An Approach to the Research Methodology for a Doctoral Study

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ABSTRACT

This paper discusses the research methodology employed in a doctoral study entitled, "Impacts of legislative controls on private hospitals in Malaysia". The research methodology encompasses the general design to the research process, from the theoretical framework to the collection and the analysis of data. The paper commences with the discussion on the methodological approaches as to whether a positivist or naturalistic framework or a combination of mixed method approach is most appropriate to be utilised in this study. This methodological decision making process led to the choice of a qualitative study. It then describes the methods for data collection, the analysis and the coding process from the key informants' interviews, observations and discourses which formed the core of the research methodology. Several emergent themes which are interlinked have been identified and crystallized as the empirical findings that provide answers to the research questions and objectives of the study.

Keywords: *Methodology, Health Policy, Regulations, Private Hospitals, Quality Care*

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INTRODUCTION

This paper describes the research methodology adopted in this study on the assessment of the impacts of the legislative controls on the private hospitals in Malaysia, in fulfilment of the requirements for the degree of Doctor of

Philosophy at University of Malaya, Malaysia. The methodology commences with the overall approach to the research process, from the theoretical underpinnings to the collection and analysis of data. The paper initiates with the discussion on the major methodological decisions whether a positivist or naturalistic framework be adopted, and what are the other methodological options available as most appropriate to the research requirements. The decision making process led to the selection a qualitative approach utilizing case study. The paper then discusses the methods for data collection adopted by this study and illustrates how data are gathered under each of the chosen methods. Lastly, this paper describes the analysis process particularly of the interviews with key informants which formed the core of the research methodology.

METHODOLOGY

Research methodology is seen as a systematic approach to solve the research problem. While there are various methods and approaches available in social science studies, the nature of most researches need more than a single approach. Hence researchers should have the choice of methods to be used as it may provide better answer than a single method (Nik Rosnah, 2002; Leedy & Ormrod, 2005; Raja Noriza, 2006; Silverman, 2010; Bryan, 2012; Braun & Clarke, 2013).

In seeking the understanding of process and outcome of a public policy, an important decision has to be made by a researcher prior to the onset of the study as to whether to use the naturalistic or positivist methodological framework (Nik Rosnah, 2002; Raja Noriza, 2006). Each of these approaches has its origin and understanding from a different epistemology or knowledge based. Research analysts such as Lincoln and Guba (1985) posit that naturalistic studies are conducted in natural settings or entities because naturalistic ontology suggests that realities are wholes and inseparable from their context. These researchers are of the opinion that knowledge is subjective and unique (Silverman, 2010; Bryan, 2012; Yin, 2012; Braun & Clarke, 2013).

On the other hand, from the positivist's perspectives, the process of inquiry is deductive and following established rules, and rigorous in providing explanations objectively. Data gathered are usually defined by a priori that will confirm or reject what has been deduced from the theory. This approach is closely associated with quantitative research methods, which commonly

involves experimental or quasi-experimental research design (Lincoln & Guba, 1985; Leedy & Ormrod, 2005; Silverman, 2010; Bryan, 2012; Braun & Clarke, 2013).

On the contrary, naturalistic researcher tends to be inductive and does not utilise either a priori theory or variables. In fact theory and variables are expected to appear from the inquiry. Furthermore, naturalistic investigation is closely associated with qualitative methods which permit the study of relationships and their consequences (Lincoln & Guba, 1985; Leedy & Ormrod, 2005; Silverman, 2010; Bryan, 2012; Yin, 2012). According to Sofaer (2002), "health care is delivered in naturalistic settings and in a wide range of professional, organisational and community context. There has been, of course, very rapid change in health care" and qualitative method is the preferred choice (Sofaer, 2002: 329).

Likewise, Creswell (2014:183) argues that "qualitative methods demonstrate a different approach to scholarly inquiry than methods of quantitative research. Although the processes are similar, qualitative methods rely on text and image data, have unique steps in data analysis, and draw on diverse designs". On the same note, Braun and Clarke (2013: 3) suggests that "the most basic definition of qualitative research is it uses words as data collected and analysed them in all sorts of ways. Quantitative research, in contrast, uses numbers as data and analyses them using statistical techniques".

Earlier on, Polkinghorne (2005) asserts that qualitative research is a generic term under which a variety of research methods that use languaged data are gathered. The author further asserts that "qualitative research is inquiry aimed at describing and clarifying human experience as it appears in people's life. Qualitative data are gathered primarily in the form of spoken or written language rather than in the form of numbers*"* (Polkinghorne, 2005:137). Thus, the data obtained for study experience requires the engagement of the first-person or self-reports of participants' own experiences. The choice of which methodology is most appropriate for this research was based on the aim of the study that is to examine the impact of the new legislation, i.e. Private Healthcare Facilities & Services Act 1998 (Act 586) and Regulations 2006 on the private hospitals in the Malaysia. This objective strongly suggests the use of a methodological approach which could elicit the various key stakeholders' experiences, and views on the public policy process and outcome of the implementation of the private health care legislation Act 586. Hence, qualitative approach was felt to be the most appropriate for this study as suggested by Gilson (2014).

> "Policy analysis starts from the understanding that policy making is a process of continuing interaction among institutions (the structure and rules, which shape how decisions are made), interests (groups and individuals who stand to gain or lose from change) and ideas (including arguments and evidence). Such qualitative analysis is a legitimate area of academic inquiry and has practical importance for health system development" (Gilson, 2014: 3).

Nevertheless, some research analysts argue that currently the research field is less about the rigidity and dichotomies of qualitative versus quantitative methodologies, but instead the research practices have a mixed of the two methodologies (Tariq & Woodman, 2013; Creswell, 2014). Both qualitative and quantitative methodologies seem to represent the extreme ends on a continuum (Newman and Benz, 1998). Sometimes a study tends to be more qualitative than quantitative and vice versa. However, in 2014 Creswell suggests three research approaches such as (a) qualitative, (b) quantitative, and (c) mixed methods. He further reiterates that "mixed methods research resides in the middle of this continuum because it incorporates elements of both qualitative and quantitative approaches" (Creswell, 2014: 3).

Based on this practice, a decision was also made in this study to incorporate quantitative approaches to obtain a more holistic understanding of the policy process, implementation and the impact of the new health legislation Act 586. In this context, several sources of secondary data were also extracted quantitatively to see the pattern of burgeoning development of private hospitals in Malaysia under a loosely regulated environment. These data were derived to enhance the reliability of the qualitative data collected through interviews and informal discourses through personal communications.

This research study tends to be more qualitative than quantitative in the approach owing to the perspective the research is undertaking. Having decided on the qualitative approach, the next step is obviously to choose which qualitative method is most appropriate for the study. In this context, research analysts have cited several methods among others including case study, ethnography, history, ground theory, narrative and phenomenology (Stake, 1995; Yin, 1994; 2012; Silverman, 2010; Creswell, 2014). Likewise, Yin (1994; 2003; 2012) states that the selection of an appropriate strategy is based on the type of research question posed, the extent of control the

investigator has over actual behaviour events, and the degree of focus on contemporary as opposed to historical events.

> In addition, Creswell (2014: 108) suggests that "a research problem is the problem or issue that lead to the need for a study. It can originate from many potential sources. It might spring from an experience researchers have had in their personal lives or workplaces. It may come from an extensive debate that has appeared in the literature. The literature may have a gap that needs to be addressed, alternative views that should be resolved, or a branch that needs to be studied. Further, the research problem might develop from policy debates in government or among top executives".

Analyst such as Tesch (1990) advocates the use of case study approach when the objective of the research is to increase understanding. Particularly, "case studies are a designed of inquiry found in many fields, especially evaluation, in which the researcher develops an in depth analysis of a case, often a program, event, activity, process or one or more individuals. Cases are bounded by time and activity, and the researchers collect detailed information using a variety of data collection procedures over a sustained period of time" (Creswell, 2014: 14). The advantage of qualitative survey is its ability to provide comprehensive textual descriptions of the behaviour and perception of the various actors on a research issue (Braun & Clarke, 2013; Gilson, 2014). Even analyst such as Patton (2002: 40) argues case study as "information rich and illuminative, that is, it offers useful manifestations of the phenomenon of interest".

On the same note, Polkinghorne (2005: 140) asserts that "because the goal of qualitative research is enriching the understanding of an experience, it needs to select fertile exemplars of the experience for study. Such selections are purposeful and sort out; the selection should not be random or left to chance". He further reiterates "the purposive selection of data sources involves choosing people or documents from which the researcher can substantially learn about the experience" (Polkinghorne, 2005: 140).

Invariably, case study is the strategic inquiry in which the researcher explores, in depth, a program, an event, an activity, a process, or one or more individuals (Stake, 1995). Based on this concept, it is felt that a case study approach was most appropriate to this research study because it contributes to the understanding of the impact and implementation of health policy process with the enforcement of Act 586 (Nik Rosnah, 2002).

Further, Yin (1994: 1) argues that "case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon with some real life context". The use of case study will provide maximum advantage as it tries to answer the 'what', 'how' and 'why' questions regarding private health policy development and implementation of the regulations. Precisely, the Research Questions in this research study are as follow:

i). What is the impact of the Private Healthcare Facilities and Services Act 1998 [Act 586] & its Regulations 2006 on the private hospitals in Malaysia in terms of achieving the intended national objectives of improving accessibility, correcting the imbalances in standards and quality of care, and rationalising the medical charges to more affordable levels?
ii). What are the factors that influence the impact of the Act 586 on the private hospitals?
iii) How is the enforcement capacity of the MOH with the enforcement of Act 586 on the private hospitals?

Furthermore, Yin (1994: 1) posits that "the distinctive need for case studies arises out of the desire to understand complex social phenomena". In this context, case study enables the investigation of the healthcare complexities and exploration of how time shapes the regulatory development in the private health care sector (Walt et al. 2008; Gilson, 2014). The unique strength of case study is its ability to deal with a full variety of evidence which includes interviews, observations, and documentation as illustrated in Table 1.

In this study the instruments of qualitative approach employed are as follow;

- Key informant's Interview
- Focus Group Discussion
- Participant Observation
- Documentation
- Archival Records
- Medical Bills
- Researcher's Personal Experience as Chief Executive Officer of Private Hospitals.

Table 1:

Strengths and Weaknesses of Five Sources of Evidence utilised in the Study

Source of Evidence	Strengths	Weakness
Documentation	• stable—can be reviewed repeatedly • unobtrusive—not created as a result of the case study • exact—contains exact names, references, and details of an event • broad coverage—long span of time, many events, and many settings	• retrievability—can be low • biased selectivity, if collection is incomplete • reporting bias—reflects (unknown) bias of author • access—may be deliberately blocked
Archival Records	• [Same as above for documentation] • precise and quantitative	• [Same as above documentation] • accessibility due to privacy reasons
Interviews	• targeted—focuses directly on case study topic • insightful—provides perceived causal inferences	• bias due to poorly constructed questions • response bias • inaccuracies due to poor recall • reflexivity—interviewee gives what interviewer wants to hear
Direct Observations	• reality—covers events in real time • contextual—covers context of event	• time-consuming • selectivity—unless broad coverage • reflexivity—event may proceed differently because it is being observed • cost—hours needed by human observers
Participant-Observation	• [Same as above for direct observations] • insightful into interpersonal behavior and motives	• [Same as above for direct observations] • bias due to investigator's manipulation of events

Source: Yin, 2003: 86.

Furthermore, triangulation of data collection methods is crucial in ensuring credibility and reliability in research outcomes (Creswell, 2003; 2014). It was decided that a triangulation of methods be utilised in the present study to provide a comprehensive illustration of the research

including validity. "Qualitative validity means that the researcher checks for the accuracy of the findings by employing certain procedures, while qualitative reliability indicates that the researcher's approach is consistent across different researchers and different projects" (Creswell, 2014: 201).

In this study, preliminary research questions and a conceptual framework guided the research towards data collection. This research adopted a flexibility approach to cope with any new development disclosed in the study. This research design permits initial research questions to be modified to suit the occurrence of new issues that become more apparent during the course of research. The data collection process may also change with the emergence of theory, developing broad themes and interpretations (Creswell, 2003; 2014).

Theory or themes provide theoretical perspectives, guide researchers as to what issues are important to examine and the people that need to be studied. The researcher had started gathering detailed information from key informants and synthesized this information into categories or themes. A conceptual framework is then used to guide the researcher as to what issues are important to examine based on respondents' interviews in the study area.

STUDY AREA

According to Creswell (2014: 189), "the idea behind qualitative research is to purposefully select participants or sites (or documents or visual material) that will best help the researcher understand the problem and the research question". The Klang Valley which is located in West Peninsular Malaysia has been purposively chosen for the study area. It covers an area of 2,826 square kilometres comprising the metropolitan Federal Territory of Kuala Lumpur and the developed state of Selangor (Malaysia, 2006).

In terms of geographical distribution of population, Selangor including the Federal Territory of Putrajaya which has the highest population of 5.07 million people. The Federal Territory of Kuala Lumpur had a population of 1.63 million people in 2008 (MOH, 2008). In addition, the Federal Territory of Kuala Lumpur has the highest population density of 6,891 persons per square meter in the country for the year 2010 (MOH, 2011). Besides, this study area has the highest concentration of private hospitals in the country with a total of 91 private hospitals. These private medical institutions constitute 43.54 percent of the total 209 private hospitals licensed nationwide in 2008 (MOH, 2008; 2011).

STUDY SAMPLE OF PRIVATE HOSPITALS

Fifteen private hospitals were purposively selected for this study. Seven of these private hospital establishments are located in Selangor while the rest of the eight private hospitals are located in the Federal Territory of Kuala Lumpur. The selection was based on two criteria. First, the utilised bed capacity and second, the type of facilities and services provided. The first category comprises of seven large sized private hospitals with bed capacity of over 200 beds and providing full tertiary care facilities and services. The second category consists of four medium sized private hospitals with bed capacity of between 100 to 200 and providing partial tertiary care facilities and services. The last category comprises of four small sized private hospitals with less than 100 beds and providing secondary care facilities and services. For the purpose of this research and ethical consideration, the identity of these fifteen private hospitals are kept confidential, and would be identified through coding as Hospital A, B, C, D, E, F, G, H, I, J, K, L, M, N, and O respectively as shown in Table 2.

Seven of these private hospitals namely, A, B, C, D, E, F and G are classified as big sized hospitals with over 200 beds capacity and providing tertiary care facilities with various specialty and subspecialty services. These private medical institutions are well equipped with the latest state of the art medical technology and sophisticated modalities.

While the other five study private hospitals H, I, J, K and L are classified as medium sized institutions with bed capacity between 100 to 200 offering partial tertiary care facilities complement with a few specialty and subspecialty services. Finally, the remaining three private medical facilities M, N, and O are classified as small sized hospitals of less than 100 beds. These private facilities providing mostly secondary care facilities and a few "bread and butter" specialty services such as internal medicine, general surgery, obstetrics and gynaecology and paediatric medicine.

In terms of corporate ownerships, nine of these private hospitals namely B, C, D, E, F, I, L, M, and N are owned by government linked corporations (GLCs) which the state has majority vested equity interests. However, four other private hospitals, A, H, J, and O are owned by standalone corporations. In spite of this status, public policy mandates a 30 percent of Bumiputra equity control or GLCs participation in these private hospitals (Chee & Barraclough, 2007; Chan, 2014). Only two other private hospitals G and K, which had their original roots as charitable and non-profit hospitals that are currently managed by the respective Board of Trustees.

Table 2:

Profile of Study Hospitals

Hospital	Bed Capacity	Type of Facilities & Services	Type of Premises	Type of Ownership	Legislation under which they were licensed
A	> 200	Tertiary Care	Purpose Built	Stand Alone Corporation	Private Hospitals Act 1971
B	> 200	Tertiary Care	Purpose Built	*GLC.	Private Healthcare Facilities & Services Act 1998
C	> 200	Tertiary Care	Purpose Built	*GLC.	Private Hospitals Act 1971
D	> 200	Tertiary Care	Purpose Built	*GLC.	Private Hospitals Act 1971
E	> 200	Tertiary Care	Non Purpose Built	*GLC.	Private Hospitals Act 1971
F	> 200	Tertiary Care	Purpose Built	*GLC.	Private Hospitals Act 1971
G	>200	Partial Tertiary Care	Purpose Built	Board of Trustees	Private Hospitals Act 1971
H	100-200	Partial Tertiary Care	Purpose Built	Stand Alone Corporation	Private Hospitals Act 1971
I	100-200	Partial Tertiary Care	Non Purpose Built	*GLC.	Private Hospitals Act 1971
J	100-200	Partial Tertiary Care	Purpose Built	Stand Alone Corporation	Private Healthcare Facilities & Services Act 1998
K	100-200	Partial Tertiary Care	Purpose Built	Board of Trustees	Private Hospitals Act 1971
L	100-200	Partial Tertiary Care	Non Purpose Built	*GLC	Private Hospitals Act 1971
M	< 100	Secondary Care	Non-Purpose Built	*GLC.	Private Hospitals Act 1971
N	<100	Secondary Care	Non Purpose Built	*GLC	Private Hospitals Act 1971
O	<100	Secondary Care	Non Purpose Built	Stand Alone Corporation	Private Hospitals Act 1971

*Government Linked Companies
Source: Author, 2010-2011.

From the perspective of medical care accessibility, private hospitals such as A, B, C, D, E, and F are tertiary care establishments providing a wide range of medical specialties and subspecialties services such as cardiology and cardiothoracic surgery, neurology and neurosurgery, minimal invasive spine surgery and oncology. These private hospitals are considered as large medical institutions with over 200 bed size capacity and are equipped with the latest state of the art medical technology. Whereas medium-sized private hospitals such as G, H, I, J, K, and L provide partial tertiary care facilities and services. These institutions have bed size capacity ranging between 100 to 199 beds except for Hospital G which has slightly over 200 beds capacity. The remaining hospitals M, N, and O are small-sized private medical establishments with bed size capacity below 100 beds providing secondary care facilities and are complement with a few specialties services.

DATA COLLECTION

This study was conducted between 2010 and 2011 using a purposive sampling method to examine the impact of Act 586 at two levels. One study was conducted at the private hospitals to examine their performance improvement in terms of compliance and non-compliance. Similarly, examination was also done at the MOH as the regulatory body in terms of the enforcement capacity among others, the mandatory approval and licensing of facilities, and the concern to address the inequitable distribution of private hospital establishments nationwide. Primary data were gathered utilising key informant interviews, focus group discussions, and observations as illustrated in Table 3.

Information obtained has been validated from at least two different sources such as repeat interviews, and documentary evidence. Secondary data were derived among others, from official publications of government agencies such as the MOH, professional bodies, academic publications, research papers, medical bills, and as a delegate attending the International Healthcare Conference and Exhibition 2010 organised by the Association of Private Hospitals of Malaysia. Besides, researcher also attended the local healthcare seminars organized by University of Malaya and the MOH respectively.

In view of the complexity, heterogeneity of actors and the multidisciplinary nature of the facilities and services in the private hospitals, this study conducts an exploratory approach by utilising case studies. This is to explore the impact of the new private health care legislation Act 586 and how

these regulations at work in the study private hospitals. The rationale for case studies is most appropriate as it will provide a greater depth understanding of such type of research. In addition, the choice of detailed case studies will help to focus on the inquiry and help to gain an insight into the impact of the different aspects of the regulation on the behaviour of the actors (Walt et al. 2008; Yin, 2012; Creswell, 2014). Although the fact that case studies may miss the macro perspective of the private health care delivery sector in the country, it permits the researcher to focus on specific issues and at the same time identifying the various regulatory processes at work in the study private hospitals (Sofaer, 2002; Nik Rosnah, 2002; Walt et al. 2008; Gilson, 2014).

Table 3:

Techniques used to Collect and Analyze Data 2010/2011

1. Primary Data Sources	Techniques
a) Key informants from the private health sector:Private hospitals, managed care organisations and medical insurance companies.	Interviews, focus group discussions, and observations.
b) Key informants from public health sector:Ministry of Health Malaysia, Public Hospitals and Public Universities.	Interviews, focus group discussions, and observations.
c) Key informants from the professional bodies, corporations, political parties, non-government organizations, civil society and private paying patients	Interviews.
2. Secondary data sources	Documentation & Archival records; Attending International Healthcare Conference 2010 organised by APHM & Local Healthcare Seminars.

Source: Author, 2010-2011.

Studies were purposively conducted in fifteen private hospitals to have a closer look of regulations at work. This includes among others, the

compliance on the mandatory licensing of facilities and services to ensure accessibility and patient's safety, the legal responsibility of the person-in-charge, rationalising the medical charges to more affordable levels, and quality care initiatives undertaken. These study hospitals represent a purposive sampling frame of 7.18 percent of the total 209 private hospitals licensed in 2008. The Klang Valley has 91 private hospitals which represents 43.5 percent of the total registered private hospitals in Malaysia (MOH, 2008). The study was conducted in 2010 and 2011. However, the availability of data for analysis was based on the official statistics released by MOH in 2009.

FOCUS GROUP DISCUSSIONS

Research analysts such as Morgan (2002) and Liamputtong (2011) suggest the preferred method of group discussions when the research approach is exploratory in nature. This approach of data collection is based on open discussions on predetermined matter with a variable number of participants initiated by the moderator. The objective is to obtain free flow of opinions and avoid a situation of undue influence of the moderator (Morgan, 2002; Liamputtong, 2011).

Primary data were gathered from three different focus group discussions in this study. These focus groups discussions comprise mostly those medical and nursing professionals from the MOH, the State Medical and Health Department of the Federal Territory of Kuala Lumpur and a study hospital for the purpose of triangulation and cross reference. In each of the focus group there were about four to six participants. The focus group discussion provides an insight of regulations at work and the enforcement capacity of Act 586 on the private health care sector especially on the private hospitals. Information obtained further strengthened the reliability and validity of the findings.

Key Informant Interviews

Interviews were conducted with the key informants who are also stakeholders to assess their rich experiences, views, and priorities on the impact of the new legislation Act 586. Perceptions of the various key stakeholders with their extensive experience reflect the reality on the ground (Yin, 2003; 2012; Creswell, 2014; Gilson, 2014). Besides, it not only generates rich

but meaningful data and information under the study (Polkinghorne, 2005; Walt et al. 2008; Braun & Clarke, 2013). Hence the identification of key informants is crucial and an important aspect in this research design. The key informants' interviews were derived from the various relevant stakeholders in the health care sector. Data were derived from three categories of relevant stakeholders of the health sector in Malaysia:

a) Public Sector,
b) Private Sector,
c) Others.

The first category is the informants from the public sector. This category comprises 25 officials from the public health sector. Key informants from the public health sector comprising of current and past officials from the MOH. This list of key informants includes a former Director General of Health, Directors and Unit Heads to the medical regulators from the Enforcement Unit, Private Medical Practice Division, Engineering Division and the Nursing Board. Personal communications were conducted with officials from State Medical and Health Department including the Director, and other relevant senior officials who were involved in the implementation and enforcement of the new private healthcare legislation Act 596. Besides, information were gathered from medical specialist consultants, medical officers, pharmacists, assistant medical officers, nurses and paramedic staff from public hospitals, and academicians from public universities.

The second category is the key informants from the private health sector. A total of 80 key informants from the private healthcare sector include the past and present senior management executives of the private hospitals participated in the study. Some of these key informants have previous working experience in at least two of these private hospitals. This list of key informants includes the Executive Director, Chief Executive Officer (CEO), Chief Operating Officer, Medical Director, General Manager, Accountant, Director of Nursing, Pharmacist and the staff of the various departments in the private hospitals. These departments encompass the emergency department, admission and discharge department, patient billing department, inpatient wards, operation theatre, central sterile supplies department, cardiac invasive laboratory, imaging, clinical laboratory, marketing and promotion, and customers' service department. Primary data were also collected from the medical and dental professionals such as the specialist consultants of the various specialties and sub-specialities across the various private hospitals. Data were also collected from the private practitioners, the medical and health

insurance companies, managed care organisations, third party administrators and the pharmaceutical companies from the private healthcare sector.

The last category comprises of key informants who are classified as "others". This group of 25 key informants include two politicians who were former Health Ministers. The data obtained from this category includes members from professional bodies such as Malaysian Medical Association who among others include three former Presidents, Federation of the Private Medical Practitioners' Associations, Malaysia, Association of Medical Specialists in Private Practice, Association of Private Hospitals of Malaysia, Medical Defence Malaysia Berhad, and Bar Council. In addition, data were gathered from corporations, non-governmental organisations such as Malaysian Society for Quality in Health, and civil society. Besides, data were also collected from academicians from universities, and a group of private paying patients and their relatives who have utilised the services of the private hospitals.

Thus in total 130 key informants have contributed to the data collection exercise. The reason for the use of multiple key informants is to gather information from different perspectives about the experience of the impact of the new legislation Act 586. In addition, multiple participants serve well the purpose of triangulation on the experience and views looking from different lens (Polkinghorne, 2005; Walt et al. 2008). While semi-structured interviews and personal communications were the preferred choice because it gave the researcher control over time, content and sequence of the interview but it has its own limitations. These among others may include the interviewer bias due to the lack of standardisation and the lack of anonymity (Nik Rosnah, 2002; Raja Noriza, 2006; Yin, 1994; 2012). Besides, the interviewer must possess the prerequisite good communication skills in order to achieve the maximum benefits from the interview process (Polkinghorne, 2005; Braun & Clarke, 2013).

Observation

Creswall (2014: 190) states that "qualitative observation is when the researcher takes field notes on the behavior and activities of individuals at the research site. In these field notes, the researcher records, in an unstructured or semi-structured way (using some prior questions that the inquirer wants to know), activities at the research site". Further, qualitative observers may also engage in roles varying from a non-participant to a complete participant. In this study, observations were made during the data collection exercise at the

private hospitals and MOH where field notes were taken. The observations were made in which the actual activities and environment at the research sites were compared with those documented, policy objectives and the requirements under the Act 586 and its regulations.

Researcher's Personal Experience as a CEO of Private Hospitals

On the personal front, in 2003 the researcher was the Chief Executive Officer of a proposed 300 bedded Australian designed modern private tertiary care hospital in the Klang Valley. This purpose-built Australian designed private hospital was almost structurally completed but unfortunately had to be temporarily abandoned due to financial constraint during the aftermath of the Asian Financial Crisis 1997/1998. However, this private hospital was eventually acquired by one of the leading GLC private healthcare provider conglomerates in the country.

Subsequently, prior to embarking on this doctoral study, the researcher was the Chief Executive Officer of a 232 bedded partial tertiary care private hospital from 2004 to 2008. This private medical institution offers a wide range of multidisciplinary facilities and services, among others encompasses subspecialties services such as cardiology and cardiothoracic surgery, and oncology in the Klang Valley. It was during this challenging period of the implementation and enforcement of the new health care legislation Act 586 that the researcher had the personal experience and opportunity to be an active participant in the regulatory reform initiatives. Precisely, witnessing the historical events of the regulatory transition period just before and after the enforcement of the new private healthcare legislation Act 586 on 1st May, 2006.

In this context, the researcher had attended a dialogue initiated by the Health Minister together with members of professional bodies such as Malaysian Medical Association (MMA), Association of Specialists in Private Medical Practice Malaysia (ASPMP), private hospitals, Association of Private Hospitals of Malaysia (APHM) and other relevant stakeholders to discuss various issues pertaining to the implementation and enforcement of the Act 586 and Regulations 2006 at MOH, Putrajaya on 29th January, 2007. Subsequently, unofficial visits were also made by the researcher and his colleagues to the various private hospitals in the Klang Valley to gain an insight on the regulations at work in these hospitals. Feedback were also gathered through discussions and observations with the medical and nursing professions including medical specialists, and paramedical staff

on the experiences encountered in terms of the policy, compliance and non-compliance of the new health care legislation. Invariably under these circumstances, the researcher was exposed to the issues of the new regulatory requirements under Act 586 and had to engage constantly with the regulatory authority under the MOH in terms of policy, compliance, licensing, annual inspection and the enforcement under the new legislation.

This rich experience and exposure provided the researcher an opportunity to interact and to establish a close networking relationships with officials of the regulatory body under the MOH, the management and staff of the various private hospitals, healthcare professionals, pharmaceuticals, insurers and managed care organisations, private corporations, non-governmental organisations, patients and relatives, and other stakeholders in the private health sector. Networking with the various categories of relevant people and stakeholders had coincidently provided the researcher the motivation to gain a further insight of the regulatory intervention of Act 586. Some of these stakeholders had eventually became researcher's key informants and sources of personal communication in providing the relevant primary data collection under this research study conducted between 2010 and 2011.

During the data collection process, the researcher was also engaged as a Chief Executive Officer of a corporation in the health care industry from March 2010 to September 2010. The researcher was involved in the setting-up, licensing and commissioning of a boutique private medical centre in Kuala Lumpur in terms of compliance under the new healthcare legislation Act 586. The researcher had the hands-on experience as an actor in dealing with the various stakeholders in the health sector including the regulatory body of MOH for mandatory approval and licensing.

DOCUMENTATION

One of the main sources of data collection under this study was from published historical data. It does not only provide valuable sources of information and references but also for the purpose of triangulation (Denzin and Lincoln, 2011; Yin, 2012). The use of document is justified in this study due to the highly political nature of the public policy process as suggested by several authors (Nik Rosnah, 2002; Sofaer, 2002; Raja Noriza, 2006; Walt et al. 2008; Yin, 2012; Gilson, 2014).

News reports from various media were also used as a source of evidence to strengthen the creditability of the research. The rationale for using news reports held by several policy analysts is that media reportage may also be included as other channels by which a problem may be brought to the attention of policy-makers and put on the policy agenda (Sofaer, 2002; Raja Noriza, 2006; Walt et al. 2008; Yin, 2012; Gilson, 2014).

Although secondary data may be timely and relevant to the researchers' needs, the disadvantage is the inaccuracy of such information (Yin, 2003). Such published data may be biased in support of vested interests (Yin, 1994; 2012). These bias reports from mainstream media such as newspapers is due to the nature of affiliation and ownership which need cautious verification and treatment. Hence, each documentary information has to be evaluated in terms of creditability and authenticity (Denzin & Lincoln, 2011).

The secondary data under this study were obtained from various official publications such as Malaysia Development Plans, Economic Reports, Annual Reports and publications from Ministry of Health Malaysia, Department of Statistics Malaysia, Professional Bodies, academic books, international refereed academic journals, medical bills, the various private hospitals' websites and the internet. Data were also gathered from mainstream media reports, press statements from the Health Minister and Director General of Ministry of Health, Malaysia.

Data and information were also gathered from the attendance of the various international healthcare conferences organised annually by the Association of Private Hospitals of Malaysia (APHM) from 2006 to 2010, Conference on the Private Hospital & Private Healthcare Institution Administration in Malaysia with special emphasis on the Private Healthcare Facilities & Services Act 1998 (Act 586) and Regulations 2006, 15th & 16th November, 2006, Kuala Lumpur. Further, data were also collected while attending the healthcare seminars organised by the Faculty of Economics and Administration, University of Malaya in 2010, and MOH on 11th December, 2011.

Approval from National Medical Research and Ethics Committee (NMRR)

Although this study is non-clinical in nature, it has sought the approval from the National Medical Research and Ethics Committee, MOH **(**NMRR) as a matter of courtesy before embarking on the collection of data. In compliance

to NMRR's requirement, the researcher had to submit the research proposal together with detailed documentation including an Investigator's Agreement and the Faculty of Economics and Administration's consent to the NMRR for their approval. It took a lengthy period before an approval was given subject to the various stringent terms and conditions among others the data confidentiality is to be adhered. The submission with a registered identification ID: NMRR-10-301-5561 has been given approval and noted that the study has no clinical intervention on patients in hospitals.

FIELDWORK

The fieldwork of this study was conducted between mid-2010 and late 2011. Purposive sampling was utilised as a method of selection of key informants for interviews based on their information rich experiences and official capacities in the various fields in the health care sector. It is crucial to select information rich participants for in depth understanding of issues which are of primary importance to this study (Polkinghorne, 2005; Yin, 2012; Braun & Clarke, 2013).

Hence, during the initial stage, ten official invitation letters were sent to the various purposive selected key informants for an interview in this study. These letters were sent out with the endorsement from the Deputy Dean for Post-Graduate Studies of the Faculty. This was subsequently followed by numerous telephone calls and electronic mails to request for their participations. In addition, researcher had also sought a letter of support from the Faculty of Economics and Administration for the purpose of undertaking research field work. The letter of support from the Faculty was deemed necessary as the historical regulatory intervention in 2006 was controversial and eventful. There was an unprecedented resistance in the implementation of the Act 586 and the professional bodies deemed the Act 586 as criminalising their professions. In a separate incident, there was nationwide protests calling for the deferment of the implementation and enforcement of the Act 586.

In view of the sensitivity arising from the enforcement of Act 586, there were scepticisms on the motive on this research study and assurance had to be given that it was an academic study. The researcher adopted a cautious and less structured approach in the interviews and personal communications with the various key informants during the initial stage of field work. In spite of the less structured approach, many of the key informants were

apprehensive and equally concerned about their confidentiality. There were mixed responses for the interviews despite the assurance given on the confidentiality. The key informants from the public sector were governed by the Official Secret Act 1972 that disallowed them to divulge government information, which may be classified as a secret information while the key informants from the private health sector were equally concerned about their corporate confidentiality.

Some key informants had even responded requesting for more details on the semi- structured questions to be posed to them during the interviews. The key informants were informed that data gathered from the interviews would be used for the purpose of this study. A few key informants wanted the request for interview to be referred to the top management for approval or approval from their research and ethics committee. Obviously, the protocols caused considerable delays for getting interviews. Despite the researcher's background and experience in the private hospitals as an actor previously, there were key informants who had declined the request for an interview. In this context, new key informants were sought to replace those who had declined earlier.

In spite of the official restrictions of information imposed, there were also many genuine respondents who were willing to share their experiences and views on the impact of the Act 586 on the private hospitals. In this respect, snowball technique was used to interview the key informants and personal communications to gather the data. However, none of the informants wanted their interviews to be recorded on a tape recorder and requested to remain anonymous but allowed hand written notes to be taken. Hence from the onset of the research, total confidentiality of the key informants had to be assured to encourage honest and meaningful insight to this research.

While the anonymity and confidentiality are maintained in the dissemination of the findings for this study, the key informants have been identified by a coding system. It is felt that at times it is necessary to know the status and category of the key informants so that their statements can be quoted and put into context. The identification codes used were based on the three categories of key informants classified and discussed earlier under sub-section 5.2. For instance, Code PUB was for key informants from the public health sector, Code PRI was for key informants from the private health sector, and the last category of key informants was coded as OTR as illustrated in Table 4. A detailed list of 130 key informants with their coding status and position is enclosed in Appendix A of the thesis for reference in this study.

Table 4:

Identification Codes for Key Informants

Category	Key Informants	Code
Public Sector	25 officials from the MOH including a former Director General of Health; Private Medical Practice Division; Engineering Division, State Medical and Health Department, medical & nursing professionals, pharmacists, assistant medical officers from public hospitals, & academicians from public universities.	PUB 1 to PUB 25
Private Sector	80 key stakeholders including past and present senior management of the various private hospitals including Executive Director, Chief Executive Officer, Chief Operating Officer, Medical Director, General Manager, Accountant, Director of Nursing, Pharmacist and the staff of the various departments in the private hospitals; medical & dental specialists, private practitioners, & medical insurance companies.	PRI 1 to PRI 80
Others	Two former Health Ministers. Key informants from Malaysian Medical Association including three former Presidents, Federation of the Private Medical Practitioners' Associations, Malaysia, Association of Medical Specialists in Private Practice, Association of Private Hospitals of Malaysia (APHM), corporations and non-governmental organisations such as Malaysian Society for Quality in Health, private paying patients and their relatives.	OTR 1 to OTR 25

Source: Author, 2010-2011

The key informants were given the freedom to express their experience about what was central to them but at the same time ensured that issues which were crucial to study were covered based on some prepared semi-structured guidelines. Face to face interviews, telephone interviews, emails and personal communication were conducted. Each interview ranges between one to three hours. Further, each exploration results in languaged data. These languaged data are "interrelated words combined to sentences which subsequently results in discourses" (Polkinghorne, 2005:137). Notes on crucial issues were taken down immediately after each interview with the key informants.

During the field work, the researcher was also engaged as a Chief Executive Officer with responsibility in the setting-up, licensing and

commissioning of a boutique private medical establishment in Kuala Lumpur. In this context, the researcher had an opportunity to gain further insight and personal experience on the impact of the regulatory intervention. Henceforth, the data collection process continued with key informant interviews, focus group discussions, and personal communication with the relevant stakeholders during this period until late 2011 when it is felt that data collection had reached the saturation level. According to Creswell (2014: 248) the idea of "saturation is when, in qualitative data collection, the researcher stops collecting data because fresh data no longer sparks new insights or reveals new properties".

It was during this fieldwork period the researcher had the hands-on experience as an actor and participant observer in dealing with the various stakeholders in the health sector including the regulatory body of MOH in the data collection exercise. In addition, the researcher had the privilege of attending and meeting other key informants at the "International Conference on Healthcare 2010" which was organised annually by the Association of Private Hospitals of Malaysia (APHM), and healthcare seminars organised by the Faculty of Economics and Administration, University of Malaya in 2010, and MOH in 2011 where primary and secondary data were also collected.

DATA ANALYSIS

After the completion of the data collection exercise, the information gathered need to be analysed in order to interpret what data were relevant to the issues being investigated. There are various perspectives available to analyse data depending on the type, aim, and the design of research (Nik Rosnah, 2002; Raja Noriza, 2006; Silverman, 2010; Denzin & Lincoln, 2011; Yin, 2012; Creswell, 2014). The data was organised and managed before the analysis process. While there are several different qualitative approaches to the analysis of data from interviews, but the design flexibility remains top priority than following one system of analysis (Reynold et al. 2011; Braun & Clarke, 2013; Creswell, 2014).

Precisely, the public policy process is a complex phenomenon and influenced among others, the social, cultural and political settings (Nik Rosnah, 2002; Raja Noriza, 2006). In order to understand the complex phenomenon of policy process in the private health sector, it is paramount to study the political power and the influence of a phenomenon, individuals or

organisations in its natural setting. Likewise, Walt et al. (2008: 308) assert that "health policy analysis is a multi-disciplinary approach to public policy that aims to explain the interaction between institutions, interests, and ideas in the policy process". Such discourses on health policy analysis are of significant importance. In general, discourse has been defined "as a specific ensemble of ideas, concepts, and categorizations that is produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities" (Hajer, 1995: 44).

In this study, discourse analysis was of assistance as it placed the emphasis on words as spoken in interviews and discourses gave a better understanding on the impact of the public policy. This understanding may also vary according to the perceptions of the key informants on the impact of Act 586 on the private hospitals in Malaysia in terms of achieving the national health objectives of accessibility, equity and quality care. Besides, discourses helped in analysing interview data where contradictions and divergent views were encountered, and provide understanding of the interpretations. As the key informants are from diverse backgrounds, discourse analysis is able to determine the ways power and influence are configured and transformed in the private hospitals sector in Malaysia with the enforcement of Act 586.

Codes and Themes

Braun and Clarke (2013: 206) argue that "coding is a process of identifying aspects of the data that relate to your research question". In this respect there are two main techniques to coding in pattern-based forms of qualitative analysis namely, (a) selective coding and (b) complete coding. Selective coding is a process which a researcher is able to recognise a corpus of 'instances' of the phenomenon which he is interested in, and selecting those out. It requires a process of more reading and familiarisation over a period of time". On the other hand, in complete coding, "codes identify and provide a label for a feature of the data that is potentially relevant for answering your research question" (Braun & Clarke, 2013: 207). Furthermore, Braun and Clarke (2013) gave an analogy of codes in relation to the building blocks of analysis. Citing the example on the analysis of a brick-built, tile-roofed house, the themes are the wall and the roof; the codes are the individual bricks and tiles. In general terms, "codes can be either reflect the semantic content of the data (we call these data derived or semantic codes) or more conceptual or theoretical interpretations of data (we called these researcher-derived or latent codes)" (Braun & Clarke 2013: 207).

Similarly, analyst like Creswell (2014: 199) assets the "use of coding process to generate a description of the setting or people as well as categories or themes for analysis. These themes are the ones that appear as major findings in qualitative studies and are often used as headings in the findings sections (or in the findings section of a dissertation or thesis) of studies". This analysis is "useful in designing detailed descriptions for case studies, ethnographies, and narrative research projects" (Creswell, 2014: 200).

In this study, the researcher utilised the coding protocols suggested by Braun and Clarke (2013), and Creswell (2014). The initial set of codes was created after having read the hand written notes taken during the interviews while paying attention to the vital sections, phrases or words and allotting them with a code. This process of coding was done simultaneously, keeping in mind of the research questions which had been established earlier in the research study.

Subsequently, manual coding was chosen as the preference over the use of qualitative computer data analysis program such as MAXqda, Atlas. ti, or QSR NVivo software package for some obvious reasons. Although the use of qualitative computer data analysis programs have become quite popular recently and they can help researchers organise, sort and search for information in text or image data, however, it needs time and skill to learn to employ effectively (Creswell, 2014). In view of the data derived from the study are complex and rich, manual coding provides the researcher the advantage of being able to conceptualise and integrate the information albeit the laborious and time-consuming process. The meticulous and slow process of manual coding in this study makes it less likely that significant concepts will be missed. Finally having each category or theme written out on a separate sheet of paper will make it easier to identify the variations within each category or theme. This process in the methodology assisted in the subsequent process of write ups in the thesis in this study as illustrated in Figure 1.

Consequently when the coding process had been completed, the list of categories generated was studied and summarised into smaller group of themes. Vigorous re-examinations of the coded data had been undertaken so as to identify emergent themes. The following core themes became evident during this process such as policy, power, governance, compliance, non-compliance, cost, inequity, quality, politics, and enforcement.

Subsequently after having identified and developed these themes, the analytic methodology becomes more apparent as a form of discourse analysis. Each theme is then examined closely so as to distinguish, compare and contrast the various approaches in which the key informants had chosen to express themselves over an issue. Eventually, these themes led to the development of the thesis in examining the impact of the new legislation, the Private Healthcare Facilities & Services Act 1998 (Act 586) and Regulations 2006 on the private hospitals in the Malaysia.

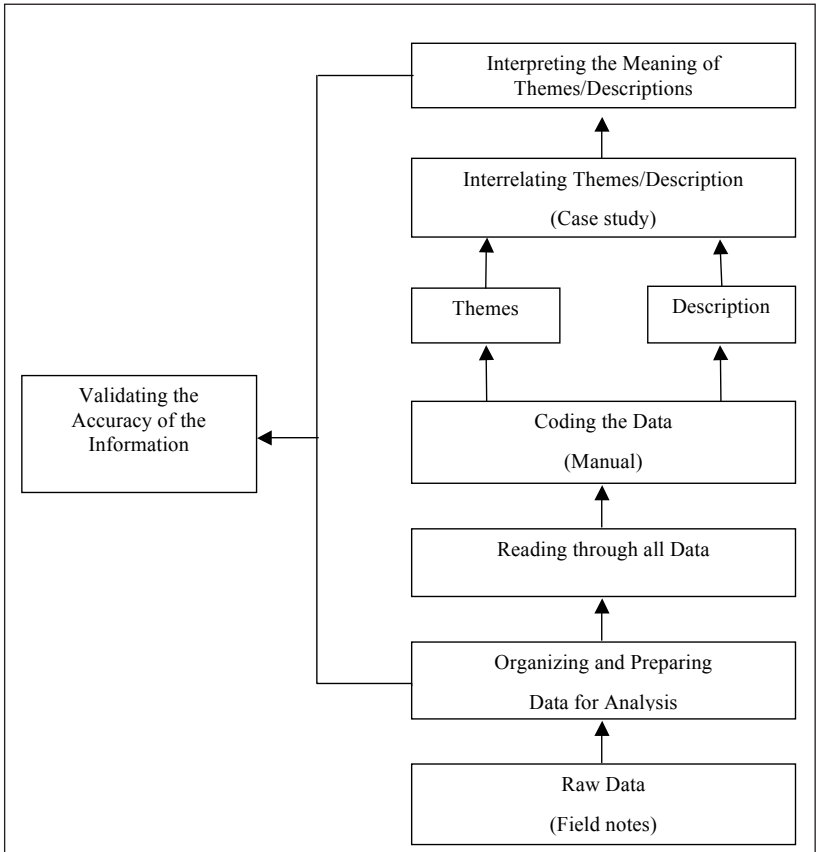

Figure 1. *Data Analysis Process in the Research Study 2010/2011.*

Source: Author, 2010-2011.

CONCLUSION

The emphasis of this qualitative study has been directed towards the impacts of legislative controls on private hospitals in Malaysia. This paper presents the theoretical underpinnings, different methods utilised for the data collection and analysis of this research study. Several emergent themes were identified during the research study. The following core themes became evident during this process such as policy, power, governance, compliance, non-compliance, cost, inequity, quality, politics, and enforcement. The result of findings of the impact of the regulatory intervention of Act 586 were subsequently presented in two chapters in the thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy at University of Malaya, Malaysia.

Ethical Considerations

Ethical issue principles including plagiarism, informed consent,misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc. have been completely observed by the authors.

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The authors have no competing interests.

REFERENCES

Braun, V., & Clarke, V. (2013). *Successful Qualitative Research: A practical guide for beginners*. London EC1Y: SAGE Publications Ltd.

Bryman, A. (2012). *Social research methods* (4th ed.). Oxford OX2 6DP: Oxford University Press.

Chan, C. K. (2014). The Malaysian Health System in transition: The Ambiguity of public and private. Occasional Paper No. 26. August 2014: Municipal Services Project, Queen's University, Canada

Chee, H. L., & Barraclough, S. (eds.). (2007). *Health Care in Malaysia: The dynamics of provision, financing, and access.* Milton Park, Oxon OX14 4RN.: Routledge Malaysian Studies Series.

Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative & Mixed Methods Approaches.* (2nd Ed.).Thousand Oaks, California 91320: SAGE Publications, Inc.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative & Mixed Methods Approaches*. (4th Ed.). Thousand Oaks, California 91320: SAGE Publications, Inc.

Denzin, N. K., & Lincoln, Y. S. (2011). *The SAGE handbook of qualitative research.* (4th ed.). Thousand Oaks, CA: Sage Publication.

Gilson, L. (2014). Qualitative research synthesis for health policy analysis: What does it entail and what does it offer? *Health Policy and Planning, 29*, iii1-iii5. doi: 10.1093/heapol/czu 121

Hajer, M. A. (1995). *The politics of environmental discourse: Ecological modernization and the policy process*: Clarendon Press Oxford. United Kingdom.

Jabareen, Y. R. (2009). Building a conceptual framework: philosophy, definitions, and procedure. *International Journal of Qualitative Methods, 8*(4), 49-62. Retrieved from: http://creativecommons.org/licenses/by/2.0

Lee, Kwee Heng. (2017). Impact of Legislative Controls on Private Hospitals in Malaysia. A thesis submitted for the Degree of Doctor of Philosophy at University of Malaya, Kuala Lumpur, Malaysia.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design* (8th ed.). New Jersey 07458, Pearson Prentice Hall.

Liamputtong, P. (2011). Focus group methodology: Principles and practice. London: Sage.

Lincoln, Y. S., & Guba, E. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.

Malaysia. (2006). *Ninth Malaysia Plan 2006-2010*; Kuala Lumpur. Economic Planning Unit, Prime Minister's Department, Malaysia.

Ministry of Health Malaysia (MOH). (2008). *Annual Report 2008*, Ministry of Health Malaysia; Kuala Lumpur.

Ministry of Health Malaysia (MOH). (2011). *Country Health Plan: 10th Malaysia Plan. 2011-2015, 1Care for 1Malaysia*, Ministry of Health Malaysia; Kuala Lumpur.

Morgan, D.L. (2002). Focus group interviewing. In J. F. Gubrium & J. A. Holstein (Eds), *Handbook of interview research: Context and methods* (pp. 141-159). Thousand Oaks, CA: Sage.

Newman, I., & Benz, C.R. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum.* Carbondale and Edwardsville: Southern Illinois University Press.

Nik Rosnah Wan Abdullah. (2002). *The Private Health Sector In Malaysia : An Assessment of Government Regulation.* Unpublished PhD Thesis, Institute of Development Studies, University of Sussex, United Kingdom.

Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counseling Psychology, 52*(2), 137-145. doi: 10.1037/0022-0167.52.2.137.

Raja Noriza Raja Ariffin. (2006). *Implementation of Urban Transport Policy in the Klang Valley, Malaysia.* Unpublished PhD thesis submitted to University of Nottingham, Nottingham, United Kingdom.

Reynolds, J., Kizito, J., Ezumah, N., Mangesho, P., Allen, E., & Chandler, C. (2011). Quality assurance of qualitative research: a review of the discourse. *Health Research Policy and Systems, 9*(1), 43.

Silverman, D. (2010). *Doing Qualitative Research: A practical Handbook.* (3 rd ed.). London EC1Y 1SP: SAGE.

Sofaer, S. (2002). Qualitative research methods. *International Journal for Quality in Health Care. 14*(4): 329-336. DOI: http://dx.doi.org/10.1093/intqhc/14.4.329 329-336

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Tariq, S., & Woodman, J. (2013). Using mixed methods in health research. *Journal of the Royal Society of Medicine*. doi: 10.1177/2042533313479197

Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York: Falmer.

Walt, G. (1994). *Health Policy: An introduction to process and power*. Johannesburg: Witwaterstrand University Press.

Walt, G., Shiffman, J., Schneider, H., Murray, S. F., Brugha, R., & Gilson, L. (2008). 'Doing'health policy analysis: methodological and conceptual reflections and challenges. *Health Policy and Planning, 23*(5), 308-317. doi: doi:10.1093/heapol/czn024

Yin, R. K. (1994). *Case Study Research: Design and Methods* (2nd Ed.). Thousand Oaks, California 91320: SAGE Publications, Inc.

Yin, R. K. (2012). *Applications of case study research* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Yin, R. K. (2013). Case Study Research: Design and Methods (5th Ed.). Thousand Oaks, California 91320: SAGE Publications, Inc.