patients and their families.

Clinical practice environments

Specialized Neurosurgical departments with resident trainees and specialized nursing in Malaysia are found only in public and university hospital systems and not in the private sector hospitals. In the latter hospitals, which are nonetheless technically sophisticated and well staffed, Neurosurgeons function as consultants in a multi-disciplinary setting alongside other specialists, sharing common facilities such as operating rooms, imaging services, intensive care and emergency room facilities. Patient care in such hospitals is directly delivered by the Neurosurgeons without the support of residency program staff.

The systemic institutional challenges faced by Neurosurgeons in both public and private sectors stem from a combination of lack of specialized training and a high

turnover of nursing as well as junior doctors. The public sector Neurosurgeons face a large patient load and hence are dependent on junior staff to communicate with patients and families. They are also likely to earn anything between 3 to 6 times less than their private sector colleagues and this explains the internal drain of specialists from the public to the private sector in Malaysia in all medical disciplines.

Appendix F 'Tacit knowing' and conflict management by physicians

Most writers on this subject refer to Polanyi who introduced the concept of tacit knowledge, describing it in these terms: "I shall reconsider human knowledge by starting from the fact that we can know more than we can tell" (Polanyi 1966) or that we have a "power to know more than we can tell" (Polanyi 1976). People who possess tacit knowledge cannot explain the decision rules that lie behind their performance. As Thomas Gallagher describes, "the aim of a skilful performance is achieved by the observance of a set of rules which are not known as such to the person following them". (Gallagher 2003)

One of the characteristics of tacit knowledge is that it is almost impossible to write down, to formalize. It has also been described as 'know-how', which has a practical and technical-skill dimension to it. Tacit knowledge is personal knowledge and it has a cognitive dimension in the sense that it is not orchestrated or scripted. (Nonaka 2007)

Tacit knowledge therefore consists of mental models that individuals follow in certain situations. These are deeply embedded in the individuals and tend to be taken for granted and may appear entirely natural. Tacit knowledge is also context specific, being typically acquired on the job or in the situation where it is used, such as a craft or profession, a specific technology or product market, or the activities of a work group or team. (Sternberg 1994; Ravetz 1971)

Tacit knowledge is often defined in terms of what it is not, by comparing it to objective knowledge. The latter is knowledge that can be communicated from the person who possesses it to another in a symbolic form, and the person who receives the communication can become as knowledgeable about the matter as the person giving it. (Winter 1987) Objective knowledge can be readily written down or encoded and explained or understood and is therefore not specific or idiosyncratic to the person possessing it. (Sobol and Lei 1994) Tacit knowledge on the other hand, is difficult to write down or to formalize and people using it cannot explain the decision rules that underlie their performance. (Nonaka 2007)

Tacit knowledge has been described as being largely practical (Sternberg 1994) and being similar to 'know-how'; it is about *how* to do something rather than knowing *what* to do. (Kogut and Zander 1992) The characteristics described above show why tacit knowledge could be argued to be a source of advantage and a resource. It is unique and also imperfectly mobile, imperfectly reproducible and non-substitutable. (Ambrosini 2001) Because tacit knowledge and skills are deeply ingrained in people they are implicit, taken for granted and so it becomes hard for outsiders to emulate them. (Sobol and Lei 1994)

The range of skills applied by physicians in managing conflict with patients come with experience and are in all likelihood applied in a tacit manner. The exposure to frequent clinical situations where the risk of adverse events or other decision-making dilemma is high contributes to the acquisition of this experience.