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UNDERSTANDING POWER IN RELATION TO VOICE AND SILENCE ON PATIENT SAFETY AMONG SURGICAL PROFESSIONALS IN GHANAIAN TEACHING HOSPITALS

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Dedication

This thesis is foremost dedicated to my late mother, Grace Akosua Wormenor and my primary school teacher, Mrs Harriet Kpodo. My mother had no formal education but did her very best to educate her children and my primary school teacher championed my education against the odds to make it a reality. Secondly, I dedicate this thesis to my lovely wife and son - Rita Mawusi Kwadzo and Joel Enam Mawuena respectively, who became part of my life on the journey of PhD.

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Abstract

Employee voice is essential in positive work outcomes and harm prevention. However, there is a dearth of research on how power influences voice and silence in organisations (e.g Morrison et al., 2015). This study aims at understanding the implication of upward and interdisciplinary power relationships on voice and silence among Healthcare Professionals (HCPs) on patient safety in surgery. Sixty-seven (67) interviews and policy documents were analysed from two teaching hospitals in Ghana. The study found that formal power inequality is often reinforced by sociocultural authority. This enables superiors to take unilateral decisions and disregard inputs of team members resulting in preventable harm as well as apathy and silence on patient safety. Likewise, authority gradient creates a psychological barrier in hierarchy and undermine voice at interpersonal and broad surgical levels. The unequal power relationships coupled with lack of organisational support exposes those who speak up to risk. Beyond these, military authority often reinforces power or overrides healthcare authority and undermine voice in the military hospital. In terms of interdisciplinary power relationships, doctors' authority often undermines nurses' voice and compel them to undertake perceived harmful practices. However, a sense of equal interdisciplinary power relationship between surgeons and anaesthesiologists give rise to power struggles that promote voice in their respective speciality but undermine voice across speciality. Finally, HCPs adopt ingenious voice strategies to avoid appearing offensive and enhance receptivity to voice. Although sociocultural values generally reinforce formal power and silence, these equally provide unique interpersonal access that occasionally permeates power barriers for effective voice. Findings imply the need to empower HCPs, especially nurses, and shift surgical responsibility from individuals such as surgeons to teams as a way of mitigating unequal power and promoting a sense of involvement to encourage voice. Surgery may also consider 'transdisciplinary approach' as a creative solution to interdisciplinary power challenges to voice. Further implications for management and practice are presented in the conclusion of the study.

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List of Abbreviation

HCPs - Healthcare Professionals

HRM – Human Resources Management

KBTH – Korle Bu Teaching Hospital

UK - United Kingdom

WHO - World Health Organisation

Chapter 1 INTRODUCTION

1.1 Introduction to Chapter

The purpose of this research and thesis is to explore issues on power and employee voice and silence on patient safety in teaching hospital settings in Ghana. This chapter introduces the research. The first section of the chapter provides an introduction and relevance of the study. It also explains key research terms. Next, the problem statement is presented. This is followed by the research purpose and objectives. Next, an overview of Ghana's healthcare, stakeholders and patient safety is presented. The final section provides a guide to the chapters in the thesis.

1.2 Introduction and Relevance of the Research

Employee voice and silence have been quite examined across academic disciplines. Employee voice, in particular, has received research attention in Human Resource Management (HRM), Industrial Relations, Economics, Political Science and Organisational Behaviour with some degrees of overlap (e.g Strauss, 2006; Wilkinson et al., 2010). For instance, from a Political Science perspective, employee voice is a right and an integral part of organisational democracy (Harrison & Freeman, 2004; Foley & Polanyi, 2006). Employee voice is viewed as laid down procedures in labour processes and trade union in Industrial Relations (Poole, 1986; Benson, 2000; Hirsch, 2004; Bryson et al., 2006). In addition to these in Industrial Relations, HRM examines employee voice as broader employee-employer processes and procedures in organisations (Spencer, 1986; Donaghey et al., 2011; Wilkinson et al., 2014). Aspects of HRM therefore examine employee voice as effective use of human resources to achieve high performance through employee empowerment and contributions for a better organisational outcome (e.g Addison, 2005; Budd et al., 2010; Boxall & Purcell, 2011; Wilkinson et al., 2013). This reflects voice in Psychology and Organisational Behaviour literature.

Compared to other academic disciplines that largely focus on employee voice, Organisational Behaviour often examines employee voice and silence. Organisational Behaviour describes voice and silence in terms of the discretional expression or withholding of verbal ideas, suggestions and corrections that may be either useful or detrimental to teams and organisations (Van Dyne & LePine, 1998; Morrison & Milliken, 2000; Van Dyne & Botero, 2003; Botero & Van Dyne, 2009; Milliken & Lam, 2009; Morrison, 2011; Brinsfield, 2014; Morrison, 2014). For instance, Van Dyne and Botero (2003) define employee voice as the expression of a constructive idea, opinion, relaying information or observation to improve work outcome. Silence, on the other hand, is

when people withhold potentially important inputs to solve problems or improve teams and organisational outcomes (Morrison & Milliken, 2000; Pinder & Harlos, 2001). Silence is therefore not a mere absence of speech that may result from employees or team members having no idea on issues but a conscious withholding of input for different reasons (Milliken et al., 2003; Van Dyne & Botero, 2003). Subsequently, although predominant literature focuses on employee voice (e.g Vandyne et al., 1995; Ashford et al., 1998; Van Dyne & LePine, 1998; Ashford & Barton, 2007) and others on employee silence (e.g Rosen & Tesser, 1970; Morrison & Milliken, 2000; Harlos, 2001; Pinder & Harlos, 2001; Bowen, 2003; Milliken et al., 2003), voice and silence is a multidimensional phenomenon that occurs simultaneously (Pinder & Harlos, 2001; Van Dyne & Botero, 2003). Following the multidimensional nature of voice and silence with the two constructs described as representing two sides of the same coin (Van Dyne & Botero, 2003), this study examines voice and silence together. The informal and discretional approach to voice and silence in Organisational Behaviour and aspect of HRM makes it quite distinct from other academic disciplines that largely examine voice as formal organisational processes and laid down mechanism (e.g Pohler & Luchak, 2014; Wilkinson et al., 2014). This study therefore examines voice and silence in terms of employees volunteering timely inputs such as ideas, suggestions and corrections to improve teams and organisational outcomes or withholding these at the detriment of work outcomes. This quite distinguishes the present study from traditional voice mechanisms, general communication, and whistleblowing in organisations.

Silence is not without virtue. For instance, silence aids the storage of secret information, decreases administrative information overload, reduces interpersonal conflicts (Van Dyne & Botero, 2003) and reduces delay in decision making (Milliken et al., 2003). However, there are often compelling reasons for voice. Employee voice is commonly associated with positive organisational outcomes such as innovation, learning, enhanced work processes, crisis prevention, error correction, the curbing of illegal or corrupt behaviour (LePine & Van Dyne, 2001; Tangirala & Ramanujam, 2008; Liang et al., 2012a; Tangirala & Ramanujam, 2012; Grant, 2013). Despite the wealth of benefits from voice, many employees choose silence (e.g Morrison & Milliken, 2000; Morrison, 2014). This eventually leads to organisational debacles such as the explosion of Enron, the crash of United Airline 173 and the Columbia space tragedy (Morrison, 2011). Among other things, an organisational culture that stifles dissent voice and the flow of safety information is cited for the Columbia space tragedy (Vincent, 2010). These incidents have important implications in day to day patient safety outcomes in healthcare.

Patient safety is described in terms of the prevention of error and harm in healthcare. Donaldson et al. (2000) define patient safety as the freedom from accidental or preventable injury and the establishment of systems to minimize the likelihood of harm and mitigate it when it occurs.

Likewise, Vincent (2006) describes patient safety as an inbuilt healthcare process aimed at preventing and amelioration harm to patients. While patient safety reflects the quality of healthcare quality, it is considered as a subset of broader healthcare quality (Cooper et al., 2000). Patient safety focuses on harm as the dark side of healthcare (Vincent, 1997) and the prevention of such direct harm (Vincent, 2010). This is based on the premise that healthcare is not without harm. Historically, healthcare has been characterised with risk as attempts to restore health often results in harm (Vincent, 2010). Early forms of this include 'heroic bleeding cures' that resulted in very inhuman treatments and harm (Sharpe & Faden, 1998) and hospital induced infections (Vincent, 2010). The term 'hospitalism' was coined to describe the disease inducing-nature of hospitals in early healthcare (Vincent, 2010) as infections and deaths rose to epidemic levels such that going for surgery was considered riskier than English soldiers on historic Waterloo battlefield (Porter, 1999).

Although lapses in healthcare may not appear as such catastrophic events as earthquakes or chemical spillage, its cumulative damage is lethal (Blatt et al., 2006). This reflects in the Institute of Medicine's estimation that medical errors in the United States of America's inpatient units lead to 44, 000 to 98, 000 preventable deaths per year and up to 3.7% of patients suffer some kind of harm (Kohn et al., 1999; Donaldson et al., 2000). The death of an eight-year-old, called Kolb, from drug mix-up during minor surgery and wrong leg amputation of Willie King are instances of harm from this report (Kohn et al., 1999). It is estimated that medical error is the third most common cause of death after heart disease and cancer in the United States of America (James, 2013). It has also been found that 4% to 16.6% of patients in Canada, Australia, the United Kingdom (UK), New Zealand and elsewhere suffer various forms of harm (Johnstone, 2006). Despite debates on the accuracy of records on harm (McDonald et al., 2000; Hayward & Hofer, 2001), there is consensus that the level of preventable harm in healthcare is alarming(e.g Leape, 2002; Vincent, 2010). Meanwhile, the absence of evidence on harm in other countries does not imply the absence of the phenomenon. For instance, in Ghana, there is anecdotal evidence and a plethora of media reports on avoidable harm and death in hospitals [an Overview of Ghana's Healthcare and Patient Safety]. On a broader perspective, healthcare is widely criticised for doing little to mitigate risk and harm compared to other high-risk sectors (Haynes & Bojcun, 1988; Leape, 1994; Cohen, 2000; Patankar et al., 2005; Johnstone, 2006; Vincent, 2010; Blenkinsopp & Snowden, 2016). For instance, despite increased scrutiny of healthcare, the sector remains curiously opaque on safety issues (Blenkinsopp & Snowden, 2016).

Moreover, while effective voice among Healthcare Professionals (HCPs) is essential to harm prevention there is evidence of entrenched silence (Risser et al., 1999; Rosenthal & Sutcliffe, 2002; Sutcliffe et al., 2004; Maxfield et al., 2005; Blatt et al., 2006; Greenberg et al., 2007;

Okuyama et al., 2014; Schwappach & Gehring, 2014b; Schwappach & Gehring, 2014a; Schwappach & Gehring, 2015). These studies attest to the critical role of voice in mitigating harm in healthcare. This corroborates a growing global concern in healthcare to attain patient safety beyond universal access to healthcare (e.g Lancet, 2012). Meanwhile, although patient safety remains a daunting task globally (Dixon-Woods, 2010), it is more challenging in developing countries (e.g Ente et al., 2010; Vincent, 2010; Coetzee et al., 2013; Okuyama et al., 2014; Aveling et al., 2015) such as Ghana. While underfunded healthcare is commonly cited for fragile patient safety in such healthcare context (Vincent, 2010), it has been argued that the lack of resources is a major reason to effectively leverage voice to prevent harm in developing country's healthcare (Vincent, 2010; Aveling et al., 2015). This suggests that effective use of voice to prevent harm which in turn reduces pressure on limited resources is imperative for developing healthcare contexts such as Ghana. Besides, there is compelling evidence of harm in surgical departments in developed and developing healthcare contexts (e.g Wanzel et al., 2002; Burke, 2003; Clements et al., 2008; Leape, 2008; Smyth et al., 2008; Vincent, 2010). Coupled with this, surgical department is highly interdependent and team-oriented (e.g Edmondson, 2003; Schwappach & Gehring, 2015). These make voice imperative for patient safety in surgery.

The decision to speak up or remain silent is a complex phenomenon (Milliken et al., 2003; Van Dyne & Botero, 2003; Morrison, 2011). For instance, this has been linked to personality factors (e.g Premeaux & Bedeian, 2003; Weiss et al., 2014), contextual factors such as organisational structure, support (Morrison & Milliken, 2000), psychological safety (Edmondson, 1999), supervisor behaviour (e.g Edmondson, 2003; Nembhard & Edmondson, 2006; Detert & Trevino, 2010), relationships (e.g Ryan & Oestreich, 1991; Milliken et al., 2003; Detert & Trevino, 2010), knowledge (e.g Waldman & Yammarino, 1999; Detert & Trevino, 2010) and Culture (Maitlis, 2005; Weick et al., 2005; Hofstede et al., 2010; Taras et al., 2010; Helmreich & Merritt, 2019). Despite the complex considerations to voice and silence, extant research (e.g Kohn et al., 1999; Milliken et al., 2003; Leonard et al., 2004; Sutcliffe et al., 2004; Greenberg et al., 2007; Schwappach & Gehring, 2014b; Schwappach & Gehring, 2015) demonstrate that power plays a more defining role in this. For instance, formal power in organisations is often reinforced with sociocultural authority especially in high power-distance regimes (Hofstede et al., 2010; Taras et al., 2010; Helmreich & Merritt, 2019). Besides, formal organisational power often supersedes personality differences to expressing and withholding voice (Milliken & Lam, 2009) and is a key determinant of psychological safety in voice (Edmondson, 1999; Milliken et al., 2003; Detert & Trevino, 2010).

Power has been described in terms of the ability to influence behaviour (Dahl, 1957; Pfeffer, 1992; Wrong, 1995; Coleman & Tjosvold, 2000). Pfeffer defines power as the ability to influence behaviour and change a course of action or overcome resistance that makes others do or not do something (Pfeffer, 1992). Keltner et al. (2003) therefore theorize power by focusing on outcomes of power in the behaviour of actors. This study therefore describes power as the capacity of a person or a group to act and influence others social behaviour such as voice and silence. Healthcare is replete with power manifesting in ranks (e.g Edmondson, 2003; Sutcliffe et al., 2004; Greenberg et al., 2007) and professional autonomy (Polder & Jochemsen, 2000; Traynor et al., 2010; Martinussen & Magnussen, 2011) which often hinder teamwork and voice. As a result, while the notion of teamwork in healthcare suggests colleagues working together, unusual degrees of power differences hinder voice (Edmondson, 2003; Greenberg et al., 2007). These confirm the observation that although creating an ideal healthcare atmosphere that encourages differing voice for patient care is laudable, this is often hindered by power differences (Mannion & Davies, 2015). These present complex implications for voice and silence on patient safety. The problem statement is presented next.

1.3 Problem Statement

According to Morrison et al. (2015), there is a dearth of knowledge on power and voice although power differences are common workplace phenomenon. For instance, while silence in upward relationships is common in organisations (e.g Ryan & Oestreich, 1991; Milliken et al., 2003; Detert & Trevino, 2010; Souba et al., 2011), there is little understanding about how the use of power undermine voice and engender apathy and silence in organisations. Besides, although sociocultural authority affects formal power relationships and voice in organisations (e.g Helmreich & Merritt, 1998; Diefenbach & Sillince, 2011; Helmreich & Merritt, 2019), previous studies largely focus on the effect of superior rank power on voice and silence (e.g Hardy & Conway, 1988; Jervis, 2002; Ogle & Glass, 2014; Crowe et al., 2017). Little is therefore known about how sociocultural authority interrelates with formal superior power to affect voice and silence, especially in high power-distance regimes.

Moreover, there is ample evidence that entrenched doctor authority undermines nurses' voice (e.g Blatt et al., 2006; Pijl-Zieber, 2013; Reed, 2016; Helmreich & Merritt, 2019). Quite contrary to this, other studies have found that changing healthcare policy and increasing knowledge and empowerment of nurses is blurring the unequal doctor-nurse power relationships for nurses to effectively speak up towards doctors (e.g Stein et al., 1990; Svensson, 1996; Snelgrove & Hughes, 2000; Lingard et al., 2002). These require continuous research, especially in interdependent

surgical teams. On the other hand, a sense of equal interdisciplinary power relationship between surgeons and anaesthesiologists has only been examined as conflicts in patient management and professional values (Fox, 1994; Katz, 2007; El-Masry et al., 2013; Villet & Collard, 2016; Cooper, 2018)without exploring how these affect voice and silence on patient safety.

In addition, it has been noted that the experiences of HCPs who speak up are more anecdotal than empirical (Attree, 2007). Although negative repercussions in whistleblowing are well known, not much is known about the negative consequences suffered by those who speak up within organisations and teams to enhance work outcomes and prevent harm. For instance, risk and the lack of psychological safety are known to undermine voice (e.g Morrison, 2014). However, from the perspective of power differences and unequal organisational support in healthcare (Simpson & Lyndon, 2009; Churchman & Doherty, 2010), little is known about how risk affects broader voice and silence on patient safety in hierarchical teams such as surgery.

Finally, despite the plethora of barriers to voice in upward relationships, there is limited research on strategies HCPs adopt to manage these. For instance, although the use of indirect and tactful voice towards authority termed 'ingenuity' is recognised among both doctors and nurses in upward relationships (e.g Schwappach & Gehring, 2014a), the phenomenon is widely examined as nurses behaviour towards doctors (e.g Stein, 1967; Garon, 2006; McBride‐Henry & Foureur, 2007; Gardezi et al., 2009; Malloy et al., 2009; Schwappach & Gehring, 2014a; Morrow et al., 2016). There is, therefore, a limited understanding of ingenuity to voice in broader upward relationships among doctors and nurses. Moreover, while intermediary voice is acknowledged among HCPs (e.g Maxfield et al., 2005), not much is known about this in upward relationships. For instance, although emergent intermediary voice through third parties is recommended to stop harm in emergencies (Green et al., 2017a), there is literally no empirical evidence on how this occurs in healthcare and surgical teams. Again, although sociocultural authority plays an active role in formal power relationships and affects voice and silence (Botero & Van Dyne, 2009; Fivush, 2010; Hofstede et al., 2010), little is known about how this is used to manage formal power barriers to voice.

From a social constructionism-interpretivism perspective, these research gaps are explored using Power Distance, Collectivism/Individualism dimensions of Hofstede (Hofstede et al., 2010), Approach, Inhibition Theory of Power (Keltner et al., 2003) and the Conceptualisation of Voice and Silence (Van Dyne & Botero, 2003). The empirical research was conducted in two teaching hospitals in Ghana namely: Korle Bu Teaching Hospital (KBTH) and 37 Military Hospital.

1.4 Purpose and Objectives

The purpose of this research is to understand the implications of upward and interdisciplinary power relationships on voice and silence on patient safety among HCPs in the surgical departments of Ghanaian teaching hospitals. The specific objectives are:

1. To identify and examine how rank power and sociocultural authority affect voice and silence on patient safety in surgery

2. To examine how professional identity from interdisciplinary power relationships affects voice and silence on patient safety in surgery

3. To understand and critically evaluate how rank power and professional identity induces risks of voice and influences voice and silence on patient safety in surgery

4. To identify and analyse strategies healthcare professionals adopt to manage power barriers to voice on patient safety in surgery.

1.5 An Overview of Ghana's Healthcare, Stakeholders and Patient Safety

Healthcare facilities in Ghana are classified into different levels based on the nature of services provided (Ministry of Health, 2007). At the top of this classification are teaching hospitals. These are established as autonomous institutions by the Ghana Health Service and Teaching Hospitals Act 525 in 1996. Teaching hospitals are tertiary institutions and referral hospitals to other hospitals and healthcare facilities. This study focuses on selected teaching hospitals and provides further information on these hospitals in the Chapter 3. Next to teaching hospitals are regional hospitals, district hospitals, health centres and community-based health planning and services. Besides these government health facilities, there are faith-based healthcare institutions, quasi-government health institutions and private sector healthcare (World Health Organisation, 2014). The National Health Insurance Scheme was established in 2004 by the Ghana government to facilitate access to affordable healthcare for the general public (Akazili et al., 2012).

Ghana Healthcare is governed by Ghana's Ministry of Health. The core mandates of the ministry are to provide overall policy direction for stakeholders, provide an effective advocacy role in intersectoral action, mobilize and allocate resources to care providers, provide relevant and adequate information for coordination and management of health services, and to provide regulatory, monitoring and evaluation services (Ministry of Health, 2020b). The governance and professional regulation of healthcare are carried out by the Human Resources Directorate under

the Ministry of Health (Alhassan et al., 2013). The next major healthcare body in Ghana is the Ghana Health Service. It is a Public Service body established under Act 525 of 1996 as an autonomous executive agency responsible for the implementation of national policies of the Minister for Health (Ghana Health Service, 2017). Ghana Health Service is therefore mandated to provide and manage access to healthcare services at regional, district and sub-district levels (Ghana Health Service, 2017). The key objectives of Ghana Health Service are to implement approved national health policies nationwide, increase access to good quality health services and prudently manage available resources in the pursuit of these goals.

There are also Ghana government regulatory institutions that ensure professionalism and discipline in healthcare practice (Alhassan et al., 2013). These are the Medical and Dental Council, Nurses and Midwives Council and the Pharmacy Council. In addition to these are professional associations comprising HCPs groups. The major among these are the Ghana Medical Association and Ghana Registered Nurses and Midwives Association. Ghana Medical Association is made up of medical professionals including medical officers, specialists, consultants as well as academics and researchers (Ghana Medical Association, 2017) while Ghana Registered Nurses and Midwives Association is made up nursing and midwife professionals (Ministry of Health, 2020a). These professional bodies seek the welfare of members and advance the interest and dignity of the profession.

Despite considerable advances in Ghana's healthcare, the sector is confronted with many challenges (United Nations Development Programme, 2010). Concern over the standard of healthcare has remained a major worry for stakeholders (Ghana Statistical Service, 2003; Bruce & Killian, 2007; Alhassan et al., 2015; Otchi et al., 2018). For instance, quality care and patient safety standards were found to be inadequate across 64 primary healthcare facilities in some regions of the country (Alhassan et al., 2013). Challenges confronting the sector have been attributed to factors such as understaffing in health facilities, inequitable distribution of health sector human resources, de-motivated staff, inadequate healthcare infrastructure (Agyepong et al., 2004; United Nations Development Programme, 2010), workload (World Health Organisation, 2006) and underfunding (Mills et al., 2012). These challenges persist despite steps taken to address them (Kwansah et al., 2012; Ministry of Health, 2012).

Another significant but rarely mentioned subject in Ghana's healthcare which is relevant to this study is the reports of harm to patients. Anecdotal evidence and media reports are replete with a plethora of harm and avoidable deaths across major hospitals in the country (Myjoyonline.com, 2011; Ghana News Agency, 2017; Myjoyonline.com, 2017; Pulse News, 2017; Starrfmonline.com, 2017). Major hospitals including Korle-Bu Teaching Hospital (KBTH), Komfo Anokye Teaching

Hospital and 37 Military Hospital were described as death traps (Pulse News, 2017). Some of these reports attest to the negligence of hospitals and medical professionals leading to harm and death. However, most of these are reports of lack of logistics, malfunctioning equipment leading to harm and death. For instance, a report attributed several premature baby deaths to the malfunctioning and broken oxygen machine (Starrfmonline.com, 2017). There are also startling maternal deaths due to the unavailability of blood for pregnant women in emergencies (Myjoyonline.com, 2011; Ghana News Agency, 2017). Ghana's healthcare is therefore plagued with challenges despite considerable progress. Replete of media reports on harm and avoidable deaths in Ghanaian hospitals potentially may be an indication of a more internal voice among HCPs. This is because reports and whistleblowing on harm to patients have chiefly traced the phenomenon to a persistent stifling of voice over time (e.g Francis, 2013). This makes voice and silence on patient safety among HCPs relevant in the Ghanaian context.

1.6 Guide to Chapters

Chapter 1 introduces the research by discussing key terms and relevance of the research. It further presents the research purpose and objectives, an overview to Ghana healthcare, stakeholders and patient safety and a guide to other chapters. Chapter 2 presents the literature review of the study based on the research objectives. The first part presents the theoretical review of the research. The second part presents the empirical literature on rank power, professional identity and interdisciplinary power, risk and managing power barriers to voice. Chapter 3 presents the approach to enquiry and outlines and explains philosophical assumptions of the research, the methodologies, and specific strategies to the research. Chapter 4 presents research findings in four major themes in connection to the research objectives. These themes are rank power, interdisciplinary power, risk and managing power barriers to voice. Chapter 5 presents the analysis of findings in connection to previous research and theories in four major sections. These are rank power, interdisciplinary power, risk and managing power barriers to voice. Finally, Chapter 6 presents the summary of the research, the contributions to empirical and theoretical knowledge, implications for practice and management as well as limitations and future research.

1.7 Summary of Chapter

This chapter presented the introduction to the research. It started with the introduction and relevance of the research. It proceeded to the problem statement, purpose, and objectives of

the research. This is followed by an overview of Ghana's healthcare, its stakeholders and patient safety. The last section of the chapter presented a brief guide to the ensuing chapters of the thesis.

The next chapter presents the literature review.

Chapter 2 LITERATURE REVIEW

2.1 Introduction to Chapter

This chapter presents the literature review of the research. The first part presents the theoretical review and the second the empirical review. The theoretical review provides a general overview of the concept of power and voice but focused on specific theories. These are; Approach Inhibition of Power (Keltner et al., 2003), Power Distance, Collectivism versus Individualism (Hofstede, 1984; Hofstede et al., 1991; 2010) and the Conceptualisation of Voice and Silence (Van Dyne & Botero, 2003).

The second part presents the empirical review in four major sections according to the objectives of the research. The first section presents general rank power in hierarchy and voice behaviour. The second section focuses on professional identity from interdisciplinary power relationships. The third section presents on risk to voice in power relationships. The last section presents the strategies HCPs adopt to manage power barriers in upward voice for patient safety.

2.2 Theorizing Power

Power is a central phenomenon not only in politics but in social and organisational life. French and Raven (1959) describe power as a pervasive and complex phenomenon that is often disguised. This resonates with the classical definition by Russell (1938:10) - "The fundamental concept in social science is power, in the same sense that energy is the fundamental concept in physics... The laws of social dynamics are laws which can only be stated in terms of power". The complexity of power reflects its diverse definitions by scholars. Giddens (1984:15) defines power as "the capacity to achieve desired or intended outcomes". These desired outcomes can be positive or negative. According to Arendt (1970), power relates to the human ability to act in concert with others. This means power is not an isolated phenomenon but manifests between and among social agents. An essential element in the definition of power which is relevant to the current study is its influence on behaviour (Dahl, 1957; Pfeffer, 1992; Wrong, 1995; Coleman & Tjosvold, 2000; Keltner et al., 2003). Pfeffer defines power as "the potential ability to influence behaviour, to change the course of events, to overcome resistance, and to get people to do things that they would not otherwise do" (Pfeffer, 1992:30). This is consistent with Dahl intuitive idea of power as "A has power over B to the extent that he can get B to do something that B would not otherwise do" (Dahl, 1957:203). Similarly, power has been defined as "the capacity of some persons to produce intended and foreseen effects on others" (Wrong, 1995:2). This

effect may be directly or indirectly through target's broader scope of environment consistent with the definition of power as "the capacity to affect the outcomes of oneself, of another, and of one's environment" (Coleman & Tjosvold, 2000:5). Keltner et al. (2003) therefore theorize power by focusing on its outcome in the behaviour of actors. This study describes power as the capacity of a person or a group to act and influence others professional and social behaviour such as voice and silence.

Organisations are marked by day-to-day political commotion where the revered powerful or despised power holders or groups strive for control in decisions and influence amidst continuing subordinates' contests (Fleming & Spicer, 2014). As succinctly described by Clegg et al. (2006:3), "power is to organisation as oxygen is to breathing." "Power is not only exercised through highly visible acts of direction or even back room politicking. It also infuses many of the systems, processes, ideas and even identities that organisations constitute" (Fleming & Spicer, 2014:275). Although power is a desirable and positive force in attaining goals (Clegg et al., 2006), it often manifests negatively to maintain the status quo especially in hierarchies (Fleming & Spicer, 2014). This becomes detrimental to team and organisational outcomes.

Power is widely conceptualized in organisations (e.g Raven & French Jr, 1958; French & Raven, 1959; Pfeffer, 1981; Foucault, 1982; Raven, 1992; Ocasio, 2002; Keltner et al., 2003; Lukes, 2004; Clegg et al., 2006; Anderson & Brion, 2014). These diverse classifications are either a direct exercise of power over another or systemic operation of power in concealed and enduring social and institutional structures (Clegg, 1989 ; Lawrence et al., 2012). For instance, French and Raven describe social power as the ability of an influencing agent (O), who may be another person, a role, a norm, a group, or a part of a group to produce a social change on another (P) (French & Raven, 1959; Raven, 1965). According to them, social force is made up of two parts: the social agent's (O) ability to induce a change towards a given direction of a target (P) and at the same time to induce an opposing resistance to other contrary directions. According to the authors, social influences are not solely limited intentional act initiated by O but do result from passive actions or inaction of O such as O's mere presence without evidence of speech or overt movement. They noted that a police officer standing on a corner of a road naturally serves as a social agent of power that sends a message to motorists to be mindful of their speed. Further intense monitoring of motorist by the police officer intensifies the social agent power of the police. Hence the influence induced by a social agent (O) does not necessarily need to be in the direction intended by O. They identified six bases of social power as reward power, coercive power, legitimate power, expert power, referent power and informational power (French & Raven, 1959; Raven, 1965).

Reward power involves an agent's ability to determine or influence positive rewards and eliminate potential negative ones for a dependent person or group (French & Raven, 1959). Coercive power is the ability of O as a social agent to manipulate or control the punishment of P failing to conform in a given direction prescribed by O (French & Raven, 1959). For instance, an offer of a piece-rate bonus to factory workers is as a form of reward power and a threat to fire a worker if he/she falls below a certain production level is a coercive power (French & Raven, 1959). While reward power increases the attraction of P towards O, coercive power decreases this attraction but maintains power through threat of punishment (Raven & French Jr, 1958; French et al., 1960). Although coercive and reward power was originally coined to describe tangible threats or reward systems, it was later expanded to include personal approval or threat of disapproval or rejection from someone powerful (Raven & Kruglanski, 1970; Raven, 1992; 1993; Raven, 2001). Coercive and reward power is therefore further classified as personal and impersonal.

Legitimate power is the power emanating from internalized values that make P accepts that O has a legitimate right to influence him (P) and therefore feels an obligation to conform to the influence of O (French & Raven, 1959). Legitimate authority manifests in structural hierarchical and superior-subordinate relationships where subordinates are obliged to perform tasks or take instructions from superiors (French & Raven, 1959; Cialdini, 1988; Raven, 1992). Other forms of legitimate power have been found as the legitimacy of reciprocity, legitimacy of equity and legitimacy of dependence (Berkowitz & Daniels, 1963; Raven, 1993). Expert Power is where superior knowledge or expertise of an influencing agent (O) induces P to do what he or she has been asked to do even without understanding the reason for it (French & Raven, 1959; Raven, 1992). Expert power is further classified as positive and negative. Negative expert power is when subordinates or followers do the opposite to what experts say because they perceive experts as selfish who are not interested in others (Raven, 1992; 1993). Finally, informational power was later distinguished from expert power to describe persuasive, logical and rational explanation as a source of power capable of influencing a target into doing or not doing something to achieve compliance (Raven, 1965). This was further classified as direct and indirect informational power.

Steven Luke's Radical Power consists of three dimensions of power, namely: the pluralist view (one dimension of power), their critics (two dimensions of power) and the third dimensions of power (three dimensions of power). One-dimension of power is the pluralists view of power that describes the capability of one person or group to prevail in decision making over the other (Dahl, 1957; Polsby, 1980). Dahl describes this as - A having power over B to the extent that he can make B do something that B wouldn't otherwise do (Dahl, 1957). Dahl's central basis for this power is determining whose decisions or opinions prevailed over the other by noting which

alternatives were initiated and adopted/vetoed or turned down (Dahl, 2005; Dahl, 1961). One dimension of power therefore understands power by establishing individuals and groups who prevail in potential conflict situations and decisions (Dahl, 1958; Polsby, 1980).

The second dimension of power argues that besides A's ability to directly prevail over B in decision making, A can exercise power by devoting its energy to creating social and political values and institutional practices that limit or makes it impossible or prevent B from bringing up issues of personal interest or detrimental to the interest and preferences of A (Bachrach & Baratz, 1970). This they refer to as non-decisions or agenda-setting where potential demands for change are often suffocated, kept covert or even killed before they are voiced or gain access to the relevant decision-making arena. This is described as a conscious setting of an agenda in a way that disempowers the powerless. The authors contend that although non-decisions may not be overt to identify, and defendants of the status quo may not consciously plan to exclude potential challengers, the act leads to the suppression of the less powerful.

Luke's third dimension of power criticised the first and second dimensions of power as significantly sharing a common feature (stressing on actual and observable conflicts that are either overt or covert). According to Luke, the most insidious form of power is when the dominated are acquiesced in their domination that is, where 'A' may exercise power over 'B' by influencing, shaping or determining the very wants of B without conflict. Luke argues that systemic bias in institutions and political systems are not simply sustained by series of actions and inactions of individual actors but are maintained and shaped by cultural and social structures that default groups and institutions to certain behaviours and practices. According to Luke, the most insidious use of power prevents conflict or grievances from arising by exercising control in many subtle and mundane forms such as control of information through mass media and socialization into values and norms. This he notes is done through shaping perceptions, cognitions and preferences in such a way that leads to accepting the prevailing role and existing order of things as a norm due to lack of foreseeable alternatives or it being perceived as natural and unchangeable or as divinely ordained values worth upholding.

Although these theories give general insight on the subject, this research focuses on two major power theories, namely; Approach, Inhibition of Power theory (Keltner et al., 2003) and Hofstede Power Distance and Collectivism/individualism (Hofstede, 1984; Hofstede et al., 2010) to examine power and voice. As Approach, Inhibition Theory of Power focuses on understanding how power manifests in interpersonal behaviour of actors, this makes the theory relevant to understanding voice and silence. Moreover, Hofstede explores broader and fundamental social and enduring structures of power that provide overarching understanding of power. These make

the two theories appropriate to understanding power in relation to voice. The following subsections elaborate on these theories.

2.2.1 Approach, Inhibition Theory of Power

Approach, Inhibition Theory of Power explains how power produces variation in the behaviour of actors (Keltner et al., 2003). Based on a broad theoretical review of origin of power (e.g French & Raven, 1959; Domhoff, 1998; Owens & Sutton, 2001), concomitants of power (e.g Kipnis, 1972; Ng, 1980; Clark, 1990; Tiedens et al., 2000) and consequences of power (e.g Milgram, 1963; Petty & Cacioppo, 1986; Pfeffer, 1992; Reid & Ng, 1999), the authors theorized how a personal sense of power engenders different constructions of social reality to influence behaviour in social engagement. According to the theory, power is associated with positive 'affect,' attention to rewards, automatic information processing and disinhibited social behaviour. On the other hand, powerlessness is associated with negative affect, attention to threat, risk and punishment, controlled information processing and inhibited social behaviour.

The theory attributes the general tendency of acting (approaching) and not acting/restraining (inhibiting) to power and powerlessness, respectively. According to the theory, personal sense of power gravitates to positive 'affects', attention to rewards and attaining personal goals, spontaneous information processing and judgments as well as unrestrained or disinhibited social behaviour. On the contrary, sense of powerlessness default people to negative 'affects', sensitivity to threat and punishment, restrained information processing and inhibited social behaviour. According to the theory, power activates approach-related processes for people with power compared to those without power (Keltner et al., 2003). Elaborating, they note that high power translates into increased access to resources and rewards (both physical and social resources such as flattery, esteem, attraction, and praise) in one's environment. According to the authors, having certain socioeconomic status or membership of certain groups and subgroups (Berger et al., 1972; Domhoff, 1998) represent social power that affects individual social behaviour. The scope of resources available to powerful people increases the awareness of their ability to act at will without facing resistance or unpleasant interference (Weber, 1947). The theory describes that people with a high personal sense of power can withhold resources and administer punishments formally or informally by giving or withholding affection, knowledge, humour, praise, criticisms in connection to others.

In contrast, a low personal sense of power translates into deprivation of resources, increased fear of opposition and negative consequences for actions (Keltner et al., 2003). Limited or low access to material, social, and cultural resources among low power individuals (Domhoff, 1998)

makes them sensitive to social threats and punishments in their environment (Fiske, 1993; Steele & Aronson, 1995; Keltner et al., 2003). People with low power are under the constant threat of losing the favour of the powerful (Chance, 1967; Hall, 1984). The theory posits that reduced power leads to restraints in almost every sphere of social behaviour (e.g. expression of voice, emotions, body language, sexual behaviour) and give rise to self-censorship. Consequently, low power individuals are more driven by threats and fear of punishment compared to high power individuals who are driven by goals and rewards (Keltner et al., 2003).

According to the theory, sensitivity to reward and risk (threat and punishment) affects information processing. High power individuals are prone to automatic social cognition, information processing and quick decisions while those with a low sense of power default to consciously controlling and deliberate reasoning (Keltner et al., 2003). Conscious information processing by people with low power is a form of circumspection that reflects early studies (e.g Chance, 1967; Ellyson & Dovidio, 1985; Fiske, 1993) that individuals with low power exercise high level of circumspection when attending to powerful people as a way of managing social threat. This reflects indirect informational power by less powerful people when conveying information to powerful targets (Raven, 1965; Raven, 1992; 1993). Indirect informational power is, however, described as power rather than powerlessness in Approach, Inhibition Theory of Power. Fear of potential conflict undermining relationship with powerful people (Operario & Fiske, 2001) defer true opinion and engender self-censorship among the powerless (Estrada et al., 1995). In contrast, a high sense of power engenders stereotyping others (Fiske, 1993). This corroborates social participation and group dynamics literature that people with power tend to speak more than those with less power (Dovidio et al., 1988). People with a high sense of power go beyond approach and are likely to engage in socially inappropriate behaviour (Keltner et al., 2003). For instance, high power individuals are prone to violating politeness norms on communication (Brown & Levinson, 1987), talk more, actively interrupt others, speak out of turn, and are more directive of others (DePaulo & Friedman, 1998). This means although workplace concerns may be known to employees, low sense of power heightens threat and punishment for silence. As Anderson and Berdahl (2002) note, low power persons often choose silence due to fear of interpersonal conflict.

Approach, Inhibition Theory of Power is therefore relevant to understanding voice and silence in hierarchical surgical teams. For instance, while individuals and groups with power can express themselves better, these can easily overshadow important observations and voice of others in teams. Again, while a high sense of power enhances a timely voice that can help prevent harm, low sense of power engenders fear, silence and deliberate information processing that may delay timely interventions for harm prevention. Approach, Inhibition Theory of Power, however,

acknowledges that personal sense of power is influenced by the level of stability in power relationships such as social values embodied in cultural differences in society (Keltner et al., 2003). This explains the inclusion of aspects of Hofstede theory presented next.

2.2.2 Hofstede's Theory: Power Distance and Individualism Versus Collectivism

Power Distance and Individualism versus Collectivism dimensions of Hofstede Theory is utilized in this study to bring insight on power and voice. Broadly, Hofstede Theory describes national culture in six dimensions namely; Power Distance, Collectivism and Individualism, Level of Uncertainty Avoidance, Masculinity versus Femininity, Long Term versus Short Term Orientation and Indulgence versus Restraint (Hofstede, 1984; Hofstede et al., 1991; 2010). Power Distance, Collectivism versus Individualism dimensions of the theory are considered appropriate for this study due to their relevance in hierarchical and multidisciplinary organisations such as surgery. Again, because Ghana is a high power-distance and collectivist culture, these dimensions give insight into contextual underpinning to power and voice behaviour. These are elaborated next.

2.2.2.1 Power Distance

Power Distance describes a set of shared values and norms which explain equal or unequal power distribution in different cultures. It is defined as "the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally" (Hofstede et al., 2010:61). Although all human society is built on inequality, some societies are more unequal than others (Hofstede, 2011). The theory distinguishes between high power-distance and low power-distance cultures. High power-distance cultures distribute power more unequally. Parents teach children the act of obedience, education is centred and driven by teachers, elderly people are revered, hierarchy is manifest, and subordinates expect to be told what to do. This contrasts with low power-distance cultures characterised by a less unequal power distribution. Parents treat children equally, the elderly are not exceptionally respected or feared, educational systems are balanced and centred on students and subordinates have greater input towards superiors.

An important aspect of the theory is the sense of shared values and norms on acceptable power distribution which make it acceptable to powerful and powerless members of society. For instance, the less powerful members of society agree to have less power in relation to the powerful. This suggests social domination where the dominated are either happy with established norms or perceive these as a norm. For instance, Hofstede notes that power distance

is easily observed through the value system of the less powerful members. At the same time, powerful members of society have more say on how power is distributed and also exhibit power in behaviour than others. This suggests that although power distance is generally described as a shared norm and an agreed phenomenon, this can be dynamic and the extent of this shared norm is quite unclear.

The family unit is basic to power distance values. According to Hofstede, children begin to acquire mental cultural values and norms right from birth. For instance, in high power-distance cultures, children are taught and expected to be obedient to the authority of parents, other elderly people and elderly siblings. “Respect for parents and other elders is considered a basic virtue; children see others showing such respect and soon acquire it themselves” (Hofstede et al., 2010:67). These virtues continue to adulthood where adults are expected to cater for their parents and grandparents financially and have them live together in old age. Generally, these values enshrined in respect for authority discourages independent behaviour especially by young people in high power-distance cultures. This contrasts with low power-distance cultures where children are treated as equal to parents, adults, and siblings right from birth. Low power-distance culture has no real structured forms of respect based on age or status that give special preferences. Independent opinion is encouraged, and children and young people can easily contradict adults. Again, besides formal relationship, parents and grandparents live their independent lives without much expectation or obligation from their children to provide their needs or moving into their homes.

Power distance values further develop and manifest in schools. According to Hofstede while children continue to spend time with families, the parent-child role is replaced by the teacher-student role when children go to school. This inculcates a set of values and behaviours from teachers and peers into children which often reinforce prevailing societal norms. In high power-distance cultures, inequality between children and parents is replaced by teacher-student inequality. Teachers are treated with respect and fear both in schools and outside of school. Students talk only when permitted to do so without daring to contradict teachers. Educational systems in high power-distance cultures are centred on teachers, who set the path through the communication of knowledge and instructions for students to follow. Teachers, like parents, have the right to discipline children when they are perceived as not behaving well. However, in low power-distance cultures, the teacher-student relationship is characterised by a high degree of equal treatment and mutual respect both in schools and outside of schools. Education is centred on students who are expected to actively bring initiations, ask questions when they do not understand and even criticise teachers when they have different ideas.

Moreover, power distance values manifest in the broader society, organisations, and the state. This study is interested in the phenomenon in organisations and work relationships. According to Hofstede, the original parent-children, teacher-student, and doctor-patient role is replaced by superior-subordinate relationships in professional life. This, in turn, explains why the attitude of subordinates towards superiors reflects those of children-parent and student-teacher relationship. In high power-distance organisations, superiors and subordinates have a clear agreement on being unequal where organisations centralize power to a few superiors. This equally manifests in large supervisory personnel and tall hierarchies in organisations where there are several reporting routes to next ranks and subordinates are expected to be told what to do. Superiors in high power-distance organisations are therefore cast in an image of a 'father' who may be liked or disliked but are adored and their instructions heeded with little or no criticism (Hofstede et al., 2010). In contrast, low power-distance organisation hierarchies are often established for convenience reflecting different roles rather than status. Again, subordinates and superiors perceive and treat themselves as existentially equal. Subordinates therefore expect to be consulted in work decisions and easily speak their mind on issues with superiors. The differences in high and low power-distance organisations also reflect in remuneration and admiration for superiors. For instance, there is a higher disparity in remuneration between superiors and subordinates in high power-distance regimes than in low power-distance organisations. Likewise, high power-distance norms place a premium on superior's status, for instance, age, brands of cars owned among other things quite in contrast to low power-distance values where these mean little or nothing. Although the theory acknowledges variations within both high and low power-distance regimes, it establishes that these cultural regimes represent deep-seated value systems that distinguish organisations and societies. Power distance values and norms are therefore relevant to understanding power and voice especially in hierarchical surgery and high power-distance cultural context such as Ghana.

2.2.2.2 Individualism and Collectivism

Individualism and Collectivism dimension of Hofstede's theory describes the degree to which people in different cultures and societies are integrated into units or stand individually (Hofstede, 1984; Hofstede et al., 2010). The theory elaborates that individualist cultures are characterised by loose ties where people attend to their personal or immediate family needs. Individualistic cultures focus and prioritize individuals, make personal decisions, express ideas, preferences, and vote in a more independent manner. Language is dominated by 'I' than 'we' and interest and preferences of individuals prevail over those of groups. Moreover, professional relationship drives work rather than personal relationships.

In contrast to individualistic culture, collectivist cultures cherish close identity and integration with groups with a strong sense of loyalty. Collectivist cultures prioritize group ties, cherish extended family connection and stress belonging to one group or the other. Views and opinions are more driven by groups rather than by individuals. Collective interest therefore often prevails over individual interest and language is dominated by 'we' compared to 'I', in individualistic cultures. According to Hofstede, emphasis on group and interpersonal ties make interpersonal relationships essential in business and other professional relationships. Accomplishing task or getting results is often driven by personal relationships. These suggest that although strong personal ties in collectivists cultures create interpersonal access for voice, emphasis on interpersonal relationships may hinder professional relationships for effective voice. Again, emphasis on group identity can strengthen professional segregation and marginalize subordinates and lower professional groups. The collectivist and individualist dimension of Hofstede's theory is therefore suitable in understanding power and voice in surgery.

The next section presents on theoretical perspective on voice and silence.

2.3 Theorizing Employee Voice and Silence

Employee voice has received wide research attention across academic disciplines such as HRM, Industrial Relations, Economics, Political Science and Organisational Behaviour (Strauss, 2006; Wilkinson et al., 2010). From a Political Science perspective, voice is a right and an integral part of organisational democracy beyond normal communication channels (Harrison & Freeman, 2004; Foley & Polanyi, 2006). The Economic perspective examines voice as a phenomenon that carries some benefits and costs with respect to customers and in employer-employee relationships (Hirschman, 1970; Medoff & Freeman, 1984). This is said to be the basis of employee voice in Industrial Relations, trade unionism and HRM (Wilkinson et al., 2010). In trade unions and Industrial Relations, employee voice is treated as laid down processes and mechanism (Poole, 1986; Benson, 2000; Hirsch, 2004; Bryson et al., 2006). Likewise, HRM examines employee voice predominantly as a workplace mechanism (Spencer, 1986; Donaghey et al., 2011) as well as employee empowerment and contribution to organisations (e.g Addison, 2005; Budd et al., 2010; Boxall & Purcell, 2011; Wilkinson et al., 2013).

As indicated in the introductory chapter, this research focuses on voice and silence as a discretional behaviour largely situated in Organisational Behaviour and an aspect of HRM. Consequently, although broader voice mechanisms have implications on such discretionary acts, discretional voice and silence is quite a distinctive form of employee behaviour (Pohler & Luchak,

2014; Wilkinson et al., 2014). Employee voice and silence is described as a discretional withholding or expressing ideas and information that can be harmful or useful to organisations (Van Dyne & LePine, 1998; Morrison & Milliken, 2000; Van Dyne & Botero, 2003; Botero & Van Dyne, 2009; Milliken & Lam, 2009; Morrison, 2011; Brinsfield, 2014; Morrison, 2014). Brinsfield et al. (2009:4) define voice as "the expression of ideas, information, opinions or concern." Referring to extant literature, Morrison (2011) defines employee voice as an informal and discretionary expression of ideas, suggestions, concerns, information about problems, or opinions about work-related issues to persons who might be able to take appropriate action, with the intent to bring about improvement or change. Van Dyne and LePine (1998:853) define employee voice as "speaking out and challenging the status quo with the intent of improving the situation." Likewise, voice has been defined as a firm and persistent expression of wrong clinical action or inaction that demands urgent attention appropriate to prevent error or harm to patient in healthcare (Premeaux & Bedeian, 2003; Lyndon et al., 2012). These definitions reflect employee voice as both promotive aimed at improving work outcome, and prohibitive intended to alert or prevent wrongs or illegality (Van Dyne & Botero, 2003; Liang et al., 2012a; Morrison, 2014).

Silence, on the other hand, is when employees withhold inputs that could help solve problems or improve organisational and team outcomes (Morrison & Milliken, 2000; Pinder & Harlos, 2001). This is a conscious decision to withhold information and not an unintentional failure to communicate for reasons such as having no idea or knowledge on an issue (Cullinane & Donaghey, 2014; Morrison, 2014). At a broader organisational level, this is described as collective silence (Morrison & Milliken, 2000). Silence has some positive attributes. For instance, for individual, silence may mean avoiding embarrassment, hostility and potential threats (Perlow & Williams, 2003). Silence is said to signify loyalty, modesty, respect and an indication that nothing is wrong (Beheshtifar et al., 2012). Silence helps in the storage of secret information, decreases information overload (Van Dyne & Botero, 2003) and reduces delay in decision making (Milliken et al., 2003). However, extant evidence demonstrates that silence is often detrimental to team and organisational outcomes (e.g Morrison & Milliken, 2000; Van Dyne & Botero, 2003; Botero & Van Dyne, 2009; Morrison, 2011; Morrison et al., 2015).

Although voice and silence have often been treated as two separate constructs with silence seen as the opposite of voice, it has been established that these have a more complex relationship (Morrison & Milliken, 2000; Pinder & Harlos, 2001; Van Dyne & Botero, 2003). Pinder and Harlos (2001) found that voice and silence are multifaceted in that silence is not limited to a lack of speech or formal voice. According to them, silence can occur simultaneously with either a sound or speech. For instance, the absence of speech may mean one has no idea or knowledge on an

issue but this can also be a conscious decision to withhold an idea (Van Dyne & Botero, 2003; Cullinane & Donaghey, 2014; Morrison, 2014). Likewise, an individual might speak frequently but withhold information or opinions about important problems from superiors on an assumption that those ideas would not be welcomed (Detert & Edmondson, 2011). Building on the work of Morrison and Milliken (2000) and Pinder and Harlos (2001), Van Dyne and Botero (2003) theorized three types of employee voice and silence based on motives. This is presented next.

2.3.1 Employee Voice and Silence Based on Motives

Van Dyne and Botero (2003) conceptualized three types of employee voice (Prosocial Voice, Defensive Voice and Acquiescence Voice) and three types of employee silence (Acquiescence Silence, Defensive Silence and Prosocial Silence) based on motives.

Prosocial Voice is described as a proactive voice motivated by the interest and benefit of others (Van Dyne & Botero, 2003). This voice could therefore be directed to benefit another person, teams or an organisation (Van Dyne & LePine, 1998; Milliken et al., 2003; Morrison, 2011; Morrison et al., 2015). This means Prosocial Voice often focuses on people or positive organisational outcomes. This form of voice has a relevant application among HCPs as Okuyama et al. (2014) observes that HCPs speak up to promote patients' wellbeing rather than for their personal and organisational interest. The second type of voice is Defensive Voice. This is an expression of fear-driven work-related ideas and information aimed at protecting oneself (Van Dyne & Botero, 2003). The fear of negative consequences inclines employees to self-protective behaviour that limits voice to safe and secure information and also attribute undesirable outcomes to external sources (Schlenker & Weigold, 1989a; Maurer, 1996). Similarly, Defensive Voice is associated with the manipulation of information consistent with Information Manipulation Theory (McCornack, 1992), where fear informs conscious information control in terms of amount, clarity, veracity and relevance to ensure self-protection. As Defensive Voice is motivated by self-protection, it bears a resemblance to powerlessness and lack of psychological safety reflecting the Approach, Inhibition Theory of Power (Keltner et al., 2003). The third type of voice is Acquiescence Voice. This is a form of disengaged voice, where employees express work-related ideas and information based on feelings of resignation that is a sense of inability to change prevailing situations (Van Dyne & Botero, 2003). Instances include when employees express agreement on issues such as "that is fine" or "whatever you think" without giving their real opinion on the issues or thinking about better alternatives (Van Dyne & Botero, 2003:16).

In terms of the types of employee silence, Acquiescence Silence is based on employee disengaged behaviour (Kahn, 1990) where employees are deeply resigned to organisational problems and have little or no hope of improvement (Pinder & Harlos, 2001). Van Dyne and Botero (2003) theorized that Acquiescence Silence is an intentional and uninvolved way in which employees withhold ideas based on the belief that voice is pointless and will not make any difference. This is when individuals or groups come to the conclusion that they lack the capacity to change prevailing circumstances. Acquiescence Silence therefore reflects Deaf Ear Syndrome in organisations (Harlos, 2001; Pinder & Harlos, 2001). The second form of silence is Defensive Silence. This is described as a conscious and deliberate omission of important information due to fear of negative personal consequences (Morrison & Milliken, 2000; Pinder & Harlos, 2001). It is also described as Quiescent Silence (Pinder & Harlos, 2001). Defensive Silence is an active withholding of relevant ideas, information, or opinions in self-protection due to fear (Van Dyne & Botero, 2003). It is aimed at protecting oneself from threats (Schlenker & Weigold, 1989b) consistent with psychological safety (Edmondson, 1999). Defensive Silence reflects Defensive Voice in that both are motivated by fear and sense of self-protection. However, as described by the authors, Defensive Silence is a more proactive withholding of ideas and information after consideration of other alternatives in the best personal interest (Van Dyne & Botero, 2003). The last type of employee silence is Prosocial Silence. This is described as withholding work-related ideas, information, or opinions purposely to benefit an organisation, groups or individuals in the spirit of altruism or cooperation (Van Dyne & Botero, 2003). It is important to note that because Prosocial Silence is motivated by purposes of confidentiality and competition; this type of silence has a limited application to voice and silence in the context of patient safety. However, evidence of power differences, risk, and apathy to voice in healthcare hierarchy make the conceptualisations of voice and silence by Van Dyne and Botero (2003) widely relevant to understanding voice and silence.

From these conceptualisations of voice and silence, this study examines voice and silence as a multidimensional construct from an Organisational Behaviour perspective. Moreover, based on the broad literature, this study examines voice in both promotive and prohibitive terms. Employee voice is therefore described as the verbal expression of ideas, suggestions, corrections or prompting aimed at preventing harm or improving patient outcomes. Silence, on the other hand, is choosing not to speak up when there is a reason to do so to avoid harm or improve patient outcomes. As a result, while acknowledging the importance of voice mechanisms to discretional voice and silence (Pohler & Luchak, 2014; Wilkinson et al., 2014), this study focuses on discretional voice and silence as distinct from traditional voice mechanisms in organisations.

The next four major sections present empirical literature review.

2.4 Rank and Sociocultural Power: Voice and Silence

This section of the literature focuses on the implications of rank power and sociocultural authority on voice and silence in healthcare hierarchy. Rank power describes overall superior-subordinate relationships in hierarchy across professional groups while sociocultural authority describes cultural values and norms in organisations that ascribe some forms of power. The section therefore covers a broader superior power relationship across professional groups (that includes both doctors and nurses). It begins with an overview of healthcare hierarchy as the basis of rank power and its implications on voice and silence. It proceeds to present the implications of rank power and authority on voice and silence. Under this, it highlights the effects of authority gradient on voice and silence. Next, the interrelation of sociocultural authority and formal rank power and its effects on voice and silence is presented. The section ends with a summary of research gaps. This section of the literature contributes towards addressing research objective one (1): *To identify and examine how rank power and sociocultural authority affect voice and silence on patient safety in surgery.*

2.4.1 Overview of Hierarchy and Silence on Patient Safety

Power in healthcare is enshrined in hierarchy. Hierarchy is an official top-down command structure of unequal and interdependent positions in organisations (Laumann et al., 1970; Mousnier, 1973) where senior professionals occupy higher positions and exercise authority in decision making (Magee & Galinsky, 2008; Diefenbach & Sillince, 2011). Despite the quest for flat organisations, most contemporary organisations remain hierarchical (e.g Sidanius et al., 2004). Healthcare is no exception (Kirkpatrick & Ackroyd, 2003; Robertson & Swan, 2003). Healthcare has a complex hierarchy made up of procedures, ranks and professional groups (Lingard et al., 2002; Edmondson, 2003; Sutcliffe et al., 2004; Kirkpatrick et al., 2005; Chattopadhyay et al., 2010). For instance, doctors occupy the highest position followed by resident physicians and nurses (Lingard et al., 2002; Chattopadhyay et al., 2010). Power from professional groups perspective is presented as professional identity and interdisciplinary power in the second major section of the literature review.

Hierarchy is known to hinder the flow of information in organisations. Although there is limited evidence that well-defined hierarchies drive performance and voice (Bunderson & Boumgarden, 2010; Sanner & Bunderson, 2018), this is said to apply to organisations that undertake less complex tasks (Cantimur et al., 2016). However, because healthcare is a complex organisation undertaking dynamic patient care (Page, 2004; Vincent, 2010), hierarchy is expected to be detrimental than helpful to its work outcomes Nevertheless, healthcare is said to have done little to flatten hierarchy (Pronovost et al., 2009; Green et al., 2017a) but conform to it for the

purpose of convenient management(Weick, 1995; Henriksen & Dayton, 2006). As a result, it is easier for HCPs to conform to the status quo of hierarchy than taking alternative approaches which are often associated with new responsibilities and uncertainties (Henriksen & Dayton, 2006). Going against hierarchy in healthcare is risky and often affront to powerful groups who consider themselves and their views more important than others (Hart & Hazelgrove, 2001). Alternative approaches to laid down hierarchy therefore increases exposure to risk (Hammond et al., 2006).

Healthcare hierarchy restricts timely voice for patient safety. Hierarchy creates physical and spatial structures that maintain asymmetrical relationships (Festinger, 1954; Valentine, 2001; Halford & Leonard, 2003) and limit effective voice on critical information leading to adverse clinical events and outcomes (e.g Pronovost et al., 2009). Complex interrelations of people at different levels in hierarchy (Sutcliffe et al., 2004) distort effective communication in patient care (e.g Frost, 1987; Edmondson, 2003; Milliken et al., 2003; Weiss et al., 2014). This creates hegemony between the powerful and powerless at both the interpersonal and broader healthcare levels (Hart & Hazelgrove, 2001; Henriksen & Dayton, 2006; Souba et al., 2011) to directly impede and frustrate the voice of subordinate ranks (Ritchie et al., 2000; Truths, 2014; Wilkinson et al., 2015). For instance, an enquiry into healthcare failure and harm found that authorities ignored several attempts by nurses to voice concerns about incompetence and wrongful acts of doctors (Wilkinson et al., 2015). In a classic case of Rodney Ledward, a malpractice surgeon who caused harm to many patients, it was reported that he rejected nursing team members concerns on the note that they [nurses] cannot express concerns directly to him but to their nursing managers (Ritchie et al., 2000). These experiences explain systemic frustration to voice in hierarchy. Kim and Oh (2016) found that nurses conform to unhelpful norms in hierarchy by getting to know unspoken rules, receiving strong disapproval for voice and personal observations. This is consistent with Deaf Ear Syndrome where people choose silence due to the persistent failure of superiors and management to listen and act (Pinder & Harlos, 2001; Harlos, 2016). These suggest that HCPs do not merely conform to hierarchy out of convenience and personal safety, but compelled into it. Although hierarchy is generally known to impede voice in healthcare, little is known about how this engenders systemic disconnect in surgical teams to undermine voice on patient safety.

2.4.2 Healthcare Rank and Voice and Silence

Rank power in superior-subordinate relationships is evident in healthcare. Healthcare is characterised by respect for the authority of superiors within and across professional groups (e.g Hardy & Conway, 1988; Jervis, 2002; Ogle & Glass, 2014; Crowe et al., 2017). For instance, doctors are socialised into respect for authority from medical schools (Lempp & Seale, 2004; Craig et al., 2018; Haruta et al., 2020). Trainee doctors respect trainers to an extent of simply taking instructions without asking questions (Crowe et al., 2017). On the other hand, doctors' exercise authority over non-doctors such as nurses (e.g Ogle & Glass, 2014; Reed, 2016) and nurses are socialised into respect for doctors' authority from training (Stein, 1967; Stein et al., 1990). Power of rank in superior-subordinate relationships is therefore replete within and across HCPs.

Rank power in healthcare reinforces respect for authority and undermine voice. Schwappach and Gehring (2014b) found that respect for superior ranks knowledge and experience incline subordinate to questioning their inexperience and competence when they perceive potential harmful acts deserving of voice. This implies that although superior's knowledge may be merely perceived in some scenarios which does not make voice any less important, respect for superiors often hinder the needed upward voice for patient safety. Again, subordinates may simply choose silence towards receptive superiors based on respect for their position and knowledge. Besides, organisational practices can legitimise the use of position and knowledge authority of superior and undermine voice. For instance, while management practices in aviation seek to shift responsibility from pilots to teams and systems (Reason, 2000), surgical departments place much responsibility of surgical outcomes on surgeons rather than teams surgical systems (Waring et al., 2007; Lewis et al., 2011). In an ethnography study, it was found that surgeons find ways around failed systems to accomplish surgery in ways that are often not appropriate (Waring et al., 2007). For instance, the study established that when a surgical instrument is not available, malfunctioning or missing, surgeons often improvised to do surgery in one way or the other even when other team members are uncomfortable. In such instances, concerns raised by team members are deemed as criticism to surgeons. This corroborates power disparity in surgical teams (e.g Edmondson, 2003). An enquiry on cardiac surgery at the Bristol Royal Infirmary, UK, concluded that a steep authority gradient which enables excessive appropriation of power and control by leaders is a major cause of harm to patients (Kennedy, 2001). It has also been found that the authority of senior doctors to overrule concerns of others is a major reason for silence among junior doctors on questionable and inappropriate prescriptions (Lewis & Tully, 2009). At the same time, a sense of power enables senior doctors to justify harm caused by them and defend their expertise by describing harm as unavoidable or blame others for it (Allsop &

Mulcahy, 1998; Ritchie et al., 2000). As a result, while upward voice behaviour is multifaceted and explained by different reasons such as relationships (Ryan & Oestreich, 1991; Milliken et al., 2003; Detert & Trevino, 2010), knowledge (Waldman & Yammarino, 1999; Detert & Trevino, 2010), there is evidence that power difference is an underlying reason and reinforcer of upward silence (e.g Milliken et al., 2003; Schwappach & Gehring, 2014b; Schwappach & Gehring, 2015).

The emphasis on rank and superior power corroborates endemic upward silence in organisations. Despite compelling reasons for voice, silence remains a popular option for most employees (Ryan & Oestreich, 1991; Detert & Trevino, 2010). An interview of 260 employees in 22 industries revealed that 70% of employees feared to speak up about certain issues or problems at their workplaces (Ryan & Oestreich, 1991). Similarly, across different industries, 85% of employees couldn't raise an important concern to superiors at least on one occasion (Milliken et al., 2003). The phenomenon is no different in high-risk sectors such as healthcare and aviation. Bienefeld and Grote (2012) found that withholding voice is a major concern in aviation as aircrew members commonly choose silence in up to half of incidents where voice was imperative. Souba et al. (2011) found that 69% of professionals in medical and surgical institutions failed to talk about obvious problems. They established that it is common for professionals in healthcare not to raise or talk about important problems. In a study across different hospitals, HCPs expressed deep concerns about a range of harmful observations including competence of others, broken rules and mistakes by colleagues and superiors (Maxfield et al., 2005). Among the key findings, 84% of physicians and 62% of nurses reported colleagues resorting to dangerous shortcuts such as not washing hands and failing to check wristbands that could be harmful to patients. Again, 85% of nurses admitted to being confronted with situations of looming harm to patients. However, most of these harmful observations went unspoken about - only 5–15% of HCPs spoke up while 85–95% were silent (Maxfield et al., 2005). Although the study did not focus on upward voice, the authors found that the majority who did not speak up for various reasons are concerned that speaking up could lead to something worse due to power differences. The work of Schwappach and Gehring (2015) in oncology established that 70% of HCPs withheld voice at least once when they were concerned about harm to patients while 37% were silent when they had information that could have averted adverse medical incidents at least once. Silence results in deaths, injuries and avoidable harm to patients in healthcare (Toft, 2001; Blatt et al., 2006). For instance, a patient died from a wrongful intrathecal administration of vincristine when a junior doctor failed to speak up to challenge his senior counterpart although he knew vincristine should not be given intrathecally (Toft, 2001).

Despite the prevalence of silence, there is some evidence of upward voice. A simulation study with anaesthesia teams found that nurses actively speak up with physicians during critical

moments resulting in positive team outcomes (Kolbe et al., 2012). While a senior physician concluded a patient's abdominal pain was a result of Hepatitis C, an intervention for further evaluation by a resident subsequently revealed that the cause of the ailment was splenic vein thrombosis (Blatt et al., 2006). This changed the course of treatment for a better patient outcome. In another study, out of 274 doctors and nurses, 176 reported poor care and of these, 98.7% and 94.3% of doctors and nurses respectively indicated their willingness to speak up again (Firth‐Cozens et al., 2003). Seventy per cent (70%) of nurses reported incidents of poor clinical practices, and management irregularities (Moore & McAuliffe, 2012). The study of Moore and McAuliffe, as well as Firth- Cozen and colleagues, did not focus on upward voice and real-time voice on patient safety. A similar study on upward relationships by Adelman (2012) found that the presence of effective formal and informal voice culture in award-winning hospitals encouraged upward voice among HCPs. The management and leadership context of Adelman's study may explain the high level of upward voice.

Moreover, evidence of unheeded voice and futility of voice in upward relationships (e.g Milliken et al., 2003; Waters, 2008; Lewis & Tully, 2009; Souba et al., 2011) give credence to upward voice. For instance, nurses attest that little or no action being taken on concerns they raise default them to silence (Attree, 2007). Likewise, junior doctors fail to speak up on questionable and inappropriate prescriptions because senior doctors easily override their concerns even when they speak up (Lewis & Tully, 2009). A survey of British nurses found that 58% cited nothing being done about concerns as the foremost reason for not reporting patient safety concerns (Waters, 2008). Besides, out of nurses who reported patient safety incidents, 47% felt that concerns were handled badly or overlooked. Again, 23% said that reporting has often caused harm to patients. These corroborate evidence of unheeded voice in hierarchy (Ritchie et al., 2000; Henriksen & Dayton, 2006; Wilkinson et al., 2015; Kim & Oh, 2016). These findings are consistent with Deaf Ear Syndrome (Pinder & Harlos, 2001; Harlos, 2016) and acquiescence silence where employees give up hope for change and improvement and resort to perpetual silence out of disengagement and resignation (Kahn, 1990; Pinder & Harlos, 2001; Van Dyne & Botero, 2003). The inclination of superiors and management to not listening and acting upon concerns therefore intensify apathy and silence in upward relationships. This hinders voice at interpersonal and group levels (Milliken et al., 2003; Blader & Tyler, 2009; Detert & Trevino, 2010; Morrison et al., 2011) as well as the organisational level (Morrison & Milliken, 2000). Power hindrances to voice is profound in authority gradient. This is presented next.

2.4.3 Voice and Silence in Authority gradient

Upward voice is further challenging in authority gradient. Studies have found that there is a higher tendency for silence with increasing power disparity between observers and actors on potential harm (e.g Detert & Trevino, 2010; Samuel et al., 2012; Schwappach & Gehring, 2014b). This typically reflects silence of residents towards visiting surgeons or attending physicians (McCue & Beach, 1994; Blatt et al., 2006; Kobayashi et al., 2006). Resident and visiting surgeon relationship have been described as synonymous to a student-teacher relationship (Sutcliffe et al., 2004). Likewise, medical students' openness to colleagues on inappropriate hand hygiene declined stepwise towards higher hierarchies (Samuel et al., 2012). It is, however, important to note that these relationships are not merely about rank power. For instance, lack of knowledge, experience and relationship in upward relationships reduces the sense of safety and efficacy and deter voice of subordinates (Waldman & Yammarino, 1999; Detert & Trevino, 2010). For instance, inexperience and lack of clinical knowledge undermine confidence and voice towards superiors (Blatt et al., 2006; Schwappach & Gehring, 2014b). Although these suggest that other factors play important role in upward voice, extant research demonstrates that rank power is often a key determinant that affects other factors in upward voice (e.g Milliken et al., 2003; Lewis & Tully, 2009; Schwappach & Gehring, 2014b; Schwappach & Gehring, 2015). For instance, a junior doctor who knew it was wrong to administer vincristine intrathecally failed to speak up due to authority gradient and the assumption that the senior doctor knew better resulting in the death of a patient (Toft, 2001) .

Moreover, voice behaviour among superiors has a far-reaching effect on voice and silence in hierarchy. It has been found that next ranks and skip-level leaders voice behaviour affects voice and silence in hierarchy (Detert & Trevino, 2010; Liu et al., 2013). For instance, Detert and Trevino (2010) found that team members tend to be silent when their immediate superior's lack power to execute actions or fail to support what they say before skip-level ranks. According to them, skip-level superiors of two to five levels above subordinates, directly and indirectly, influenced voice and silence of subordinates. This they note occur through pleasant or unpleasant stories heard about skip-level leaders or direct observations and personal experiences with them. Although these studies were conducted in multinational organisations, similar results are expected in healthcare. Schwappach and Gehring (2014b) established in an oncology department that cultural norms make it nearly impossible for lower hierarchies to speak up to skip level leaders on patient safety concerns when their immediate supervisors are unable to speak up. However, there is limited research on how next rank voice behaviour either undermines or promotes voice in hierarchical teams and organisations such as surgery.

Next, sociocultural authority and its implications on voice and silence in the context of organisational culture is presented.

2.4.4 Sociocultural Authority and Voice and Silence

Sociocultural values and norms are an integral part of organisational culture. As rightly noted by Helmreich and Merritt (2019), cultural values and norms are disguised forms of power in organisations and professional behaviour. This means culture cannot be separated from professional relationships and values at work. For instance, organisational hierarchies and ranks do not only serve formal functions but regulate social relationships (Mousnier, 1973). Formal hierarchies are interwoven and often reinforced by informal hierarchies which are often enshrined in sociocultural values and norms in different cultures (Diefenbach & Sillince, 2011). Informal hierarchy is described as social domination in dominant-subordinate relationships that develop from social interaction over time (Diefenbach & Sillince, 2011). According to them, hierarchical organisations put their members in groups marked with unequal social relationships through unwritten rules that creates social distance. These unequal social relationships are sanctioned and legitimized through organisational structures, which in turn keep formal hierarchy intact and unquestionable even when there is resistance for change (Diefenbach & Sillince, 2011).

Sociocultural values and norms are therefore important to discourse in organisations. This is evident in the seminal work of Hofstede which permeates society and organisations (Hofstede, 1984; Hofstede et al., 2010). As established in the power distance dimension of Hofstede's theory, high power-distance cultures distribute power more unequally in favour of esteemed members of society such as older people and superior ranks. High power-distance cultures and organisations emphasize obedience and respect to authority (Milgram, 1963) and social conformity (Asch, 1955). This quite contrasts with low power-distance cultures that embrace a more equitable distribution of power and de-emphasizes status differences, which turn to facilitate social discourse (Hofstede et al., 1991; 2010). Differences in power distribution therefore manifest in a negative relationship between voice and power distance (Botero & Van Dyne, 2009; Hofstede et al., 2010). High power-distance cultures respect authority and are less expressive compared to low power-distance cultures. Although there is considerable variation within high and low power-distance regimes based on differences in social class, educational level and personality of parents (Hofstede, 1984; Au, 1999; Clugston et al., 2000; Brockner, 2005; Hofstede et al., 2010), differences between high and low power-distance regimes are based on enduring value systems that often prevail (Hofstede et al., 2010). This means although

similarities and contrary cultural values are expected across these different power distance regimes, fundamental differences are generally evident.

Research shows that high power-distance cultures revere and respect authority (e.g Sarpong, 1974; Yang et al., 1989; Kasoma, 1996; Farh et al., 1997; Van der Geest, 1997; 1998; Yang, 2003). In Ghana, for instance, authority is respected, and social orders are adhered to. For instance, young people respect older people, women respect men, children respect their parents, workers their employers, pupils their teachers, laymen respect sacred people, and poor people respect the rich (Van der Geest, 1997). In similar high power-distance cultures such as Asian, Farh et al. (1997) identified five core items from the submission to authority scale portraying individual's endorsement of traditional hierarchical relationships in consonant with Confucianism social ethics and values as (i.e., emperor-subject, father-son, husband-wife, older brother-younger brother, and friend-friend). As part of this social order, disputants are expected to ask the most senior person to decide who is right and instructions of senior persons are judged the best remedy to avoid mistakes. This suggests that culture rules humanity and social life. As Fivush (2010) observes, culture provides established signals that directly or indirectly specify what social discourse conforms or deviates from norms.

High power-distance cultures such as Ghana are structured into layers of authority that regulate social and professional relationships. High power-distance values translate into shared norms that perceive superiors as simply right on the basis of being superiors (Hofstede et al., 1991) . Managers and superiors appropriate power and authority perceiving to know better (Morrison & Milliken, 2000) and subordinates are often acquiesced to the authority of superiors (Hofstede et al., 2010). It has therefore been argued that high power-distance values do incline people to silence without consciously considering the safety and efficacy of voice (Morrison, 2014). This reflects 'implicit theories' where young people or lower hierarchies feel it is wrong or disrespectful to speak up in the presence of higher hierarchies (Kish-Gephart et al., 2009; Detert & Edmondson, 2011; Morrison, 2014). This suggests that subordinates may be naturally inclined to desist from questioning the actions and inactions of superiors just as superiors do not expect to be questioned. Cultural values and norms in power distance values are therefore important to understanding voice and silence in organisations (Burgoon et al., 1982; Hofstede et al., 2010).

Cultural implications for voice and silence are evident in healthcare. A comparative study across ten European health-care systems on doctor-patient relationships established that high power-distance cultures experienced less consultation time and have less room for unexpected information exchanges especially initiated by patients compared to low power-distance cultures (Meeuwesen et al., 2009). The study found that the level of power distance in a society reflects

in the doctor-patient relationship. However, the phenomenon has not been thoroughly examined in the workplace, especially among health professionals. A study on disclosure intention and behaviour among 251 physicians in Germany, Japan and the USA (Loewenbruck et al., 2016), found that social norms embedded in culture affects and moderates other individual and situational factors to determine medical disclosure behaviour. Physicians of high power-distance and high collectivism origin (Japan) reported the least intention to disclose medical errors and adverse outcomes compared to physicians of low power-distance and individualist culture (USA and Germany). While the study focused on the disclosure of medical errors rather than broader voice and silence, which is of interest to the current research, it lends support to previous findings that cultural values affect voice and silence (Botero & Van Dyne, 2009; Taras et al., 2010). Power Distance values therefore influence people's inclination to speak up with each other and deal with mistakes and corrections (Hofstede et al., 2010; Loewenbruck et al., 2016). This means cultural values and norms are important determinants of how HCPs express concerns such as correcting, suggesting and prompting for patient safety. Consequently, although sociocultural authority actively interrelates with formal healthcare power to determine voice and silence behaviour, this has not received adequate research attention, especially in high power-distance -organisations. This corroborates an observation that although Hofstede's Power Distance gives overarching insight on voice across cultures and organisations, little is known on its implications on employees voice (Morrison, 2014).

2.4.5 Research Gaps

Extant research attributes employee apathy and silence in upward relationships in organisations to power and hierarchy (e.g Frost, 1987; Edmondson, 2003; Milliken et al., 2003; Page, 2004; Sutcliffe et al., 2004; Weiss et al., 2014). However, there is little understanding on how the use of power undermines voice generally and affects voice and silence at interpersonal and team levels in acute settings such as surgery. Moreover, research has predominantly focused on the implications of formal rank power on voice and silence. As a result, despite the evidence that sociocultural authority influence voice and silence in organisations (Hofstede et al., 2010; Diefenbach & Sillince, 2011; Helmreich & Merritt, 2019), little is known about how sociocultural authority interrelates with formal rank power to affect voice and silence, especially in high power-distance regimes.

The next major section presents literature on the implications of professional identity from interdisciplinary power relationships on voice and silence.

2.5 Professional Identity and Interdisciplinary Power Relationships: Voice and Silence

This major section of literature presents the implications of professional identity from interdisciplinary power relationships on voice and silence. The section begins with an interdisciplinary power relationship between doctors and nurses. Next, it presents an interdisciplinary power relationship between surgeons and doctor anaesthesiologists. It ends with a summary of research gaps. This literature review contributes towards addressing research objective two (2) - *To examine how professional identity from interdisciplinary power relationships affects voice and silence on patient safety in surgery.*

2.5.1 Interdisciplinary Power of Doctors Over Nurses

Doctors' domination over nurses is often associated with general healthcare hierarchy and professional hierarchy. Professional hierarchies are consciously demarcated to put professionals into groups of varying status, power and knowledge (Freidson, 2001; Kirkpatrick et al., 2005). Professional hierarchy is achieved through well thought-through formal and social actions aimed at securing social dominance of some groups over others (e.g Kirkpatrick & Ackroyd, 2003; Robertson & Swan, 2003; Diefenbach & Sillince, 2011). Professional classifications and status therefore override professional autonomy (Diefenbach & Sillince, 2011). This explains why nurses are subordinated to doctors despite being an autonomous professional group. Although decades of change in healthcare is expected to lessen this power relationship, Reeves et al. (2008) note that subtle defence of professional boundaries and resistance of regulatory systems continue to perpetuate professional subordination of nurses to doctors. Professional identity as physicians gives confidence and authority to even junior doctors in connection to other HCPs (Blatt et al., 2006). Nearly all doctors exercise authority over nurses including very experienced nurses (Helmreich & Merritt, 2019). In surgery, for instance, nurses are always at the bottom in terms of authority while surgeons hold the highest positions followed by resident physicians (Lingard et al., 2002; Chattopadhyay et al., 2010). In a cross-cultural study, nurses bemoaned how hospitals are structured in favour of physicians in a manner that directly silences them or forces them to choose silence on patient safety concerns (Malloy et al., 2009).

Power in the doctor-nurse relationship is linked to broader medical socialisation. According to Foucault (1995), the disciplinary power of the medical profession was achieved through meticulous control and application of subtle coercion that generate and control desired behaviours in other professionals. This is consistent with a seminal work of Freidson (1988) establishing that the medical profession attained dominance through negotiated sanctioned

autonomy and self-regulation that subjected other professionals to them in broader healthcare. Professional discourse in medicine and socialisation in training predisposes doctors as leaders in healthcare (Hall, 2005; Whitehead, 2007) and empowers them as decision-makers over non-doctor HCPs (Coombs & Ersser, 2004; Attree, 2007; Nugus et al., 2010). This means the professional identity of doctors is inherently associated with confidence and power over nurses. On the other hand, the nursing profession is historically socialised into submission and obedience to authority at its origin where these were considered a virtue (Buresh & Gordon, 2000). It has been argued that because nursing started primarily as a female profession in an era of male domination in society and medicine, the profession has been cultured into obedience to the authority of doctors as a womanly virtue (Stuart, 1993; Davies, 1995; Witz, 2013). Nurses are therefore systemically socialised into suppression in healthcare in a manner that undermines their self-image and confidence (Roberts, 2006; Siebens et al., 2006). This is evident in Stein (1967) description of the Doctor-Nurse Game where nurses are obliged to be respectful and passive subordinates to doctors. For instance, corrections and suggestions by nurses are expected to be indirect and appear as an initiative of doctors but not themselves [nurses]. At the same time, doctors may indirectly ask for nurses' recommendations without appearing to do so. This game aims to achieve patient care, avoid open disagreement and maintain respect for doctors (Stein, 1967).

Moreover, doctors' status as learned and knowledgeable professionals is a major source of authority over nurses and other HCPs (e.g Street, 1992; Hall, 2005; Whitehead, 2007; Lingard et al., 2012; Reed, 2016). In contrast to knowledge authority of doctors, nurses have been found to have a sense of inferiority from lack of clinical knowledge and experience (e.g Ogle & Glass, 2014), inability to cope with dominant medical healthcare language (Canam, 2008) and difficulty in expressing untold human suffering (Ferrell, 2006; Rudge & Holmes, 2009) particularly in relation to doctors. Doctors claim of superior knowledge over other HCPs is linked to their years of education. Lingard et al. (2012) found that normally physicians in Canada and the United States of America especially specialists complete a minimum of six years of formal education and training after completion of an undergraduate degree. Such duration of training is often used as a basis for superior knowledge assumption and unilateral decision privileges over other HCPs (Baker et al., 2011). Despite evidence of a comparable length of education among other HCPs such as nurses from further studies (Plack & Wong, 2002; Redenbach & Bainbridge, 2007), Lingard et al. (2012) found that duration of doctors training is a popular justification of their superior knowledge posture over nurses which hinder inter-professional relationship and voice.

Broader medical socialization, organisational and professional hierarchy therefore reinforces professional domination of doctors and undermines nurses' voice on patient safety. For instance,

it has been found that nurses often choose silence because of strong organisational and professional stereotypes against them that make them feel their voice and concerns will not be heard (Mitchell & Ferguson-Pare, 2002). According to Simpson and Lyndon (2009), doctors' higher social status and favourable hospital support create an extreme power gradient that allows them to intimidate nurses into silence. Newton et al. (2012) found that although nurses actively exercise voice in an attempt to prevent harm to patients, they eventually become frustrated and morally distressed by unfavourable hierarchy and domination of doctors. For instance, lack of authority poses a challenge to nurses' role in infection control in relation to doctors (Kellie et al., 2012). Surgeons flout patient safety rules and disregard suggestions from nurses and nurse anaesthetists leading to harm (Aveling et al., 2015). This corroborates report describing doctors and hospital managers as judges who ignore the concerns nurses bring before them (Sinclair, 2000). Consequently, nurses become self-protective and conform to established norms rather than actively advocating for patient safety (Newton et al., 2012). These corroborate evidence that nurses' speak up but are just not heard (e.g Rodney et al., 2002).

Moreover, the doctor-nurse power relationship is characterised by professional disrespect for nurses. The doctor-nurse relationship is marked by disrespect and lack of recognition for nurses (Sirota, 2008; Malloy et al., 2009; Simpson & Lyndon, 2009). Disrespect for nurses is linked to doctor's hegemony and perceived superior knowledge (e.g Buresh & Gordon, 2006; Ferrell, 2006; Rudge & Holmes, 2009; Baker et al., 2011; Lingard et al., 2012; Ogle & Glass, 2014). Disrespect is also associated with managerial activities and doctors superiority which undermine the professional identity of nurses and make them feel inferior (Ogle & Glass, 2014). For instance, nurses describe doctors' behaviour towards them as often disrespectful and extremely negative such as insults, profanity screaming and rudeness (Sirota, 2008). A large scale survey confirmed that the hierarchical relationship between doctors and nurses has seen little or insignificant change in 17 years (Sirota, 2008). The study further found that 46% of nurses described their relationship with doctors as that of subordination in 2008 compared to 57% in 1991. This is consistent with nurses sense of not being valued in their role by doctors (Aveling et al., 2015). For instance, nurses are dismayed by doctors' attitude of not listening to them when they speak up on patient safety concerns (Schwappach & Gehring, 2014a; Aveling et al., 2015). This suggests although nurses may have required clinical knowledge to speak up, the authority of doctors' limits their inclination to voice and being heard when they do speak up.

Contrary to traditional subordination of nurses to doctors, another stream of research describes a changing doctor-nurse relationship into a more cordial and team-oriented one (Stein et al., 1990; Svensson, 1996; Snelgrove & Hughes, 2000; Lingard et al., 2002). For instance, it has been found that the traditional top-down Surgeon-anaesthetist-nurse relationship is increasingly

being challenged both at the individual and inter-disciplinary levels especially by nurses (Lingard et al., 2002). This is consistent with evidence of continuous interprofessional negotiations between doctors, nurses and other HCPs in patient care (Zwarenstein & Reeves, 2002). For instance, a later work of Stein notes that the traditional doctor-nurse game has changed with nurses deciding to end this game and consciously seeking to change nursing and how they relate with doctors (Stein et al., 1990). According to them, a decline in esteem of doctors over decades due to the commercialisation of medicine and increasing female doctors as well as male nurses that weakens the front of male-dominated physicians in relation to female-dominated nurses. This fits into findings of a more cordial and negotiated doctor-nurse relation in contrast to the traditional subordination (Svensson, 1996). The study found that majority of nurses were straightforward and open in conveying suggestions and opinions to doctors who listen and act upon it. It has been found that senior nurses openly speak up against perceived deficient actions of junior and relatively inexperienced doctors and take control of procedures (Hughes, 1988) and elite nurses do intimidate and pressure junior doctors who are dependent on them in learning (Lewis & Tully, 2009).

Several factors are cited for the changing doctor-nurse power relationship. Research has linked this change to increasing work pressures, increasing nurses' knowledge and changing healthcare policy (Hughes, 1988; Svensson, 1996; Snelgrove & Hughes, 2000). For instance, it has been found that work pressures and contingencies, nurses' involvement in specialised units, changing hospital policies and patient advocacy are blurring traditional roles and stereotyping between doctors and nurses (Snelgrove & Hughes, 2000). Increasingly, interprofessional collaborations, partnerships of teams and leaders are being recognised as imperative to patient care (McCallin, 2003; Freeth & Reeves, 2004). These studies suggest that changing work trend is fostering teamwork and reducing inter-professional barriers in healthcare. For instance, there is increasing evidence of continuous interprofessional negotiations and collaboration between doctors and other professionals (Zwarenstein & Reeves, 2002). The use of sophisticated technology that increases interdependence boosts voice between doctors and nurses in surgery (e.g Edmondson, 2003). Again, the concept of nurse prescribers in the UK, United States of America, Australia, Europe and New Zealand signify empowerment of nurses in healthcare (Pritchard, 2017). Meanwhile, nurses are increasingly becoming clinically knowledgeable (Pijl-Zieber, 2013; Ogle & Glass, 2014) and being professionally empowered to assume a more active and collegial role with doctors in patient care (Stein et al., 1990). Again, the central role of social knowledge in modern healthcare makes nurses invaluable as they are closer to patients to make important patient observations and win patient trust to obtain important information that aid

diagnosis and treatment (Svensson, 1996). These developments are said to enhance nurses' empowerment for a more interdependent doctor-nurse relationship for voice on patient safety.

Despite the positive trend, there is evidence that little has changed in nurses' subordination to doctors in healthcare. Doctors' authority is deeply embedded in modern healthcare despite nurses autonomy (Reed, 2016). For instance, it has been found that nurses with extraordinary medical knowledge and complex clinical experience describe themselves as being less knowledgeable and having limited experience in relation to doctors (Ogle & Glass, 2014). The authors posit that nurses' sense of inferiority to doctors is merely a professional mindset rather than an actual knowledge and experience gap. Again, nurses can only dissent in view with doctors on patient care when they know more than doctors (Pijl-Zieber, 2013). Nurses are unlikely to challenge clinical decisions and actions of senior doctors in particular (Schwappach & Gehring, 2015) and are often silent on core medical concerns (Svensson, 1996; Edmondson et al., 2001). For instance, although most nurses describe voice relationship with doctors as straightforward, some admit to being silent on core medical issues out of fear of intruding or challenging the authority of doctors (Svensson, 1996). Again, while overlapping roles in healthcare allow nurses to undertake routine medical tasks, doctors perceived these as carrying out their instructions (Snelgrove & Hughes, 2000) rather than collegial teamwork. Coombs and Ersser (2004) found high medical dominance and little shared knowledge in decision making in intensive care unit. According to them, despite effort over the years to improve interprofessional teamwork, entrenched domination of doctors makes nurses knowledge supplementary in clinical practice and decision making on patients.

These contrasting evidence of changing traditional subordination of nurses to doctors and entrenched status quo require further research in different context and team-oriented surgery. Moreover, while the authority of doctors and nurses' silence has often been associated with healthcare hierarchy, little is known about how superior posture of doctors and disrespect for nurses' affect voice and silence.

Besides doctors' domination over nurses, the relationship between surgeons and anaesthesiologists is characterised by power struggles. This is presented next.

2.5.2 Surgeons and Anaesthesiologists Power Relationship

There is evidence of a deep-seated power struggle and rivalry between surgeons and anaesthesiologists. This rivalry is said to be historical as anaesthesia emerged from surgery. Prior to anaesthesia becoming a speciality, surgeons performed surgery solely and partially managed anaesthesia (Villet & Collard, 2016). At this stage in medicine, surgery was a very risky venture that was undertaken as a last resort to death and a successful surgery was considered an extreme achievement (Villet & Collard, 2016). However, anaesthesia emerged out of surgery and became an independent speciality with advanced expertise to enhance patient safety and drastically reduced surgical deaths (Lienhart et al., 2006; Villet & Collard, 2016). Subsequently, although decision-making between surgeons and anaesthesiologists is expected to be mutual and patient-centred rather than speciality centred (Villet & Collard, 2016), there is considerable evidence of conflict between these specialities which has been attributed to differences in professional values, interests and power (Fox, 1994; El-Masry et al., 2013; Cooper, 2018). The surgeon-anaesthesiologist relationship is therefore marked with power and friction instead of teamwork. It is important to note that although surgeons generally have conflicts with anaesthesia, this conflict is intense between surgeons and anaesthesiologists, who are colleague specialist doctors, compared to other members of anaesthesia such as nurse anaesthetists.

The surgeon-anaesthesiologist relationship is therefore characterised by struggles for dominance and control. Although surgeons generally have the power to admit and plan surgery, anaesthesia's critical role is inevitable to surgery (Fox, 1994; Aberese-Ako et al., 2015; Helmreich & Merritt, 2019). For instance, anaesthesiologists key function of maintenance and resuscitation of patients before and after surgery often conflicts with core surgical duties of surgeons especially during emergencies (Helmreich & Merritt, 2019). The struggle for power and control is heightened by a lack of clearly defined authority in surgery between surgeons and anaesthesiologists. Although there are clearer lines of authority between physicians, residents and nurses, the ultimate authority is unclear between surgeons and anaesthesiologists (Helmreich & Merritt, 2019). Moreover, surgeons are often perceived as impatient, aggressive, dominating authoritarian, arrogant and prestige-driven by team members (Mitra et al., 2003). This sense of control is said to be rooted in an archaic concept of "captain of the ship" which places legal responsibility of negligence on patient's to the surgeon's mere presence in the theatre (Katz, 2007) despite the out-dated nature of the law in many court rulings (Murphy, 2001). This means surgeons' inclination to control and override with nurses is bound to face resistance with anaesthesiologists, who are their colleague specialists.

The conflict between surgeons and anaesthesiologists has also been traced to differences in professional values. Differences in surgeons and anaesthesiologists' professional values often

conflict in patient management (Fox, 1994; Cooper, 2018). For instance, while surgeons are preoccupied with patients' immediate diseases that must be removed as early as possible, anaesthesiologists are more circumspect at satisfying overall patient fitness requirement for surgery (Fox, 1994; Aberese-Ako et al., 2015). The phenomenon is therefore underlined by the development of value systems by groups which influence how they see each other (Haidt, 2012). It reflects interprofessional tension in ethical decision making (Malloy et al., 2009). It is, however, important to note that while doctors' domination over nurses minimizes such conflict in the doctor-nurse relationship, an equal sense of power intensifies the phenomenon between surgeons and anaesthesiologists.

Consequently, decision making between surgeons and anaesthesiologists is characterised with stereotypes, disagreement and conflicts (Fox, 1994; Katz, 2007; El-Masry et al., 2013; Aberese-Ako et al., 2015; Cooper, 2018). Cooper (2018) elaborates professional stereotypes between the two specialities. He observes that anaesthesiologists often accuse surgeons of failure to appreciate the holistic medical condition of patients, properly optimise them and take precautionary measures but are often preoccupied with surgical procedures. This results in surgeons often failing to appreciate pertinent safety and precautionary measures by anaesthesia such as ensuring adequate availability of blood during surgery for the unexpected. On the other hand, surgeons accuse anaesthesiologists of unreasonable eagerness to cancel surgeries for flimsy reasons, failure to inform surgical teams of vital signs in patients and unpreparedness to alter anaesthesia to surgical requirements (Cooper, 2018). This corroborates findings of conflict between surgeons and anaesthesiologists (Katz, 2007; El-Masry et al., 2013). For instance, anaesthesiologists demand to cancel or postpone surgery for further patient information or evaluation is often a source of conflict with surgeons (Katz, 2007). The study found that surgeons are often displeased by request for further patient examinations to ensure safety or attempt to force anaesthesia team members to anaesthetise patients who are not well prepared for surgery. Other times, surgeons do not even inform anaesthesiologists of upcoming surgery but expect them to undertake procedures (Katz, 2007). Although the conflict between surgeons and anaesthesiologists suggest an active voice relationship, this may lead to negative use of voice and silence across speciality. However, the relationship between surgeons and anaesthesiologists has been examined by previous studies as conflict and differences in professional values without examining how these affect voice and silence on patient safety. Again, although surgeon-anaesthesiologist power relationship and conflict is known to affect nursing roles (Cooper, 2018), little is known about how this affects voice and silence of nurses, especially nurse anaesthetists who work in anaesthesia department.

2.5.3 Research gaps

The mix evidence of entrenched nurses subordination to doctors (e.g Sirota, 2008; Malloy et al., 2009; Simpson & Lyndon, 2009; Reed, 2016) and an emerging equal power relationship between doctors and nurses (e.g Stein et al., 1990; Snelgrove & Hughes, 2000; Lingard et al., 2002) require continuous research in different power regimes and interdependent surgical teams. Meanwhile, although the silence of nurses on patient safety is predominantly associated with an unfavourable hierarchy that reinforces doctors' domination, not much is known about how superior knowledge posture of doctors and sense of disrespect from that leads to silence among nurses. Moreover, besides limited empirical evidence on surgeon-anaesthesiologist power relationship (Cooper, 2018), previous research has examined the relationship as conflict and differences in professional values (Fox, 1994; Katz, 2007; El-Masry et al., 2013; Aberese-Ako et al., 2015; Cooper, 2018) without examining how these affect voice and silence on patient safety. Again, although the surgeon-anaesthesiologist power relationship affects team role of nurses (Cooper, 2018), little is known on how this further affects voice and silence of nurses, especially nurse anaesthetists who work in anaesthesia.

The next major section of literature presents on risk to voice in power relationships

2.6 Power Induced Risk to Voice

This major section of literature presents risk of speaking up in upward relationships. It begins with negative and unpleasant experiences of voice in power relationships. Next, it presents how sense of psychological support from organisational support affects risk and voice. It ends with a summary of research gaps. This section of literature contributes towards addressing research objective three (3) - *To understand and critically evaluate how power of rank and professional identity induces risk of voice and influence voice and silence on patient safety in surgery*

2.6.1 Risk to Voice in Power Relationship

Employee voice is often associated with risk. As a result, although voice is considered a desirable organisational behaviour and associated with positive team and organisational outcomes, people consider risk involved before speaking up or remaining silent (Morrison & Milliken, 2000; Detert & Burris, 2007; Morrison, 2014). The idea of safety is often discussed together with the efficacy of voice which was earlier captured in decisions to whistleblowing (Near & Miceli, 1985). Among the key considerations to reporting wrongs outlined by the authors include if reporting will be effective in discontinuing wrongful actions as well as the potential risk associated with reporting an issue. The general understanding is that individuals will engage in voice as their judgments of efficacy and safety increase but are more likely to remain silent when both or any of these elements decline (e.g Near & Miceli, 1985; Attree, 2007; Morrison, 2014). This means employees often choose to speak up when they perceive a high level of psychological safety and are also confident that appropriate action will be taken on what they intend to say (Detert & Burris, 2007; Chiaburu et al., 2008; Detert & Trevino, 2010; Schwappach & Gehring, 2015). Safety is linked to a host of factors such as relationships (Sutcliffe et al., 2004; Blatt et al., 2006), leadership, power, and resource control (Pinder & Harlos, 2001; Milliken et al., 2003; Morrison & Rothman, 2009). For instance, predominant reasons for silence such as being ignored and negative repercussions are common with speaking up to superior groups such as leaders in healthcare (Souba et al., 2011). Similarly, the fear of being seen as a trouble maker, damaging relationships and suffering retaliation such as losing jobs or promotional opportunities from speaking up are commonly reported in upward relationships by employees across different work sectors (Milliken et al., 2003). These suggest that although the risk to voice is diverse, it is primarily reinforced by power differences (e.g Morrison & Milliken, 2000; Blatt et al., 2006). Power is therefore a major reason for risk in speaking up especially in hierarchical organisations such as healthcare.

It has been found that expressing honest observations and alternative views to higher hierarchies can have negative implications such as punishment (e.g Milliken et al., 2003; Kish-Gephart et al., 2009; Detert & Edmondson, 2011; Schwappach & Gehring, 2015). For instance, a notable report found that an atmosphere of fear and negative repercussions kept individuals and groups from speaking up on poor care resulting in deaths in UK hospitals (Francis, 2013). Risk therefore constitutes a compelling reason for employees to be cautious about speaking up especially on sensitive and known organisational problems (Liang et al., 2012b) and challenging the status quo or exposing serious problems since this can have negative personal and career consequences (Milliken et al., 2003; Detert & Trevino, 2010; Grant, 2013). This risk is particularly profound in whistleblowing. Whistleblowing is associated with detrimental personal and professional consequences (e.g Ahern & Mcdonald, 2002), social prosecutions, institutional disciplinary action and other forms of hostilities from institutions and superiors (Jackson & Raftos, 1997; Brodie, 1998). Whistle-blowers are often subjected to a range of official and unofficial reprisals such as workplace violence and intimidation (Ahern & Mcdonald, 2002) to an extent where actors contemplate resignation or actually resign (Jackson & Raftos, 1997; Ahern & Mcdonald, 2002) or suffer punitive transfers due to tension in the workplace (De Maria & Jan, 1994). For instance, a survey in the UK found that one-third of nurses who speak up on serious patient concerns suffered personal consequences (Myers, 2008; Public Concern at Work, 2008). Whistle-blowers suffer physical and emotional health (Ahern & Mcdonald, 2002; Jackson et al., 2011) and career consequences (McDonald et al., 2000; Jackson et al., 2010a; Jackson et al., 2010b). A classic example is the ostracizing of a consultant anaesthetist, Stephen Bosin, who raised concerns about the poor performance of cardiac surgeons at the Bristol Royal Infirmary (Teasdale, 2002).

Compared to whistleblowing, a less hostile internal voice aimed at better organisational and team outcomes is not without risks (e.g Morrison & Milliken, 2000; Detert & Burris, 2007; Morrison, 2014). For instance, although the foremost motivation for voice among HCPs is to prevent harm to patients, voice often comes with negative personal and professional consequences (e.g Okuyama et al., 2014; Schwappach & Gehring, 2014b). For instance, a deep sense of risk in upward relationships among doctors and nurses in oncology resulted in conscious assessment and trade-offs of risk and benefit prior to voice even during compelling patient safety concerns (Schwappach & Gehring, 2014b). Nurses consider raising concerns on patient safety as high risk and low benefit venture (Attree, 2007). Attree found that the fear of negative consequences such as retribution, being negatively labelled as a troublemaker or blamed kept nurses from speaking up on compelling patient safety concerns. For instance, the study found that nurses speaking up has a direct negative effect on their relationship with superior and

career progressions. Consequently, nurses admit to either remaining silent on most legitimate patient safety concerns or thinking carefully over such before raising them (Attree, 2007).

Unequal power relationships in healthcare teams (e.g Edmondson, 2003) underlines nurses' fear about speaking up for patient safety. This suggests that perceived concerns may often not result in voice due to the risk of negative personal consequences. Risk to voice is also evident among doctors. For instance, a report on harm in surgery established that junior doctors fear criticizing harmful and questionable actions of superiors due to the risk of jeopardising their career (Ritchie et al., 2000). According to the report, junior doctors' dependence on superiors for references make challenging their wrongful actions and inaction risky career-wise. Similarly, it has been found that trainee doctors strive to stay in favour with consultants despite humiliation and harsh treatment because they feel dependent on these superiors for future career opportunities (Crowe et al., 2017). The study found that trainees rarely express their true emotions and feelings to superior trainers on the medical hierarchy due to fear of negative consequences such as jeopardizing their training and future career prospects. The study, however, focused on how power relationships make junior doctors and trainees suppress their emotions but did not examine how this affects voice and silence on patient safety concerns.

Negative personal and career consequences in upward voice across diverse organisations (e.g Milliken et al., 2003; Attree, 2007; Crowe et al., 2017) quite contradict findings that voice engenders status building in organisations through which employees can gain respect, prestige or admiration in the eyes of others (Weiss & Morrison, 2019). It has been found that individuals with a low level of formal power or professional status do leverage agentic and communal voice behaviour to shore up their social status in organisations (Weiss & Morrison, 2019). Although status motivation may be a possible reason for voice among HCPs, this will have little significance due to prosocial nature of voice in this context. As Okuyama et al. (2014) note, the voice of HCPs is aimed at the interests of patients compared to other organisations where voice is often associated with direct personal or organisational interest and benefit. Notwithstanding this, voice that challenges superiors in the interest of patients is often perceived as a nuisance rather than useful input (Faunce & Bolsin, 2003). This means while voice is important for patient safety, it may be associated with a higher sense of risk because there is no real personal interest or gain attached to it compared to other organisations. Henceforth, while this sense of altruism quite distinguishes voice of HCPs from employees in other sectors, there is little understanding on how the phenomenon affects the sense of risk and determines voice and silence on patient safety.

The risk to voice in power relationship reflects Approach, Inhibition Approach of Power (Keltner et al., 2003). The theory posits that sense of power and powerlessness activates sensitivity to approach or restrain respectively. Sense of power enables superiors to act as they deem fit and even victimize subordinates for speaking up. On the other hand, a sense of powerlessness makes subordinates sensitive to risk which inhibits them from speaking up (Keltner et al., 2003) out of the fear of negative personal and career consequences. Underlying power differences to approach and restrain means powerful groups can easily compromise subordinates into questionable and harmful patient procedures (e.g Orbe & King, 2000; Ritchie et al., 2000). This intensifies lack of psychological safety in upward relationships (e.g Edmondson, 1999; Milliken et al., 2003; Morrison, 2014) and engenders defensive silence, where people fail to speak up due to the fear of negative personal consequences (Van Dyne & Botero, 2003). The sense of risk and lack of psychological safety to voice is further influenced by the level of organisational support for voice. This is presented next.

2.6.2 Organisational Support and Risk to Voice

Organisational support is central to the sense of safety and psychological safety for voice. For instance, nurses only challenge doctors when they perceive the backing of hospital policies and support systems and are sure that their voice will not result in conflict, stress or reprisal attacks (Churchman & Doherty, 2010). Trust in management for fair and objective handling of patient incidents is important to nurses ability to speaking up on patient safety (Attree, 2007). Simpson and Lyndon (2009) established contrasting cases of empowerment and disempowerment of nurses based on hospital support systems. They found that while nurses generally felt powerless towards doctors during disagreements in clinical practices, circulating nurses in neonatal resuscitation were confident because of institutional policy gave them the authority to act and call resuscitation teams when things are going wrong. This is consistent with findings that clear institutional policies and support are fundamental to effective collaboration and mutual respect in interdisciplinary healthcare teams that is marked by power differences (American Association of Critical-Care Nurses, 2005; Porto & Lauve, 2006). While this suggests that organisational policies and support are fundamental management tools in promoting voice, there is entrenched evidence of unequal management support in healthcare hierarchy.

Research shows that the mode of hospital administration and support is often uneven in favour of superior ranks and doctors generally and biased against nurses (Simpson & Lyndon, 2009; Churchman & Doherty, 2010). Regarding professional groups, research has found unfair organisational support in favour of doctors against non-doctor HCPs (Booij, 2007; Aberese-Ako et al., 2015). Nurses have often lacked the support of management to challenge doctors to

maintain patient safety standards and guidelines (Attree, 2007; Simpson & Lyndon, 2009). For instance, nurse anaesthetists commonly report unfair organisational treatment in connection to surgeons stemming from hospital policies that rarely appreciate them (Booij, 2007). Besides, the power and influence of doctors in healthcare result in nursing managers choosing loyalty to doctors over nurses (Valentine, 1992; Roberts, 2000; Daiski, 2004). These studies found that nursing managers often align themselves to doctors, as a powerful professional group, by unfairly betraying colleagues' nurses in connection to doctors. This behaviour of nursing superiors and managers is described as an act of powerlessness (Roberts, 2000) which strengthens doctors' domination and makes nurses further vulnerable and voiceless on patient safety (Daiski, 2004).

Although research primarily focuses on lack of organisational support for nurses in connection to doctors, the phenomenon is also evident across other professional groups such as doctors. For instance, it has been found that doctors and nurses with managerial function reported higher psychological safety and organisational support than those without managerial function which results in higher tendencies to silence among junior doctors and nurses (Schwappach & Gehring, 2015). This confirms junior doctors and trainees sense of vulnerability and silence towards superiors (Ritchie et al., 2000; Crowe et al., 2017) and the general vulnerability of subordinates in different organisations (e.g Milliken et al., 2003). It has been found that young and junior ranks often face severe negative effect of speaking up compared to older and more experienced higher ranks due to power differences and unequal management support (Milliken et al., 2003).

This unequal management support undermines trust for voice. The presence of organisational policies and management support processes therefore does not necessarily guarantee employee trust and voice (Goffman, 1974; Schein, 1992; Leavitt, 2005; Detert & Trevino, 2010). According to these studies, employees may choose silence due to the lack of trust in management support systems and policies. This reflects procedural justice and interactional justice in organisations. Procedural justice has to do with fairness from formal organisational policies or processes (Konovsky, 2000) while interactional justice has to do with fairness at the interpersonal level in organisations (Brockner & Wiesenfeld, 1996; Cobb et al., 1997). Consequently, people will speak up when they perceive a sense of fairness at both organisational and interpersonal level. While interactional justice can make a difference at the interpersonal level, procedural justice from broader organisational policies and processes is expected to have a more defining role in perceived organisational support even at the interpersonal level in hierarchical organisations such as healthcare. However, little is known about how perceived inequalities in organisational support affects trust and voice among HCPs in surgery.

The lack of fair organisational support heightens risk from a sense of power and powerlessness (Keltner et al., 2003) and lack of psychological safety (Edmondson, 1999; Van Dyne & Botero, 2003; Morrison, 2014) for voice on patient safety. The absence of organisational support therefore intensifies risk in upward voice especially for powerless groups such as nurses and junior doctors. This intensifies futility of voice and silence in upward relationships (e.g Pinder & Harlos, 2001; Milliken et al., 2003; Van Dyne & Botero, 2003; Waters, 2008; Lewis & Tully, 2009; Souba et al., 2011). Besides, although risk to voice is associated with defensive silence and defensive voice (Van Dyne & Botero, 2003; Morrison, 2014) little is known about these among HCPs.

2.6.3 Research gaps

Although the risk of speaking up is quite established in research, Attree (2007) observes that experiences of HCPs who raise concerns are more anecdotal than empirical. For instance, while evidence of negative repercussions is rife in whistleblowing literature (e.g McDonald et al., 2000; Jackson et al., 2010a; Jackson et al., 2010b), little is known about the risks encountered by those who suggest correct and prompt to avoid negative outcomes in teams and organisations. Moreover, although risk and lack of psychological safety generally undermine voice (e.g Attree, 2007; Morrison, 2014), from the perspective of unequal power and organisational supports in healthcare (Simpson & Lyndon, 2009; Churchman & Doherty, 2010), little is known on how these affect broader voice and silence on patient safety.

The next major section presents literature on how HCPs manage power relationships for voice on patient safety.

2.7 Managing Power Barriers to Voice

This major section of the literature presents strategies HCPs adopt to manage power barriers to voice on patient safety. This connects to the previous major sections of the literature review that presented power hindrances to voice. The section begins by presenting the use of positive relationships and intermediary voice to manage power barriers to voice. Next, it presents the use of ingenious voice strategies that seek to make voice less offensive and enhance receptivity. It ends with a summary of research gaps. This literature contributes towards addressing research objective four (4): *To identify and analyse strategies healthcare professionals adopt to manage power barriers to voice on patient safety in surgery.*

2.7.1 Relationship and Intermediary approach to Voice

Positive relationship is important in managing power relationships for voice. Employees generally make suggestions and volunteer ideas for good team outcomes when they have positive relationships with supervisors and superiors (Botero & Van Dyne, 2009; Tangirala & Ramanujam, 2012) and perceive superiors as receptive to input (Edmondson, 2003; Detert & Trevino, 2010; Takeuchi et al., 2012). For instance, although most employees choose silence in a study across a range of organisations, 27% admitted to speaking up to immediate superiors they relate well with (Milliken et al., 2003). In a survey and observational study, Morrison et al. (2015) found that team members with a low sense of power remained silent on performance problem until receiving clues that powerful team members are open to input. The study found that although power differences hinder subordinates voice in hierarchy, superiors' sense of openness to listen encouraged upward voice.

Beyond these, indirect and complex relationships in hierarchy affect voice and silence in different ways. Studies have found complex rational implications in upward voice behaviour (e.g Detert & Trevino, 2010; Liu et al., 2013). For instance, next rank superiors relationship and voice behaviour towards higher ranks deter or encourage voice among lower subordinates (Detert & Trevino, 2010; Schwappach & Gehring, 2014b) and skip-level superiors influence voice and silence behaviour in several ways in teams (Detert & Trevino, 2010; Liu et al., 2013). It has been established that the kind of relationship and voice of leaders along hierarchy is an important determinant of voice behaviour and choice of voice target among subordinates (Liu et al., 2013). Liu and colleagues found that subordinates often speak up to immediate superiors who have strong relationships and positive voice behaviour with skip-level leaders to deal with concerns. Moreover, the study found a more positive relationship and voice behaviour of subordinates toward skip-level superiors when there is a weaker relationship and voice

behaviour between direct superiors and the skip-level superiors (Liu et al., 2013). While these complex relationships in hierarchy give some level of interpersonal access for voice, the phenomenon has not been adequately examined in hierarchical healthcare teams such as surgery

Moreover, complex rank and relational considerations in hierarchy influence intermediary voice on patient safety. Intermediary voice is generally described as speaking through third-parties rather than directly with those concerned in an issue. A limited body of research attests that HCPs often speak through third-parties in an attempt to address patient safety concerns (e.g Maxfield et al., 2005; Lewis & Tully, 2009; Schwappach & Gehring, 2014a). For instance, it has been found that junior doctors who couldn't personally intervene in inappropriate prescriptions of superiors often manage to intervene through other doctors (Lewis & Tully, 2009). These other doctors used in such interventions are often superior team members whom junior doctors relate well with and feel safe to talk to. Maxfield and colleagues found that while most HCPs had serious concerns with people they directly worked with about broken clinical rules, mistakes, incompetence among others, they rarely spoke directly with actors but rather shared concerns with other colleagues or managers (Maxfield et al., 2005). According to the study, taking concerns to managers is often considered unfruitful as these rarely act. On the other hand, those who inform colleagues note that the purpose is not to solve immediate problems but to make colleagues aware of potential harm certain people can cause so they can manage this when working with them (Maxfield et al., 2005). This is consistent with finding that HCPs, especially subordinate ranks, learn to work around problems to rectify them tactfully without confronting the superiors involved (Schwappach & Gehring, 2014a). Solving problems in collaboration with same rank colleagues or giving them certain information about potential harmful actions of superiors are therefore indirect approaches to addressing problems without confronting superior actors. Although these help to an extent in harm prevention, these forms of voice are often passive and do not address safety concerns in a timely manner to prevent harm. At the same time, such voice is described as silence in disguise as it is motivated by apathy and a sense of resignation (e.g Newton et al., 2012; Kim & Oh, 2016). Beyond the passive intermediary voice, Green et al. (2017a) recommended that team members in healthcare can actively address pressing safety problem by speaking through others or shout for third parties intervention to stop harm when necessary. This represents a more proactive intermediary voice for patient safety. However, in the context of complex power and relational considerations to voice in hierarchy (Detert & Trevino, 2010; Liu et al., 2013), little is known on how this active intermediary voice occurs in acute surgery.

In addition, the role of cultural values has not been examined in connection to relationships and intermediary voice among HCPs. Compared with individualistic cultures, collectivist cultural values embrace group and social ties which encourage strong interpersonal relationships and creates platforms for solving problems through others (Hofstede, 1984; Hofstede et al., 2010). This suggests that despite power inequalities being common in collectivist cultures, strong social ties is expected to encourage personal relationships among team members of different ranks than in individualistic cultures. Moreover, in contrast to individualistic cultures where professional relationships drive work, personal relationships drive work in collectivist cultures (Hofstede, 1984; Hofstede et al., 2010). According to Hofstede, personal relationship is fundamental to how things are done in collectivist cultures. The emphasis on personal relationships and group ties in collectivist cultures suggest that personal relationships will be central in managing direct power and intermediary relationships for voice on patient safety compared to individualistic cultures. This suggests that although high power-distance and collectivist cultural values generally hinder voice, these present potential opportunities for interpersonal access for some level of voice in upward relationships. For instance, a strong relationship with immediate superiors will encourage voice through them to skip-level superiors while stronger relationships with skip-level leaders can equally be utilized by subordinates when immediate superiors do not listen to their concerns. Relational considerations, therefore, have important implications for emergent approaches such as getting third-parties assistance to avoid looming harm in healthcare (Green et al., 2017a). Moreover, evidence of unheeded upward voice in healthcare (Ritchie et al., 2000; Sinclair, 2000; Mitchell & Ferguson-Pare, 2002; Aveling et al., 2015; Wilkinson et al., 2015) makes proactive intermediary voice imperative to harm prevention in acute surgery. Despite these, little is generally known about intermediary voice and how sociocultural values affect interpersonal access and relationships for voice in healthcare hierarchy, especially in high power-distance and collectivist cultures like Ghana.

2.7.2 Ingenuity to Voice

Ingenuity to voice can be described as a vocal act of being subtle, indirect, tactful and circumspect in presenting concerns or information to others. Acknowledging difficulties in expressing voice in upward relationships, Schwappach and Gehring (2015) acknowledge the need for vocabularies on acceptable manner of conveying concerns under difficult circumstances. For instance, a strategic choice of words to address concerns of harm, especially in difficult upward relationships, has been recommended (Green et al., 2017a). The authors recommend the need for healthcare to adopt a language format developed by the aviation industry termed 'CUS', where C is "I am Concerned", U is "this is Unsafe" and S is "I am Scared".

These codes of language are expected to make it easier for team members to speak up in different scenarios of perceived harm. Moreover, Green et al. (2017a) recommend a choice of words acronym – PACE, where P is Probe, A is Alert, C is Challenge and E is Emergency. For instance, in probing, a subordinate could use words like – I thought we should have been doing this or that and not this? Alerting will be relatively emphatic where a team member says – this is what we are supposed to be doing. Challenging is a more daring attempt that contradicts a wrongful act while Emergency is an attempt to address a more pressing problem such as shouting for a third-party intervention to stop an actor from causing looming harm (Green et al., 2017a). This is consistent with the observation that assertive and critical training in communication skills is imperative for team members to handle unsafe patient situations (Leonard et al., 2004). For instance, a simulation study revealed that combining training in conversational assertiveness and collaborative approach improved the effectiveness of resident anaesthetists voice to challenge physicians in operation room (Pian-Smith et al., 2009). While the range of voice strategies recommended are relevant for patient safety, there is generally a dearth of empirical research on how these strategies occur among HCPs. It is also important to note that those strategies that are quite confrontational such as 'challenging' and emergency will be more difficult in upward relationships. The limited literature on how HCPs attempt to correct or suggest to superiors on patient safety is therefore dominated by ingenious voice approaches.

Ingenuity to voice has been examined predominantly in the nurse-doctor power relationship. An early seminal work of Stein describes ingenuity to voice as the doctors–nurses game (Stein, 1967). He found that entrenched authority and domination of doctors over nurses make open corrections and suggestions on patient safety to doctors an affront to authority. This results in nurses resorting to ingenious ways of raising patient safety concerns indirectly and passively as if they are not suggesting. At the same time, doctors are expected to be smart to detect such disguised suggestions and corrections to avoid harm without acknowledging it is coming from nurses. According to Stein, this game aims at achieving patient safety while maintaining the status quo of respect for doctors and avoiding confrontation and disagreement. Although later work of Stein and others attest to changing doctor-nurse power relations over decades enabling nurses to better speak up towards doctors (Stein et al., 1990; Svensson, 1996; Snelgrove & Hughes, 2000; Lingard et al., 2002), there is compelling evidence that little has changed in doctors' domination over nurses (e.g Pijl-Zieber, 2013; Ogle & Glass, 2014; Reed, 2016).

Beyond the work of Stein, research has found ingenuity among nurses. These studies establish that nurses often use quiet speech, manipulation of speech, use of subversive or tactical silence, or avoidance of follow up speech in connection to doctors (Garon, 2006; McBride‐Henry &

Foureur, 2007; Gardezi et al., 2009; Malloy et al., 2009; Schwappach & Gehring, 2014a). It has been found that instead of nurses proactively speaking up for patient safety, they often opt for indirect voice strategies to achieve patient safety goals (Morrow et al., 2016). Nurses express concerns in a diplomatic manner and frame errors or rule violation for instance by asking naive questions as a learner to avoid offending or appear incompetent before doctors (Schwappach & Gehring, 2014b; Schwappach & Gehring, 2014a). For instance, nurses use relative language by recalling how something was done or how they used to do it when trying to correct doctors instead of directly pointing out the correct or best known clinical procedure (Schwappach & Gehring, 2014a). This is consistent with the findings that nurses are politically adept at manoeuvring information for physicians in a more presentable and acceptable manner (Malloy et al., 2009). It confirms finding that although nurses are primarily considered to be patient safety advocates (e.g Kingston et al., 2004), they often engage in opinion-focused voice compared to physicians who mostly engage in problem-solving voice by being explicit to stop harmful actions (Weiss et al., 2014).

Although research has primarily focused on the ingenuity of nurses towards doctors, the phenomenon has been found in the hierarchy of doctors as well. For instance, both doctors and nurses admit to the need for high-level tact in communication and coping skills to speak up on patient safety concerns due to risks associated with speaking up (Schwappach & Gehring, 2014b; Schwappach & Gehring, 2014a; Schwappach & Gehring, 2015). These studies found that junior doctors and nurses are caught in a web of dilemma on how to express concerns of harm to superiors. To make voice less an affront to authority and to enhance receptivity, junior doctors, like nurses, often frame concerns about harmful acts in a form of naïve questions while acknowledging their inexperience and position as learners even when they are certain of deviations from standard (Schwappach & Gehring, 2014a). These are consistent with the recognition that ingenious approach to raising concern on patient safety is essential in mitigating authority, lessening risk of voice and enhances acceptability (Green et al., 2017a). It has also been found that poor manner of raising safety concerns (impolite, judgemental or rudeness manner) is often a source problem that hinders acceptance of voice for patient safety (Sydor et al., 2013; Green et al., 2017a). These suggest that while power often hinders voice, speaking up in appeasing ways devoid of offence plays an important role in receptivity to voice. Meanwhile, ingenuity to voice has also been linked to fear of losing patient trust in colleagues and hospitals. HCPs use indirect language and non-verbal expressions in an attempt to correct colleagues in the presence of patients and relatives or carers (Schwappach & Gehring, 2014a). According to the study, the phenomenon is profound among paediatricians who often do not want to expose the mistakes of colleagues to parents and guardians with their children.

Ingenuity in upward relationships reflects a sense of power and powerlessness as described in Approach, Inhibition Theory of Power (Keltner et al., 2003). Sense of powerlessness heightens sensitivity to risk and leads to deliberate and conscious processing of information towards powerful targets (Keltner et al., 2003). Subordinates inclination to circumspection in presenting safety concerns to superiors is therefore informed by a sense of powerlessness. Subordinates therefore attempt to present voice in a manner that is not offensive as a way of mitigating power differences to enhance receptivity to voice. Although powerlessness informs such ingenious behaviour, the act also reflects power to an extent when it achieves results. This corroborates indirect informational power (French & Raven, 1959; Raven, 1965; Raven, 1992) where indirect and tactical language is used as a source of power to put across information that cannot be ordinarily presented to powerful targets. However, ingenuity to voice in managing power barriers is not without limitations. For instance, two nurses involved in the preventable death of Elaine Bromiley, later reported they had known what should have been done right but resorted to passive and indirect statements with surgeons on this without being assertive (Green et al., 2017b).

Although previous research gives a general understanding on the manner of speaking up among HCPs, there is little understanding about how HCPs use ingenuity to manage voice in upward relationships. Moreover, it is important to note that because cultural values affect social discourse such as voice (Botero & Van Dyne, 2009; Fivush, 2010; Hofstede et al., 2010), cultural regimes may intensify or moderate ingenuity in upward relationships in hierarchical organisations such as healthcare. For instance, high unequal power distribution in high power-distance regimes means subordinates will be more circumspect in the choice of words to correct superiors compared to low power-distance regimes.

2.7.3 Research gaps

Despite the plethora of barriers to voice in healthcare, there a limited empirical research on strategies HCPs adopt to manage voice barriers. For instance, a limited body of knowledge on ingenuity to voice has focused on the act as nurses' voice strategy towards doctors without examining the phenomenon among doctors and nurses in broader upward relationships. Moreover, intermediary voice is acknowledged among HCPs (e.g Maxfield et al., 2005; Lewis & Tully, 2009; Schwappach & Gehring, 2014a) and an emergent intermediary voice is recommended to prevent looming harm (Green et al., 2017a), there is a dearth of empirical research and knowledge on how these occur in surgical hierarchy, especially in real-time to prevent harm. Also, although voice is a social discourse which is shaped by cultural values and

norms (Botero & Van Dyne, 2009; Fivush, 2010; Hofstede et al., 2010), previous research has not examined how sociocultural values and norms shape relationships and ingenuity in managing voice barriers in upward relationships.

2.8 Summary of Chapter

This chapter presented the literature review of the research. It started by exploring the theoretical basis for power and voice. As part of this, the three driving theories of the research, namely; Approach, Inhibition Theory of Power (Keltner et al., 2003), Power Distance and Collectivism versus Individualism (Hofstede et al., 2010) and Conceptualisation of Voice and Silence (Van Dyne & Botero, 2003) were elaborated. It proceeded to present an empirical review in four thematic sections. The first section presented rank power and sociocultural authority in connection to voice and silence. The second section presented professional identity and interdisciplinary power relationships in relation to voice and silence. The third section presented power induced risk to voice in upward relationships while the last section presented how HCPs manage power barriers to exercise some forms of voice on patient safety.

The next chapter presents on research methodology termed approach to enquiry.

Chapter 3 APPROACH TO ENQUIRY

3.1 Introduction to Chapter

This chapter presents the processes and procedures that guided this research. It begins by presenting an overview of research design and philosophy where ontology and epistemology are discussed. Under this, a general overview of objective positivism epistemology and subjective constructionism-interpretivism epistemology are presented. Next, the methodology is presented. Under this, study hospitals, target population, research instruments, pilot interview, sampling, interview process, and data preparation and analysis are presented. Next, the ethical requirement is presented followed by the research trustworthiness.

3.2 Overview of Research Design and Philosophy

This study uses subjective epistemology and constructionism-interpretivism. This is deemed apt for a better understanding of the dynamic subject of power in relation to voice and silence. The study's design and philosophy presented in this section provide further justification of the chosen subjective epistemology in connection to alternative worldviews. Research design is described as a logical sequence linking research questions to empirical data and its conclusion (Yin, 2003) that guides the collection, analysis and interpretation of findings (Nachmias & Nachmias, 1992). Creswell (2009) describes research design as the intersection of key research assumptions and classified it into worldviews/philosophy, strategies to an inquiry, and specific methods. Guba and Lincoln (1994) describe research paradigm as underlining belief systems that guide research which is based on ontological, epistemological, and methodological assumptions. All research is guided and conducted within a basic set of beliefs (Guba, 1990:17) often referred to as worldviews (Creswell, 2009) or paradigms (Lehaney & Clarke, 1995; Lincoln & Guba, 2000). Research paradigms represent the general orientation of researchers about the nature of the world and reality (Creswell, 2009). "Paradigm constitutes a way of looking at the world; interpreting what is seen; and deciding which of the things seen by researchers are real, valid, and important to document" (LeCompte & Schensul, 1999:41). While Creswell uses worldview or philosophies to represent research paradigms, ontology, and epistemology (Creswell, 2009), others examine these quite separately. Research worldviews or paradigms are therefore interchangeably used and often described in terms of ontology, epistemology and methodology.

Ontology is the study of the nature of being or existence (Williams & May, 1996; Ponterotto, 2005). It relates to how the world is seen and what is perceived as reality. Ontology addresses

fundamental issues and questions such as what the nature and form of reality is and what can be known about reality (e.g Guba & Lincoln, 1994; Ponterotto, 2005; Creswell, 2009). There are different levels of perceiving reality mainly rooted in positivism and constructionism-interpretivism. For instance, Morgan and Smircich (1980) outline a continuum of assumptions of reality as; a concrete structure, concrete process, contextual field of information, field of symbolic discourse, social construction, and a projection of human imagination. Creswell (2009) classifies research worldviews or ontology as postpositive, social construction, advocacy/participatory, and pragmatic. These ontological views, generally rooted in positivism and constructionism-interpretivism, have their respective epistemological view.

Epistemology is generally described as the theory of knowledge or how we come to know it (e.g Williams & May, 1996; Jary & Jary, 2000; Krauss, 2005; Saldana, 2011). Epistemology examines how knowledge is obtained and justifications of the process used to obtain it (Williams & May, 1996; Jary & Jary, 2000). It describes the process of producing knowledge; how the world can be known and its impact on the perception and interpretation of knowledge (e.g Saldana, 2011). Epistemology therefore addresses issues such as the relationship between the knower and what is known, how one comes to know what is known, what amounts to, or can be considered as knowledge (Krauss, 2005). Positivism is rooted in objective epistemology and uses quantitative methodology while constructionism-interpretivism is rooted in subjectivity and uses qualitative methodology. A general review of alternative positivism as an alternative to the chosen research paradigms is presented next.

3.2.1 Positivism Paradigm and Epistemology

Positivist philosophical paradigm conceives the world as deterministic from which truth can be scientifically observed and measured (e.g Lincoln & Guba, 1985; Guba & Lincoln, 1994; Healy & Perry, 2000; Krauss, 2005; Creswell, 2009; Saldana, 2011). The goal of positivism is therefore to describe phenomena that we experience by simply sticking to scientific methods on what we can observe and measure (Krauss, 2005). Knowledge is therefore discovered and verified through direct scientific observations or measurements of phenomena to establish facts in discrete components (Krauss, 2005) in what is described as viewing the world through a "one-way mirror" (Guba & Lincoln, 1994:110). Kolakowski (1972) defines positivism and its epistemology in four key rules: (1) phenomenalism, that states that there is only one valid experience and all other abstractions such as "matter" or "spirit" must be rejected; (2) nominalism – argues that words, generalizations, abstractions among others do not give insight into the real world; (3) separation of facts from values. In other words, the researcher must be independent of the subject and knowledge found (4) harmony of scientific approach.

Based on these, unlike constructionism-interpretivism, positivists subscribe to a value-free research process where researchers are separated from the research process to eliminate bias and ensure objectivity (e.g Guba & Lincoln, 1994; Krauss, 2005; Farquhar, 2012). Positivists therefore perceive reality as a concrete process and adopt a deductive approach to establish reality (Burrell & Morgan, 1979). Knowledge is carefully developed through the observation and measurement of objective reality (Creswell, 2009). In positivism, data is collected based on theory and analysed to either support or refute existing theory using quantitative methodologies (Creswell, 2009). Positivist paradigms rely on theory to discover patterns and causal relationships which are described and explained (Farquhar, 2012). It reduces phenomena into a small and discrete set of testable ideas where outcomes are traced to causes deductively (Krauss, 2005; Creswell, 2009).

Positivism like other paradigms has been criticised. For instance, the complex nature of social reality makes an objective investigation of cause and effect relationships problematic and inexhaustive (Flick, 2002). This is because social phenomena are complex context and person-dependent which cannot be ideally reduced to a few known variables as done by positivists (Creswell, 2009). The social world is therefore best understood by taking into account contextual meaning ascribed by actors (Heracleous, 2004) since things of the social realm come out of discourse (Phillips & Hardy, 2002). This means constructionism-interpretivism is imperative to understanding the social world. Consequently, positivist research is labelled as categorising people into objects based on theories (e.g Mills, 2000) and fact-finding in isolation of real actors (Remenyi et al., 1998). Critics contend that positivist research serves manipulative goals of governments and companies to control and influence the masses (Hammersley & Traianou, 2012) but is less useful in the social realities of day to day life experiences (Flick, 2002). Advocates of postmodernism research therefore argue the need to pay much attention to local, temporal, and situational aspects of social life rather than focusing on big narratives and theories (Flick, 2002). The constructionism-interpretivism paradigm and epistemology are presented next.

3.2.2 Social Constructionism-Interpretivism Paradigm and Epistemology

Constructionism-interpretivism is based on the assumption of multiple reality from subjective meaning in complex social and individual meaning to life experiences (Easton, 1995; Buttle, 1998; Creswell, 2009). Constructivists-interpretivists perceive that because reality is constructed in the mind of individuals rather than in external entities (Hansen, 2004), these hidden meanings must be unearthed through deep hermetical and inductive reflection rather than traditional

deductive enquiry (e.g Sciarra, 1999; Schwandt, 2000; Flick, 2002; Saldana, 2011; Flick, 2014). Constructivism–interpretivism is rooted in Kant's Critique of Pure Reason (Kant, 1966). Kant argued that "human perception derives not only from evidence of the senses but also from the mental apparatus that serves to organise the incoming sense impressions" which he notes means "human claims about nature cannot be independent of inside-the-head processes of the knowing subject." (Hamilton, 1994:63). This is consistent with the assertion that objectivity cannot be known in isolation of subjects who experience, process, and label reality (Sciarra, 1999). Major assumptions of constructionism by Crotty (1998) are elaborated as follows. First, as social beings, humans engage with their world and make sense of it based on their historical and social perspectives. Second, social interactions represent the basic form of generation of meaning in human community. Third, the process of qualitative research is inductive, with the inquirer generating meaning from the data. Contrary to value-free research in positivism, constructionist researchers actively interact with subjects to determine and interpret facts (e.g Cousins, 2002; Flick, 2002; Farquhar, 2012). The active role of constructionism-interpretivism researcher better convey questions and clarify possible misunderstanding, probe and test data insights for rich and accurate data (e.g Burgess, 1982; Sarantakos, 2005; Creswell, 2009; Blumberg et al., 2014). Constructionism-interpretivism therefore provides a better understanding of complex phenomena rather than narrowing these into a few known variables (Creswell, 2009).

However, constructionism-interpretivism is not without criticisms. For instance, it is criticised for subjectivity and apparent lack of strict procedures creating the impression that 'anything goes' (Benini, 2000). While positivism aims at removing bias by ensuring researcher is independent of the subject of research (Farquhar, 2012), researchers' life experience, knowledge, emotions, values, attitudes and beliefs are an integral part of constructionism-interpretivism research (Creswell, 2009; Saldana, 2011). This active researcher's role introduces potential biases in interpretation and the entire research process (Creswell, 2012). It has, however, been argued that despite the claim of researcher independence in positivism, background of researchers influences basic research processes such as formulating research hypothesis and interpretation of data (Flick, 2002). This implies that the potential of researcher bias is necessarily not a sole concern in interpretive research. Meanwhile, the integrity of qualitative research process is enhanced by incorporating credibility, dependability, confirmability, and transferability into data collection and the entire research process (e.g Guba & Lincoln, 1994; Silverman, 2013). Researchers can therefore be open about their personal experiences to enrich research findings without compromising research integrity.

Moreover, it has been argued that constructionist-interpretivist research risk not obtaining real responses compared to positivist. For instance, respondents may be unwilling to open up on certain issues as people often prefer to write rather than talk about sensitive issues (Sarantakos, 2005). Accordingly, using an intrusive data collection approach such as interviews could discourage active and honest participation. Similarly, respondents can be political actors capable of manipulating issues to present themselves in a socially acceptable manner (Heracleous, 2004) and refrain from expressing actual behaviours (Fielding & Thomas, 2008). Although these are real potential shortfalls, inherent qualities in constructionism-interpretivism research help manage these and better enhance quality of data collection compared to positivism. For instance, interviews could be administered as a real conversation which increases the tendency for honest and reliable answers (Fontana & Frey, 1994). Interviewers could redefine norms and allay fears of respondents by creating a sense of trust and openness by displaying knowledge on sensitive issues in what is termed 'drilling" (Alvesson & Deetz, 2000). Again, an indirect approach to asking questions eventually aids eliciting sensitive information respondents will withhold if asked directly (Fielding & Thomas, 2008). The research methodology is presented next.

3.3 Research Methodology

Methodology describes processes and procedures in conducting research. This study subscribing to subjectivity epistemology of constructionism uses qualitative methodology. This is rooted in a postmodern perspective rejecting absolute truth for subjectivity and multiple-meaning to social and life experiences (Creswell, 2009; Saldana, 2011). Qualitative research has been defined as a "research interested in analysing subjective meaning or the social production of issues, events, or practices by collecting non-standardised data and analysing texts and images rather than numbers and statistics" (Flick, 2018:604). It is an inductive approach to studying socially constructed realities focusing on meanings people attach to their world (Alvesson & Deetz, 2000). Knowledge often originates from the individual rather than from outside, which makes gaining insight and understanding about social life more important than predicting it (e.g Sciarra, 1999; Saldana, 2011).

This study uses a multiple qualitative case approach. A case study is based on the recognition of the subjective nature of human beings characterised by the creation of meanings (Stake, 1995; Yin, 2003). A case is defined as an integrated system (Stake, 1995) which may be an individual, a group, an event or an organisation or social phenomenon (Saldana, 2011; Hancock & Algozzine, 2017). A case study is an empirical approach to researching contemporary phenomenon in real-life situations especially when the boundary between phenomenon and context is not clearly

defined (Yin, 1981b; 1981a). It is considered appropriate when there is considerable evidence to believe that contextual conditions affect the phenomenon of study (Yin, 2003). A qualitative case study allows contextual exploration of phenomenon with the aid of a variety of data ensuring that subjects are adequately explored through a variety of lenses for a better understanding (Baxter & Jack, 2008). It is distinctive in explaining real-life situations that are too complicated for a survey or experimental research and also describes a real-life situation as it occurs (Yin, 2003). Seeking an in-depth understanding on phenomenon such as answering how and why questions are therefore best answered with a case study (Yin, 2003).

A case study enables close collaboration between researchers and participants, with participants telling of their reality (Crabtree & Miller, 1999) and researchers making sense with participants' actions (Lather, 1992; Robottom & Hart, 1993). It enhances the exploration of complex organisations, interventions, relationships or programs (Yin, 2003) and, therefore, appropriate for developing theories and interventions and evaluating activities in health research due to its flexibility and rigour (Baxter & Jack, 2008). These qualities make case study appropriate for this study which examines complex power relationships and voice behaviour among HCPs. The study hospitals are presented next.

3.3.1 Study Hospitals

Surgical departments of two teaching hospitals namely Korle Bu Teaching Hospital (KBTH) and 37 Military Hospitals located in Accra, Ghana were purposefully selected for this study. KBTH is the first and largest Teaching Hospital in Ghana and the third largest hospital in Africa. 37 Military Hospital, on the other hand, is a military managed teaching hospital. Although the two are public hospitals, KBTH is managed by civilians while 37 Military Hospital is managed by the Ghana Armed Forces. The differences in management context informed their choice for potential uniqueness that could represent other hospitals (Yin, 2003; Saldana, 2011). Besides, the choice of surgical department is based on compelling evidence of harm in surgery (Wanzel et al., 2002; Burke, 2003; Clements et al., 2008; Leape, 2008; Smyth et al., 2008; Vincent, 2010; Kurmann et al., 2012) and its team-oriented nature (Edmondson, 2003; Schwappach & Gehring, 2015) which make voice imperative.

3.3.1.1 Korle Bu Teaching Hospital (KBTH)

Korle Bu Teaching Hospital (KBTH) is a public hospital in Accra, the capital of Ghana. It is the largest teaching hospital in Ghana and the third largest hospital in Africa (KBTH, 2019a). It was established in 1923 as a 200-bed facility to address the healthcare needs of the indigenous

people of Korle, a suburb in Accra. The hospital has seen tremendous growth and expansion gaining teaching hospital status in 1962, after its affiliation with the University of Ghana Medical School (KBTH, 2019a). It currently has a 2,000-bed capacity, 17 clinical and diagnostic departments. It has a daily average attendance of 1,500 with about 250 admissions. Besides its medical school, it has 5 health training schools that train different healthcare professionals such as nurses. As a teaching hospital, it operates as a semi-autonomous hospital under the direction of a management board. It is therefore not directly subjected to the Ghana Health Service, a body that directly regulates and manages all government hospitals but falls under the general regulation of Ghana's Ministry of Health.

The hospital's surgery is the largest department in the entire hospital with 10 units and over 860 staff (KBTH, 2019b). These surgical units are: General Surgery, Plastic Surgery, Trauma and Orthopaedic Surgery, Urology, Neurosurgery, Cardiothoracic Surgery, Paediatric Surgery, Ophthalmology, Ear, Nose and Throat surgery and Dental surgery. Some of these units (Allied Surgery, Orthopaedics & Accident Centre, Plastic Surgery and Cardiothoracic) are sub decentralized units in terms of management and administration under surgery. As a teaching hospital with diverse specialisations, its surgical department has diverse HCPs including trainers and trainees at different ranks. The diverse ranks also come with different age compositions that have implications for sociocultural authority and voice and silence. Moreover, because semi-autonomous hospitals have some level of centralization of power, this is expected to have some effect on power dynamics for voice and silence.

3.3.1.2 37 Military Hospital

37 Military Hospital is a public hospital that is managed by the Ghana Armed Forces. It was established and commissioned on the 4th of July 1941 to provide healthcare for returned injured troops in the Second World War (37 Military Hospital, 2016). The hospital's original name "37" was also changed to '37 military Hospital' in 1956. Its scope of service has been expanded as well to provide healthcare to military personnel, their families, and the public. The Hospital currently has a 500-bed facility and four major departments. Its surgical divisions are Urology, General Surgery, Orthopaedics and Trauma, Plastic Surgery and Neurosurgery. The hospital has allied training institutions such as the School of Anaesthesia, Nursing and Midwifery Training School (NMTC), Post Graduate Medical College and Emergency Medical Technicians School (37 Military Hospital, 2016).

Although the hospital is regulated by Ghana's Ministry of Health, it is directly managed by the Ghana Armed Forces. It therefore has an army management team, who are mostly HCPs or have

a healthcare background, and headed by an army commander. At the same time, it has a mixture of military and civilian workforce. A common sight at the hospital is the presence of military HCPs in military uniforms and civilian HCPs in usual healthcare uniforms delivering healthcare to patients. This means in addition to the general diversity of HCPs in teaching hospitals such as trainers and trainees, the hospital has military and civilian HCPs as well. The military-healthcare interface at both management and workforce levels makes 37 Military Hospital quite a unique hospital context for power and voice compared to other hospitals.

3.3.2 Target Population

The target population for the study are the core HCPs in surgery. These are made up of doctors of different ranks (house officers, residents, specialists surgeons/anaesthesiologists and consultants surgeons/anaesthesiologists), Nurses (peri-operative/theatre nurses, recovery nurses, surgical ward nurses and nurse anaesthetists) as well as some unit and general hospital managers. Although there is a broader range of HCPs such as lab technicians in surgery, the identified group are the core surgical team whose actions or inactions are critical to patient safety (e.g Page, 2004; Blatt et al., 2006; Burke & Cooper, 2013). The inclusion of management staff is appropriate as management actions and inactions are important determinants of voice among HCPs (Reason, 1997; Vincent et al., 1998; Truths, 2014). Although HCP-patient interaction is another important subject, this study focuses on the implications of voice of HCPs on patient safety and therefore treats patients as an outcome of healthcare. For instance, the team-oriented nature of surgery makes the voice of HCPs critical to patient safety (e.g Edmondson, 2003). Patients are therefore excluded in the study as shown in the sample in Table 3.1

3.3.3 Research Instruments

The primary research instrument was in-depth face-to-face interviews. According to Creswell (2009), interviews are appropriate for obtaining experiences and historical information from participants in research settings where it is difficult to directly observe. Interviews enable researchers to directly solicit information from participants (Saldana, 2011) in the form of real conversations to obtain real responses that differentiate reality from socially accepted responses (Fontana & Frey, 1994). Although researcher presence is often cited to lead to bias in interview responses, effective control of questions, opportunity to probe, asking questions indirectly among others produce reliable interview data (Fielding & Thomas, 2008). Besides interviews, policy documents, code of conduct, professional values of hospitals, healthcare

regulators and HCP groups were examined to ascertain pertinent information on the subject. As Creswell (2009) notes, organisational documents are essential and thoughtful data sources.

3.3.4 Pilot Interview

I conducted 5 pilot interviews on a similar study population in the UK after preparing interview questions. As noted, a pilot interview is an important preliminary exercise that aids understanding, determining the best approaches and make necessary adjustment for better interview outcomes (Luck & Rose, 2007). It also helps to determine if potential participants perceive the research as important and if it is something people will be willing to talk about (Smith et al., 2009). Piloting therefore contributes and strengthens reliability and confirmability of qualitative research as it aids revision and adjustment to achieve meaningful results (Neuman, 2003; Luck & Rose, 2007).

The pilot sample comprised of 1 paediatrician and 4 nurses. Besides 1 being a nursing student, the other 4 respondents had at least 6 to 20 years of healthcare experience. Although respondents were British by nationality, 3 are of African origin and had practised there before joining healthcare in the UK. Pilot respondents were therefore ideal for the exercise. I assured the respondents of confidentiality and anonymity and obtained their consent for audio recording. After each interview, I asked them general and specific questions for formative feedback. These included whether questions were clear enough or ambiguous and what they felt I could add to make it more meaningful to participants. I listened to the interviews and transcribed them. Undertaking pilot interviews helped me to develop a better understanding of the subject, refine interview questions, build interviewing skills and confidence for the actual interview.

3.3.5 Sampling

A total of 67 respondents were purposively sampled across the surgical departments of the two teaching hospitals for the study. A sample size range of up to 20 to 50 is generally recommended for qualitative interviews (Denzin, 2005; Creswell, 2007; Mason, 2010). Purposive sampling was used to ensure the inclusion of diverse professional groups at different ranks. Purposive sampling is based on a prior understanding that certain groups of respondents may have a unique or important perspective on a subject of study hence the need for their inclusion (Trost, 1986; Moser & Korstjens, 2018). Glaser and Strauss (1967) attest to the need of including all appropriate groups in right proportions especially in heterogeneous population of interest can

increase sample size in qualitative research. Morse (2000) observes higher sample size is often justified in studies with broad and complex scope and effects. The complex nature of voice and silence from different professional groups and ranks therefore explain the need for a slightly higher sample of 67 to obtain data saturation. Out of a total of 67 respondents, 41 were sampled from KBTH, being the largest hospital, while 26 were sampled from 37 Military Hospital. Across the two hospitals, the total number of doctors were 32 [8 consultants, 8 specialists, 8 residents and 8 house officers]. A total of 35 nurses were included in the sample [12 peri-operative/theatre nurses, 10 nurse anaesthetists and 13 surgical ward and recovery nurses]. 3 consultants were either departmental, unit or general hospital managers. 7 nurses were matrons of theatres or surgical wards. A detailed breakdown of the sample across the two hospitals are provided in table 3.1 below:

Table 3. 1: Detailed breakdown of the sample across the two hospitals

	Professional Groups	KBTH	37 Military Hospital	Total by Professional groups
Doctors	Consultants	4 [2 unit managers]	4 [1 unit & 1 hospital manager]	8
	Specialists	6	2	8
	Residents	4	4	8
	House Officers	3	5	8
Total Doctors				32
Nurses	Peri-Operatives	8 [3 Theatre Matrons]	4 [1 Theatre Matron]	12
	Nurse Anaesthetists	7	3	10
	Surgical Ward/Recovery	9 [1 Ward Matron]	4 [2 Ward Matrons]	13
Total Nurses				35
Total HCPs by Hospital		**41**	**26**	**67**

3.3.6 The Interview Process

I used semi-structured open-ended questions to collect in-depth interview data from October 2017 to April 2018. Interviews lasted from 40 minutes to 70 minutes. The average duration of interviews was, therefore, about 50 minutes. I conducted interviews with respondents using offices in theatres, wards, and doctors' personal office. This provided the needed privacy for respondents to talk about sensitive issues without looking over their shoulders. Although arranging interviews outside the hospital would have provided a better atmosphere, this would have been a costly arrangement and quite difficult due to the busy schedules of HCPs in Ghana. Although interviews in hospitals resulted in occasional breaks for respondents to attend to duty when the need arises, this was well managed to the benefit of patients care and the research.

For instance, this arrangement made HCPs available for patient care whenever a need arises, it enabled them to cite real-time voice and silence episodes on patient safety.

Moreover, I managed potential challenges with interviews such as the tendencies of respondents hesitating to talk about sensitive issues (Sarantakos, 2005) and behaving as political actors to manipulative responses (Heracleous, 2004; Fielding & Thomas, 2008) in order to enhance honest and true responses. For instance, I approached interviews less formally and more as a conversation. As a result, besides introducing myself and the research, I initiated informal conversations on something interesting to which respondents often reciprocated. I also informally engaged respondents by asking what their job entails and who they contact often in their work. These familiarization chats helped minimize barriers and tensions and created openness and trust that facilitated honest responses. As Fontana and Frey (1994) noted, conducting interviews as real conversation increases the tendency for more honest and reliable answers.

Also, I ensured interview processes reaffirmed confidentiality and trust which encouraged respondents to share true experiences. For instance, commencing voice recordings after respondents mentioned their names further assured them of confidentiality to share experiences. Again, identifying with respondents and acknowledging some of their experiences, difficulties, and sensitive nature of the subject [reflexivity and subjective statement] made respondents more open to talking about sensitive issues. These are consistent with creating trust and openness by displaying knowledge of sensitive issues (Alvesson & Deetz, 2000).

Moreover, I asked questions indirectly and avoided being intrusive, especially at the beginning of the interviews. This is important as the interviews centred on quite sensitive healthcare issues which could easily ruin prospects of open and true responses when it starts off intrusively and personally. For instance, I started interviews by asking about general observations on team members ability or inability to speak up on patient safety rather than directly asking them for their personal experiences. This makes it easier for respondents to talk freely about others and subsequently share their personal experiences naturally. This helped to create a good and open atmosphere for subsequent direct and sensitive questions. This is consistent with the recommendation that an indirect approach to questions enhances obtaining sensitive information which could be withheld if asked directly (Fielding & Thomas, 2008).

I also engaged in timely probing of responses to establish the veracity and further insight on emerging issues. For instance, I probed into instances of silence or voice to really understand the context under which these occurred. Interview questions therefore generally evolved over time as some follow up and probing questions became major questions due to their emerging

significance. This resulted in improving questions and how questions were asked to enhance the collection of rich data. These approaches coupled with the opportunity of observing respondents with well-managed eye contact facilitated real responses and good judgement on trustworthy responses. Some of the major questions asked are as follows:

- What could possibly hinder timely interventions, promptings and useful suggestions that could help avoid harm, improve safety outcomes ……..?
- Generally, how comfortable do you see people when it comes to raising patient safety concerns with colleagues and supervisors in surgery?
- How comfortable are you expressing such concerns?
- Can you recall some instances where you or a team member couldn't express a concern for one reason or the other? What particularly made it difficult for you to do so?
- Can you recall instances where you or a team member expressed concern to salvage some situations or avoid some harm or made things better?
- How is power manifested in voice and silence?
- Are interpersonal relationships important considerations to expressing/withholding concerns? And does voicing concerns affect interpersonal relationships?
- Among HCPs, are people especially lower ranks allowed to admit to not knowing things they are expected to know without being tagged as incompetent?
- Can you recall instances of harm being avoided or harm occurring/complications due to a team member's failure to express or withhold concerns?
- How will focus on voice/free expression help improve patient safety?
- Are there management support and policies to encourage voice on patient safety?

Moreover, I actively undertook memo writing during interviews and broader engagement with stakeholders in the process of fieldwork. Relevant organisational policy documents pertaining to codes of conduct and others relating to voice were obtained from management, websites of hospitals, healthcare regulators HCP groups.

3.3.7 Data Preparation and Analysis

I actively integrated data preparation and analysis into the data collection process. For instance, I transcribed interviews in the process of data collection and mapped key emerging issues with the ongoing analytical memo. These helped me to develop a general understanding of the data and identify emerging patterns and trends prior to actual coding and analysis.

After fieldwork, I transcribed outstanding interviews and uploaded these into NVivo for coding. I read each transcript carefully and coded patterns and trends. Although knowledge in literature guided the coding process, I was open to interesting emerging issues that had no immediate identification with literature. At the end of the first round of coding, 102 codes were generated from the transcribed data. I did further re-reading of the codes to identify connections,

interconnections, and differences. This resulted in changes such as merging some codes and reclassifying others which reduced the codes to 70 with sub-codes. While coding, I did a preliminary analysis of emerging findings.

Next, I conducted intense reading and writing of analysis on specific and related codes to better identify patterns and themes. Here, I identified what respondents are saying differently and similarly on given issues and why. Initial analysis was highly iterative between reading, drawing connections and writing from one time to the other. Re-visiting codes and reading alongside writing helped me to clarify doubts, draw better linkages for patterns and themes to emerge from the data. The mission statements, policies, professional codes of conduct of stakeholders such as hospitals, regulators and HCP associations were examined for relevant information as part of data analysis. Although other themes emerged on understanding voice and silence emerged, power was selected as the foremost theme for this thesis.

Findings are presented across the two study hospitals and peculiar differences highlighted appropriately. This option was chosen in preference to separate presentation of findings since the hospitals have more in common despite peculiarities. Findings are presented by discussing and analysing responses and supported by quotes from respondents. Quotes from respondents are identified by pseudonyms composed of professional identity and unique identity numbers (e.g. Peri-Operative Nurse 1, Nurse Anaesthetist 5, Specialist Surgeon 6 or Doctor Anaesthesiologists 1) and respective hospitals (e.g. KBTH or MH). Korle Bu Teaching Hospital is represented by 'KBTH' while 37 Military Hospital is represented by 'MH'. Respondents are therefore identified as follows: Specialist Surgeon 1 KBTH or Nurse Anaesthetist 2 MH. In addition, respondents in 37 Military Hospital are distinguished in terms of being military and civilian HCPs. Military HCPs are represented by 'M' while civilian HCPs are represented by 'C'. For instance, Consultant Surgeon 4 MH M means the consultant is a military officer while Nurse Anaesthetist 2 MH C means the nurse is a civilian. Moreover, nurses in anaesthesia are identified as 'nurse anaesthetist' while specialist doctors in anaesthesia are identified as 'anaesthesiologist'

3.4 Ethical Requirement

The aim of this research is to benefit humanity and avoid any form of harm. As a result, all ethical requirements were adhered to. This research went through Institutional Review Board that regulates and governs all research involving human participants. I first applied for and obtained ethical clearance from the University of Hull through the University's Research Ethics Committee. Afterwards, I formally applied to the Institutional Review Boards of KBTH and 37 Military

Hospital and went through all established processes and procedures to obtain ethical and institutional approval.

Moreover, practical steps and guidelines were adhered to during fieldwork. For instance, interviews were arranged in a manner to minimize the impact of the study on health delivery. I consulted key stakeholders such as heads of departments and matrons to facilitate appropriate and convenient timing for interviews. I also made flexible arrangements with potential respondents and adjusted interviews to their convenient times. Occasionally, interviews were paused when respondents need to attend to emergencies. These arrangements minimized the effect of the research on healthcare delivery.

In addition, I adhered to informed consent of respondents. In accordance with ethical requirement, all participants were given honest information on the purpose of the research to enable them to make an informed decision whether to participate or not (Bryman, 2008). I explained the purpose of the research and the role and right of respondents. I presented each respondent with a consent form and addressed any concern raised by them. Each participant therefore took personal and freewill decision to take part in the interview and signed the consent form to that effect. I also obtained the consent of respondents to record interviews. There were a few instances where respondents requested that certain aspects of responses should not be recorded. I therefore paused recordings in such instances and wrote information given in research field note.

I also ensured privacy, anonymity, and confidentiality of all respondents. According to (Fisher & Buglear, 2010), it is important to protect the identity of respondents through anonymity. This was a priority of this research because of its sensitive nature. I therefore used pseudonyms to identify respondents [Data Preparation and Analysis]. Research data will be kept confidentially to avoid it becoming available to other parties. I also managed relationships with the respondents with respect and dignity. This prevented any form of abuse on the part of the researcher and respondents.

Finally, although maintaining objectivity can be a difficult task (Hammersley & Traianou, 2012), I adhered to standard qualitative research practices and mitigated potential personal biases [Research Trustworthiness]. Besides, I have no personal affiliation or interest in the study hospitals and my sponsoring organisation has no direct interest to influence research outcome.

3.5 Research Trustworthiness

Like any other interpretive study, findings of this research are based on my interpretation of the qualitative data. I therefore do not seek to claim that findings represent universal truth that is applicable or transferrable to any other organisations. Nevertheless, this study ensured trustworthiness by adhering to standard practices in qualitative research namely - credibility, dependability, transferability, confirmability and reflexivity (Lincoln & Guba, 1985). Prolonged fieldwork, thick description, persistent checking, and consciousness of my personal experiences in relation to the research subject strengthened trustworthiness of the entire research process and outcome.

Prolonged fieldwork for data collection enhanced quality data and insight. During active 6 months fieldwork, I became as a worker of the study hospitals sharing sitting places and offices with HCPs and patients. Besides direct research data collection, I got to understand hospital context and work relationships better. I actively engaged people in informative conversations relating to the subject and related issues. This insight aided effective interview and a meaningful interpretation of data. Moreover, I ensured trustworthiness of the research through persistent checking of data. Interview recordings were personally transcribed and read over and over. Further to this, I coded and recoded data into categories, concepts, and themes in Nvivo over time. The intense personal involvement and immersion in the data collection, preparation, and analysis enhanced data intimacy for a better understanding. This adequately exposed me to the data including potential hidden elements that could easily be unnoticed. In addition, thick description of research processes, context, procedures, and output engender trustworthiness of the research. For instance, sound contextual information on study hospitals describing general and unique characteristics provided a good background fit into findings. Again, findings demonstrate a detailed description and analysis of data with confirmation quotes of respondents.

Finally, consciousness of personal experiences and worldview helped me manage reflexivity for trustworthy research. As Maxwell (2012:79) notes “any view is a view from some perspective, and therefore incorporates the stance of the observer.” My personal background and experiences therefore cannot be totally isolated from the subject of this research. Growing up in a rural Ghana where I started school proceeding to major Ghanaian cities for further education and work, I am not an alien to power and voice in the Ghanaian context. For instance, working on projects with an institution in Ghana, although we [subordinates] had important information about stakeholder’s expectation through frequent contact, we had no voice in meetings. I recall an instance, where a colleague was warned after a meeting “you…. you talk

too much…. keep quiet when you go for meetings." I personally recall not being able to talk on issues I knew would have been helpful on several occasions.

Arriving in the UK as a PhD student, I experienced and observed quite an open voice relationship. This was evident for me in relation to senior faculties as well as undergraduate students I taught. Out of the many experiences on the phenomenon outside the confines of the University, I share two striking and contrasting ones. One of these was an observation of an encounter between a boy of about 5-year-old, and a professor in his 50s. The boy was sharing candies during a church meeting to a group of adults when he got to the professor, who jovially attempted to take the bowl of candy instead of picking up a few. The boy said 'NO' and the professor firmly insisted 'I want all'. The little boy resisted further – 'NO, NO, that is greedy!'. This caught my attention and I said to an older woman sitting next to me; this will be politically incorrect in Ghana. She smiled and we proceeded with an interesting chat. The second is an intriguing personal experience as a care support worker during a shift. I saw a resident laying awkwardly at a far end of a corridor floor unattended. Although I was assigned to safeguard someone as my primary responsibility, I felt concerned. But as my first day of work there, I could not do much than prompting a co-worker, I perceived as more experienced, and asked 'please is the person laying there all right.' He gave me a surprising and cautionary response - *'if you come from the agent to work here, just do what they have asked you to do.'* While I was surprised by the response, I either didn't expect the ideal voice scenario in the UK.

These personal exposures and experiences give me quite a balanced worldview about power and voice. Meanwhile, being conscious of the tendencies to bias guided me from merely jumping to conclusions upon slightest hints during the interviews but go further to establish issues beyond reasonable doubt. As noted, reflexivity helps to account for possible biases and mitigate against such (Schmidt, 2005) to enhance trustworthiness of qualitative research process and outcome (Malterud, 2001). It is also important to note that because I am not a healthcare professional and neither I nor my sponsors have vested interest in the study hospitals and research outcomes, I also did not have any real knowledge of healthcare and work dynamics that will engender bias, I went into research purely as a researcher. Mitigating potential bias in data collection, analysis and presentation helped inbuilt trustworthiness to make this study credible, dependable, transferable, and confirmable.

3.6 Conclusion of Chapter

This chapter presented the processes and procedures followed in conducting the research. It started with an overview of research design and philosophy where objective positivism and subjective constructionism epistemologies were explained. It proceeded to present the methodology. Under this, study hospitals, target population, research instruments, pilot interviews, sampling, interview process and data preparation and analysis were presented. This was followed by the ethical requirement. The last section presented the research trustworthiness.

The next chapter presents the findings of this research in four major themes in the order of the research objectives.

Chapter 4 FINDINGS

4.1 Introduction to Chapter

This chapter presents research findings in four thematic sections in accordance with research objectives. The first section presents the implications of rank power and sociocultural authority on voice and silence. The second section presents the implications of professional identity from interdisciplinary power relationships on voice and silence. The third section presents on risk to voice in rank and interdisciplinary power relationships and how this affects voice and silence. The last section presents how HCPs manage power barriers to voice. Each major section begins with an introduction and ends with a summary. The chapter ends with an overall summary.

4.2 Rank Power and Sociocultural Authority: Voice and Silence

4.2.1 Introduction to Section

This major section of findings presents on the implications of rank power and sociocultural authority on voice and silence in surgery. Rank power describes position power in a superior-subordinate relationship in hierarchy and across professional groups [nurses and doctors]. Sociocultural authority is a subtle form of authority from cultural values and norms in the context of rank power. Findings generally reflect voice and silence in rank power (e.g Waldman & Yammarino, 1999; Rosenthal & Sutcliffe, 2002; Lempp & Seale, 2004; Blatt et al., 2006; Edmondson, 2007; Detert & Trevino, 2010; Samuel et al., 2012) and sociocultural respect for authority (Hofstede, 1984; Masalika, 1994; Rooney, 2007; Hofstede et al., 2010; Sesanti, 2010).

The section begins by presenting on rank power and sociocultural authority in surgery. Next, it presents on the futility of voice in upward relationships. Next, it presents on apathy and silence in upwards relationship. It proceeds to present on voice and silence in authority gradient. Under this, next rank voice behaviour and sociocultural authority in the context of authority gradient are presented. Finally, the implications of military authority on voice and silence in the healthcare context is presented. Findings in this section contribute to addressing research objective one (1):

To identify and examine how rank power and sociocultural authority affect voice and silence on patient safety in surgery.

4.2.2 Rank Power in Surgery

Respondents describe surgery as replete with ranks and power. According to them, ranks at different levels are associated with varying degrees of power in surgical hierarchy both within and across professional groups. For instance, nursing ranks range from the very junior nurses to very senior ranks such as the Deputy Director of Nursing Services while doctors are made up of the house officers, residents, specialists, and consultants. These ranks are associated with wide power latitudes as a Resident Surgeon describes among doctors:

> The structure is, in the medical profession the consultant is always like a God. Then comes the specialists [junior and senior specialists] who are like the Son and the Holy Spirit. These form the Holy Trinity. Before others like we residents, medical assistants and house officer then come- Resident 2 MH

Respondents describe similar order of ranks among nurses. However, they note that in the general order of superior power in surgery, the nursing profession is subordinated to doctors. As a result, although nursing ranks matter among nurses, in the broader context of rank power in surgical hierarchy nurses and other professionals are subordinate to doctors. A nurse describes such broader ranking and power in the quote below:

> Eerrrhh! let me put it this way, the doctor is ahead of the pharmacist, pharmacist is ahead of the nurse the nurse is ahead of the healthcare assistant and the grades goes on and on like that - Nurse Anaesthetist 1 MH

Although this quotation describes a broader healthcare hierarchy, in the context of this study it shows that nurses are subordinated to doctors by hierarchy.

According to respondents, ranks come with varying degrees of power and authority in surgery. For instance, respondents note that superior ranks are conferred with position and knowledge power. Responses align superiority to knowledge noting that superiors know better or at least are expected to know better. Endorsing seniority as an embodiment of knowledge, respondents copiously refer to assumptions that perceive the superior as knowing better and always right in connection to others and teams. Again, responses show that superiors are perceived as wholly responsible for patient outcomes. This reflects in respondents' words on patient care. For instance, nurses commonly refer to patients as 'this or that surgeon's patient' and surgeons commonly say, 'my patient'. This unbalanced power and sense of responsibility reflect in superior's inclination to make unilateral decisions perceived by teams as unhelpful or even harmful to patients. According to respondents, the way things are done in surgery is not driven by teamwork and inputs of team members but by how leaders or superiors feel and want things done. The following quotes attest:

> Power as in who is in authority, power as in who will find himself head of the team. And the way he or she sees things. That is how it must go - Nurse Anaesthetist 3 KBTH

> I think that the system we work in is such that the burden and the responsibility lie on the senior person - Specialist Surgeon 6 KBTH

Although leaders are ultimately responsible for team outcomes and expected to exercise reasonable control in teams, this level of decision power is worrying and represent a systemic shift of responsibility to individuals in a manner that hinders teamwork. Meanwhile, responses reveal that rank power in surgery is often reinforced by sociocultural authority which comes from cultural values and norms. This is presented next.

4.2.2.1 Sociocultural authority in Rank Power

Respondents associate rank power with sociocultural authority. According to respondents, rank power and authority in hierarchy is reinforced by sociocultural values. They note that culturally, people are trained to adhere to established social order from childhood. For instance, children and young people are taught to listen, take instructions from parents, adults, and senior siblings without asking questions. These cultural practices, they note, are rooted in the assumption that old people know better, are right and should not be challenged. According to respondents, these established norms give a strong sense of respect for order and hierarchy to people ahead of becoming HCPs. Consultant Anaesthesiologist 3 KBTH asserts:

> There is a hierarchy and in the African system, you cannot jump hierarchy. You are born into a family…your parents are there, your grandparents and your older brothers. They give instruction and they can tell you what to do

A young House Officer 2 MH confirms:

> Young ones being brought up are told that the elderly doesn't make mistakes and anytime you have an issue with the elderly, the elderly is always right. So, children are brought up to be timid, you are not supposed to expose the flaws of elders in public

The cultural respect for authority manifest in knowledge authority of superior ranks. There is a strong view among respondents that superiors know better, are always right and should not be challenged. Superiority is somewhat perceived as synonymous to knowledge and superiors are often referred to culturally as '*the elderly'*. Respondents copiously use the term superiors are right! as shown in the quote below:

> The superior is always right - Surgical Ward Nurse 2 MH

Beyond the notion of superiors knowing better being an accepted shared norm, responses indicate that people do not believe in such assumptions. A close examination of responses reveals that most people have merely come to terms with it although they do not think it is real and practical. Some respondents therefore refer to the notion of superior knowing better with a sense of scepticism. This means a strong prevailing norm has forced people to an extent to accept this notion unwillingly. The quote confirms:

> … when it comes to ranks, I mean in Africa or Ghana here [we] believe that rank goes with knowledge rank is almost proportional to the knowledge. So, who I am I to tell the surgeon a patient is not ideal for surgery? - House Officer 1 KBTH

Another important basis for sociocultural authority is age. According to respondents' older people are culturally revered for knowledge and wisdom. Responses show that cultural values and norms emphasize respect for age and frown on young people speaking up to older people. In the description of respondents, respect for age authority puts older people quite above reproach. Responses reveal this manifest among HCPs in surgery. For instance, older team members command respect and often have a better voice opportunity towards superior ranks than younger subordinates. However, it is evident that age authority often complements rank power to reinforces authority since most rank superiors are also older. Young and subordinate ranks describe their relationship with superiors ranks as 'fatherly'. This illustrates both formal and cultural authority. For instance, some liken the inability to speak up to fathers at homes to the inability to speak up to workplace superiors. A Peri-Operative Nurse 4 MH juxtaposes:

> It's [superior relationship] like you and your father kind of thing, let me use that analogy – when your father does something wrong you can't actually come straight and dish out words that are not appropriate

Few respondents attributed authority to the male gender. According to them, cultural authority male over female makes some men stereotype voice of female professionals in patient care. A male nurse Anaesthetist observes:

> if a woman is in high position then people [men] turn to talk a lot like you a woman who are you to come and order me around! but it not common

Gender authority may not be a major source of authority due to the increasing number of female doctors in healthcare. A more balanced gender workforce is expected to mitigate the traditional male authority as doctors in connection to female nurses prevalent in years ago. However, the level of sociocultural authority in healthcare reflects respect for authority (Milgram, 1963; Hofstede, 1984; Hofstede et al., 2010; Hofstede, 2011).

The sociocultural authority on age and superior rank often reinforce formal rank power to hinder upward voice on patient safety in surgery. This is presented next.

4.2.3 Futility of Voice in Upward Relationship

Responses reveal compelling evidence upward futility of voice. Respondents relate to and describe several experiences of speaking up on patient safety concerns that were disregarded. According to them, although most people choose silence in upward relationships, considerable HCPs speak up, but their concerns are often ignored. Some respondents even stated with certainty that they have not been silent but are rather not listened to when they speak up. Resident doctor 1 KBTH avers:

> I have always been privileged to express my opinion but as to whether it was listened to or otherwise is another story. But I will not say I have been silent

This is consistent with a rhetorical question of an experienced Surgical Ward Nurse 3 MH:

> Even if you are able to voice it [patient safety concerns] out, how many have voiced out and it has been taken for them?

Respondents narrate incidents to confirm the phenomenon. For instance, a Recovery Nurse 9 KBTH recalls that a junior colleague's suggestion, to re-intubate a patient who ceased breathing after first intubation, was disregarded by superiors. According to her, team members continued struggling to sustain the patient, who was near death, until a senior rank came to suggest the same re-intubation which saved the patient. Similarly, a junior Recovery Nurse 5 MH recalls her intervention for a patient to do an appropriate X-ray tests before undergoing a given surgery was ignored until a more senior person intervened. She narrates:

> I said it – it wasn't taken – it like I don't fit (sic) [I don't have the authority] to suggest but when a senior colleague also came in then it was taken then – Recovery Nurse 5 MH

A house officer describes an impasse with a resident, who wrongly diagnosed a hand infection as a mid-palmer infection instead of a sub-fascial web space infection. Although the house officer pointed this out, the resident ignored him and proceeded with the mid-palmer infection incision for treatment. This eventually proved to be a wrong diagnosis and treatment. He narrates:

> I felt his diagnosis was wrong and mine was correct but I couldn't carry it far because it looked like I was challenging his authority and knowledge on the field

> but he has been there far longer than I am so I just have to keep quiet - House Officer 1 MH

In the experiences of respondents, some of these unheeded voices result in devasting harm and death. Respondents recount personal experiences of harm including fatal wrong leg amputations after a request by a subordinate to mark the right leg was ignored by superiors. Others recall harmful surgeries that took longer hours than normal simply because superiors or leaders did not listen to clear observations of team members. In one such instance, a resident doctor recalls that a simple direct hernia that takes less than 30 minutes ended up in more than 3 hours because the specialist refused to listen to prompting on what was the hernia sac. According to him, the specialist defied team members prompting and rather opened the abdomen of the patient to put his finger through before realising what was suggested 2 hours earlier was right. In another instance, a superior declined a clear warning resulting in a terrible patient outcome. A Senior Specialist Surgeon 3 KBTH recounts:

> It has happened in this hospital before that a junior colleague said this thing you are cutting is an important vessel you should not cut but he [the superior] looked at it and said I am right and went ahead. He did it but at the end of the day, the subordinate was correct.

Another classical instance is when a team member advised a surgeon not to remove a fibroid called myomas during a Caesarean Section. This caution, the respondent notes, was based on the risk of unceasing bleeding that often results in lack of womb contraction associated with the removal of this fibroid. The surgeon however, defied these suggestions asserting:

> …. this is nothing I will take it off I am the one doing the case [surgery] – I will take if off [narrates – Senior Nurses Anaesthetist 1 MH

According to her, the surgeon took off the fibroid and everything went wrong - the patient continued bleeding and the uterus failed to contract up to a point where her life was at risk. As a result, the patient's womb was removed to save her life. Unfortunately, the baby, who is the only child of the patient died shortly after delivery. The surgeon's statement – *I will take it off I am the one doing the case* reflects an extreme appropriation of power and responsibility by superiors and leaders in connection to surgical teams.

Moreover, subordinates who speak up promptly against hierarchy for patient safety are often frustrated. According to respondents, authorities often demand strict adherence to hierarchy even when direct voice intervention is required to avoid harm. A typical scenario cited by respondents is when superiors in different professional groups (e.g. surgeons or anaesthesiologists) decline real-time intervention or voice from subordinates of another

professional group and insist on speaking with a comparable senior rank. Although these are expected under routine patient care, its prevalence during critical patient conditions and emergencies poses an immense threat to patients. Nurse Anaesthetist 2 KBTH narrates:

> Somebody will even feel that if you want to say something to him or her it will be at his level- like consultant level, professor level and whatever whatever (sic) level. It is about call your consultant to call me!

This implies that critical decisions may be taken by superiors who may not be physically present and have limited patient information while subordinates who are present are ignored. Again, this delays decision making during emergencies and lead to harm. An incident narrated by a Surgical Ward Nurse Matron 3 MH confirms this. According to her, there was an instance where nurses and junior doctors on her ward failed to set an Intravenous (IV) for a critically sick patient with broken down veins. This prompted her to call a nurse anaesthetist in a theatre to assist do a cut or get a central vein to save the patient. The nurse anaesthetist however said she could not leave the theatre to the ward unless the doctor in charge of the patient [not the nurse] calls her superior to release her. She narrates:

> … the doctor in charge of the case should call the anaesthetist boss – it should be from boss to boss so that she can be released to come and assist on the ward

According to her, it took more than 8 hours for the anaesthetist to be released by which time the patient had passed away. These experiences show HCPs who speak up against hierarchy experience frustrations and may see little or no result from voice. These experiences confirm the narration of Consultant Anaesthesiologists 3 KBTH that:

> In the medical field too, there is a hierarchy and it is strictly adhered to

The strict adherence to hierarchy compels HCPs to conform to routine reporting procedures even when a more emergent approach is required. Details on this is presented in the fourth major section of findings in this chapter. This demonstrates that subordinates are not necessarily silent as often thought of but are often not listened to. Again, the evidence of harm from unheeded voice implies that the need for superiors to listen to subordinates is equally important to patient safety as speaking up itself. Next, apathy and silence in upwards relationship is presented

4.2.4 Apathy and Silence in Upwards Relationship

Responses reveal endemic apathy and silence in upwards relationship. According to respondents, emphasis on rank authority and unilateral decisions of superiors make subordinates feel less responsible for patient outcomes. As a result, subordinates often choose to merely follow instructions and withhold important feedback on patient safety. Junior doctors and nurses admit to not feeling obliged to suggest, give important information or engage superiors on patient safety. House Officer 3 KBTH observes:

> Most of the time people don't really care because they are just following instructions and write the senior consultant name into bracket so that if anything happens you are covered

Other times, subordinates intervene minimally. According to respondents, although they may be aware of obvious patient safety issues and may even mention it, they are rarely persistent on it but often allow superiors to have their way. A Senior Nurse anaesthetist 2 MH narrates:

> Sometimes you see it is the surgeon who brought the patient – so when you put on suggestion and it doesn't seem to agree with it, you keep silent and he goes on because he brought the patient. This is the surgeon; the patient is for him. So, you keep quiet for him to do what he wants to do to the patient

This means although subordinates may have important input, they don't feel bound to speak up because they think their opinion doesn't really matter and they are not accountable for safety outcomes. The sense of apathy is therefore underlined by helplessness and reflects acquiescence silence (Van Dyne & Botero, 2003) as they feel they can do little to nothing for patient care in relation to superiors.

Moreover, upward silence is informed by the fear of usurping authority. Respondents fear appearing disrespectful and usurping authority when they speak up. Respondents note that superiors are often uncomfortable and even get offended when prompted or questioned on their actions and inactions. Many respondents recount instances where speaking up resulted in either explicit or implicit warning of superiors that team members are stepping beyond their boundaries. According to them, one may be asked - *Who are you to make this suggestion?* This concurs with the observation of other respondents that some superiors assume knowing everything and do not expect input from team members. Peri-Operative Nurse 4 MH asserts:

> …some [superiors] they just come with the impression or the mind that – this is me, I am the boss – no suggestion should be made. I know better than you and this is my case I want to do -yeah!

For instance, Nurse Anaesthetist 5 KBTH recalls a surgeon becoming angry at him for asking what he was doing about a patient he had left unattended in a theatre. Similarly, Peri-Operative Nurse 7 Matron KBTH observed that a surgeon who was mistakenly doing a burr hole [drilling of the head to drain fluid] at the wrong side of a patient's head was displeased when a nurse rightly prompted him. These concur with the observation of House Officer 3 KBTH:

> One of the hindrances is you may feel you are usurping authority so you might decide to keep quiet

This means most people are not silenced by wrongly assuming that superiors know better and are right but are rather by the authority posture of superiors.

The fear of usurping authority is further influenced by the nature of perceived patient safety concern. According to respondents, it is generally easy to chip in information or speak up on general issues in a manner that does not contradict superiors. Similarly, it is easier to do so when there is no clear idea of what must be done especially when there is risk of harm and confusion in teams. For instance, Resident (Anaesthesiologists) 1 MH recalls making a life-saving suggestion to a senior colleague who had tried everything to restore a very sick patient gasping for breath. He [Anaesthesiologists] suspecting the patient to be having chest fluid suggested drainage which was heeded resulting in draining 3 litres of fluid to save the patient.

However, upwards voice becomes more difficult when superiors must be contradicted. Respondents note that once superiors take decisions or give instructions on patients, it is extremely difficult to say anything contrary. The following quotes attest:

> you have to respect what the bosses say …in the medical field, opinion that is contrary to that of your superiors is not that easy - House Officer 1 MH

> corrections [of superior ranks] is totally out! Largely in medical practice even in the USA correcting a superior is a big deal, it a big deal… Specialist Anaesthesiologists 2 KBTH

Several respondents admit to remaining silent on perceived wrongs that will contradict superiors. Some said they have seen superiors instructing certain drugs they know shouldn't be given under certain conditions but failed to utter a word. Others admit to knowing certain procedures as potentially harmful or not ideal but remain silent or follow instructions to execute these. For instance, a senior resident recalls a hernia wound that had broken down requiring sutures removed, and wound treated before re-suturing. However, as they [trainees] were doing this as a standard practice, a specialist instructed them to stop that and simply re-suture the

wound. According to the resident, although they felt the specialist's instruction was wrong, they had no choice than to comply. He narrates:

> But he felt it should be sutured so we had no choice than to suture because the oracle is speaking - Resident 3 KBTH

These suggest that although lack of clinical knowledge is often cited for silence in upward relationships, subordinates who have the needed knowledge may yet be forced into silence in one way or the other. Voice and silence become more complex in authority gradient. This is presented next.

4.2.5 Voice and Silence in Authority Gradient

Authority gradient present interesting dynamics to voice and silence. Experiences of respondents reveal that upward voice is less difficult towards closer ranks but more difficult or impossible with rank disparity. According to respondents, this deprives lower ranks of voice towards skip level superiors. An experienced Matron Peri-Operative Nurse 1 KBTH confidently asserts:

> If you are junior junior! so you look at the ranks and files, the further you are away from that rank the more you are likely not to talk – you will be quiet you won't say anything

Subordinates confirm this. Junior doctors and nurses admit to experiencing a deep-seated psychological barrier with superiors due to rank disparity. They admit to failing to talk to or prompt top-ranked team members on important patient safety observations such as critical laboratory reports requiring urgent action. Some describe approaching consultants and specialists as a daring task. Resident 2 MH attests:

> A house officer can easily relate to a resident. A resident might be able to talk to a junior specialist. But then talking to a senior specialist or a consultant is like a taboo

Although such estranged work relationship is often attributed to lack of bonding from a short working relationship, responses show that some team members who have worked with skip level ranks for years yet find it difficult or impossible to speak up to them. This is evident in the following quotes:

> For that one let me speak the truth I can't [suggest to the consultant] …. hahahahaha I can't …. Let me say so! I have been here for two years and most often they don't come on rounds, they give instructions! - Senior Surgical Ward Nurse 2 KBTH

> Who are you to challenge the professor? When I am with my colleague, I am more assertive but once those people [consultants, senior specialist...] come in, sometimes ward rounds I don't even talk – Senior Recovery Nurse 7 KBTH

It is important to note that rank disparity may have a severe hindrance for nurses' voice due to their professional subordination to doctors besides general hierarchy. This is presented in the second major section of findings in this chapter.

Moreover, rank disparity manifests in broader rank disconnect and silence between subordinate and superior groups in surgery. Lower hierarchies (house officers, residents and nurses) generally describe their working relationship with higher hierarchies as remote. According to both subordinate and superior respondents, there is often a hierarchical gap that hinders teamwork and voice. Some explain that by hierarchy, superiors consciously or unconsciously become isolated from team members when with career progression. Consultant Surgeon 1 narrates:

> ... I think as people gravitate to the top working to become more qualified and experienced you begin to leave the team

This means most superior ranks in surgery merely lead teams from outside by giving instructions without being an integral part of the team. According to respondents, this hinders the flow of patient safety observations to superiors. Virtually, all respondents attest that junior doctors and nurses, who spend more time with patients, do make critical and lifesaving patient observations. Moreover, while patients naturally give information to lower hierarchies because of a better bond with them, they easily withhold certain things from superiors who rarely see them. Consultant Anaesthesiologist 3 KBTH asserts:

> The people that are really with the patients are the nurses. So, there are certain things doctors will not pick up during the limited contact hours through no fault of theirs. And it is not everything too that a patient may tell you in your first and second encounter

This means good patient outcomes do not depend much on senior ranks or who are more learned, but an active collaboration between these and lower hierarchies' who know more about patients. This confirms an incident narrated by Senior Specialist Surgeon 4 KBTH. According to him, some medical students were able to obtain a better patient history from a patient suffering from gastric obstruction leading to a change to the initial treatment plan by a senior colleague. Despite this, there is consensus among respondents that important observations on patient safety are not communicated to superiors. A Senior Resident 3 KBTH asserts:

> Of course, the situation remains the same. That is the problem – things that could be done better will remain the same because no one [subordinates] is talking and the bosses are not seeing – it doesn't solve anything

These means while ideal practice requires superior and subordinate groups working in tandem for best patients' outcomes, lower hierarchies who know more about patients are out of touch with more experienced superiors who take big patient decisions. Moreover, voice in authority gradient is influenced by closer rank voice behaviour and sociocultural authority.

4.2.5.1 Next Rank Voice Within Authority Gradient

Another important finding in the context of authority gradient is that upward voice is influenced by voice behaviour of other superiors in hierarchy. According to respondents, voice relationship between immediate superiors and skip level ranks has a broader effect on voice and silence across teams. Responses reveal that when immediate superiors speak up towards next ranks or are listened to, lower ranks turn to speak up in authority gradient. For example, some nurses who spoke on certain issues to surgeons felt confident to do this because their superiors do speak up to surgeons. On the contrary, when immediate superiors do not speak up or are disregarded by next ranks, lower ranks give up on speaking up towards such skip level ranks. A junior resident narrates how a senior resident is often humiliated by a specialist with unpleasant responses such as - *Who are you, are you the specialist?* when he suggests. This he notes keeps him, as lower rank, in perpetual silence towards the specialist. He asserts:

> …for me I won't even talk if the senior resident is being insulted, I just keep quiet – Junior Resident 2 MH

Likewise, silence of immediate superiors in upward voice intensifies silence among subordinates towards skip level ranks. Consequently, besides the rare experiences of nurses speaking up due to the active voice of their superiors, most nurses say voice towards surgeons is often impossible because their superiors are silent. Surgical Ward Nurse 1 MH describes this:

> Because the people you will expect to talk are not talking - Your in-charge [matron] is here she is seeing what is going on and she is not even talking.

This makes voice difficult and risky for subordinates. For instance, subordinates speaking up while their immediate superiors are silent may be perceived as disrespect not only to skip-level ranks but to the immediate superior who is silent. This reflects research demonstrating the role of skip-level leaders on voice in organisations (Detert & Trevino, 2010; Liu et al., 2013).

4.2.5.2 Sociocultural Authority in Authority Gradient

Responses reveal that voice and silence in authority gradient is influenced by sociocultural authority. This relates to the sociocultural respect for age and superior ranks presented earlier in this section. Responses reveal how the cultural authority of age and ranks interrelate to affect voice and silence on patient safety. The sociocultural authority of age and superior ranks either reinforce or mitigate authority gradient and silence. First, responses reveal that authority gradient and silence is reinforced when there is both age and rank disparity. For instance, young subordinates find it extremely difficult to speak up to older superiors. This is because older superiors [e.g specialists and consultants] often have both age and rank authority over young subordinates [e.g residents and house officers, nurses]. Young house officers, residents and nurses therefore find it extremely difficult to talk to older senior specialists and consultants. A young house officer confirms:

> We always give much respect to our elderly people, so the specialist and consultants being elderly some are old enough to be our parents so when they talk, we tend to keep quiet and do as they say - House Officer 5 MH

It is also quite interesting to note that this quite hinders voice to some extent from some junior doctors towards senior older nurses. A Senior Resident 3 KBTH admits:

> I might have superior knowledge and my level might be higher than them [senior nurses] but this one is old enough to be my mother. So, I should be able to respect [them]

On the other hand, age authority mitigates rank authority to encourage voice in some instances. Respondents note that older subordinates tend to have better voice opportunity towards superior ranks than younger subordinates. For instance, although doctors' authority generally silences nurses, age authority often enables older nurses to speak up to doctors. Likewise, older doctors have a better voice opportunity towards senior doctors in authority gradient. House Officer 1 MH observes:

> Even let's say in a team a resident who is 50 years old and a consultant. A 50-year-old resident will be able to approach the consultant to talk to him but if say there is another resident who is 27 he will not be able to approach the consultant in a certain way

This is confirmed by a unique voice experience of the oldest resident interviewed. In contrast to the experiences of other residents, this resident describes having a very positive voice relationship with superiors. He narrates:

> …. maybe I have been lucky because all the consultants I have worked with if I suggest to them, they take it. And like I say, some of my consultants here are my juniors by age, I even finished medical school before them- Resident Surgeon 1 MH

Despite attributing being heard to luck, it is important to note that being an older person quite mitigates the authority gradient between him and superiors and make it easy for him to speak up and be listened to. This means although sociocultural authority offers an opportunity for voice in authority gradient, it often reinforces rank power to intensity silence in surgery as demonstrated earlier.

Although findings in this section apply to both study hospitals, the military hospital has additional power dynamics to voice and silence due to its military values. This is presented next.

4.2.6 Unique Power Relations in 37 Military Hospital

The Military Hospital is characterised with further power relations distinct from the civilian hospital. 37 Military Hospital is managed and operated by the Ghana Armed Forces and has both military and civilian Healthcare Professionals (HCPs). This brings to the fore interrelations of military power and healthcare power on one hand and interrelation of the military and civilians on the other which generally hinders voice on patient safety.

Responses reveal that civilian HCPs quite express themselves better towards senior military ranks than military HCPs. Respondents note that civilians are generally not bound by the typical military culture of respect for authority, they have a better voice opportunity towards superior military HCPs. In contrast, respondents note that military professionals' sensitivity to military orders and culture make them extremely circumspect in speaking up to superior military HCPs. Both civilian and military HCP respondents note that superior military rank HCPs expect a certain level of respect from junior ranks in terms of the way they talk to them. According to them, the typical military values of obedience, respect and order is deeply ingrained among military HCPs and interfere in patient care. For instance, a sergeant rank who is a nurse will find it extremely difficult to correct or suggest to a colonel military surgeon compared to a civilian nurse. According to respondents, upwards voice among military HCPs is not only difficult but riskier as it exposes subordinates to military disciplinary measures outside healthcare. These quotes confirm the phenomenon:

> I am a civilian, I can easily communicate with a colonel as compared to eeerrrrrh a sergeant talking to a colonel – Peri-Operative Nurse 4 37 C

> immediately you wear the uniform [military person] it is different. But if you are a civilian you can express yourself. But military you need to be careful – Ward Nurse 2 37 M

Most military ranks, including some senior ranks, lament difficulties in combining the military and healthcare. In their personal experiences and observations, it is very sensitive to be a military officer and healthcare professional due to inherent struggles in establishing a balance between these professions in patient care. A Military Resident 3 MH reflects:

> that difficulty is always there [military factor] and it will continue to be there because sometimes it is difficult to know where the ranks come in and the professional break comes in

Respondents recount several experiences of silence among military ranks. They also cite voice experiences that lead to victimisation of subordinates in the military order resulting in resignations [this is presented in risk to voice in the third section of findings]. For instance, a civilian Matron Surgical Ward Nurse 3 MH attests to endemic silence among military ranks in her ward in the quote below:

> Even here when the nurses are taking up from an officer [senior military HCP] and there is something the officer has not done for that patient; they can't even ask that why has this or that not been done

Despite the compelling evidence, a few senior military HCPs in managerial role appear to totally discount the phenomenon or play down upon it. Some note that military authority never hinders voice towards superior military HCPs. According to them, healthcare comes first before the military. As a result, because the military is a second profession in the context of healthcare, it does not interfere with patient care and voice. A Military Manager and Surgeon 1 MH asserts:

> Voice cannot be hindered …that may happen in the infantry unit but not in the medical

Those who do not totally discount the phenomenon perceive it as a minor. According to them although this may occur, junior military ranks do speak up and challenge senior military HCPs when it is necessary. A Military Colonel/Surgeon 1 37 observes:

> I think that aspect [military factor] plays a very small role. We have ever had an instance of a sergeant and a colonel; the sergeant is an operative nurse and the colonel is a surgeon

While such instances may rarely occur as shown in the narration 'ever' due to personality factors among others, overwhelming responses show that the military authority hinders upward voice among the military HCPs. Contrary views of a few senior military HCPs in management positions

may therefore only represent ideal practices. It is also important to note that these superiors may not appreciate the phenomenon from subordinates' perspectives.

Another important finding is that despite limitation to voice among military ranks, there is a strong sense of military entitlement in the hospital that equally restricts voice of civilian HCPs. Responses reveal that as a military facility, the hospital is structured and managed with military interest. Key positions are occupied by military officers enabling the military to maintain a firm grip on organisational processes. According to respondents, while hospitals normally have nurses in charge of the theatre and wards, this teaching hospital has a military HCP attached to each ward and theatre to oversee these nurses. A civilian Surgical Ward Nurse 3 37 confirms:

> Every ward here there is a military person in charge…if you have the normal in charge there is a military attachment and administratively it is like the military who is in charge. You see how they run the thing so that they can get a grip

According to civilian HCP respondents, military entitlements allow military HCPs not only to speak up towards them but abuse power to silence them in patient care. For instance, military HCPs are said to appropriate authority over same ranks colleague and senior civilian HCPs. This makes experienced and senior civilian HCPs feel unappreciated and unnecessarily subjected to military authority in healthcare. Responses show that military power quest over civilian's manifests strongly among upper ranks and more experienced civilian HCPs than lower rank civilians. Consequently, while some perceive military entitlement as individuals merely taking advantage of their military status to appropriate power, others see this as an institutionally sanctioned phenomenon. A senior civilian Peri-Operative Nurse/Matron 1 MH notes:

> I think it is more of the policy of the hospital because it is a military hospital and so once you are a civilian no matter how much experience you have, you can't be the head. So, with your years of experience [as civilian HCP] sometimes it doesn't matter to them.

This means although military status enables individual military HCPs to appropriate power in connection to their civilian counterparts, the authority of the military HCPs over civilian HCPs is primarily institutional.

Moreover, although civilian HCPs are not bound by typical military values, the general military atmosphere is said to be quite intimidating. Civilian respondents note that the military can be intimidating by the way they go about things. Some are noted to use power bluntly to silence team members in very hostile ways. A civilian Peri-Operative Nurse 3 37 C describes:

> the soldier kind of thing is there – somebody can actually tell you – shut up! And you have to shut up!

The military authority therefore hinders voice both within military ranks as well as from civilian to military HCPs. This means besides the general hindrances healthcare rank and hierarchy pose to voice and silence across the two hospitals, military values introduce additional dynamics. Military authority intensifies healthcare power relations to reinforce silence on patient safety concerns in a more complex manner.

4.2.7 Summary of Section

This section presented findings on rank power and voice and silence on patients' safety in surgery. Findings establish that rank and hierarchical power is endemic in surgery and often reinforced by sociocultural respect for social order, age and ranks. This leads to extreme appropriation of power by superiors and strict adherence to hierarchy in a manner that hinder teamwork and voice. As a result, considerable upwards voice on patient safety is unheeded or ignored, leading to harm and even death. This gives rise to endemic apathy and silence in upwards relationship as subordinates feel less responsible for patient safety and fear usurping authority of superiors. The hindrances posed by rank and superior power to voice is profound in authority gradient. Authority gradient often deprives lower subordinates voice opportunity towards skip ranks and creates a systemic rank disconnect and silence on patient management between subordinate groups and superior groups. However, when next rank superiors speak upwards and are listened to, subordinates are encouraged to speak up to skip level ranks. However, when immediate superiors do not speak up or are not listened to by next rank superiors, lower ranks totally give up on voice. Moreover, although the sociocultural authority of age rarely enables older subordinate ranks to speak up to superior ranks in authority gradient, age authority often reinforces authority and silence since most superiors are older than subordinates. Finally, findings establish that military authority interferes and conflicts with healthcare authority to further hinder voice of military HCPs than civilian HCPs in the military hierarchy. At the same time, general military culture and entitlement enable military HCPs to appropriate power in relation to civilian HCPs and silence them.

The next major section presents findings on professional identity and interdisciplinary power in surgery.

4.3 Professional Identity and Interdisciplinary Power: Voice and Silence

4.3.1 Introduction to Section

This section of findings presents the implications of interdisciplinary power relationships on voice and silence on patient safety. It describes how professional diversity and interdisciplinary relationships affect voice and silence. It relates to literature on doctor-nurses power relations and voice behaviour (e.g Stein, 1967; Svensson, 1996; Snelgrove & Hughes, 2000; Mitchell & Ferguson-Pare, 2002; Daiski, 2004; Sirota, 2008; Malloy et al., 2009; Simpson & Lyndon, 2009; Churchman & Doherty, 2010) and power struggles and conflicts in surgeon-anaesthesiologist relationship (Fox, 1994; El-Masry et al., 2013; Cooper, 2018; Helmreich & Merritt, 2019). The section begins with an overview of professional identity and interdisciplinary power relationships in surgery. It proceeds to present an interdisciplinary power relationship between doctors and nurses. Three subsections under this present on doctors' authority futility of nurses' voice, doctors' authority and nurses' silence as well as rare powerlessness of nurse anaesthetists in connection to surgeons and anaesthesiologists. Next, the interdisciplinary power relationship between surgeons and anaesthesiologists and how this affects voice and silence is presented. Findings in this section contribute to addressing research objective two (2):

To examine how professional identity from interdisciplinary power relationships shapes voice and silence on patient safety in surgery.

4.3.2 An Overview of Professional Identity and Interdisciplinary Power in Surgery

Respondents describe power in terms of professional identity based on interdisciplinary relationships surgery. They describe surgery as replete with degrees of power from the surgeon to the cleaner. According to them, professional identity comes with a status that is consciously recognised and acknowledged by all. Describing this, they note that despite working as a team and undertaking the same or similar tasks, status differences overshadow a sense of being colleagues and hinder real teamwork. Senior Nurse Anaesthetist 6 KBTH graphically illustrates:

> …because in health people need to be recognised…because here we don't assume that we are working in the theatre, so we are all colleagues. No, no no, it not like that. The cleaner cannot see me as a cleaner and I can't see my consultant as a colleague. We are not colleagues! - Senior Nurse Anaesthetist 6 KBTH

This means individuals and groups know their place in terms of status and fit themselves there and accord others the needed recognition. Beyond shared norms on professional status, responses reveal it is enforced. According to respondents, professional groups exert authority to compel others into subordination. This means shared norms of status is primarily a

phenomenon of power emanating from interdisciplinary relations. Respondents attest that one's professional identity is key to the ability to speak up as well as to be heard when one speaks up. Professional identity rooted in interdisciplinary relationships is therefore an important determinant of voice and silence as demonstrated in the following quotes:

> …in the surgical team, we are all not the same – we are not at the same level. The surgeon is a doctor and a specialist… The scrub nurse might be a degree holder. …So, with all these in mind the other person feels you are down. So even if you are right, you are wrong – Peri-Operative Nurse 3 MH

> classification of who you are – you are the surgeon, the nurse, anaesthetist, the porter and ward assistant and cleaner. It matters. It more of professional status – Peri-Operative Nurse 2 MH

Responses reveal that professional identity based on interdisciplinary relationships create power relationships between doctors and nurses as well as surgeons and anaesthesiologists and affect voice and silence.

4.3.3 Doctor-Nurse Power Relationship

The authority of doctors over nurses is evident in responses. Respondents copiously describe power disparity between these professional groups. According to them, the structuring of hospitals in terms of hierarchy and polices are in favour of doctors. They also note that the phenomenon is reinforced by unwritten rules and shared norms that create an aura of power around doctors to marginalise nurses and hinder their voice. Nurse Anaesthetist 1 MH reflects:

> I may not be able to pinpoint where exactly it [power] is coming from but it is just an unwritten something – the doctors have it at the back of their mind they are the bosses, the nurses have their own place

Doctors' professional power over nurses centres on unwritten rules surrounding doctors' reputation, fame and influence. Responses reveal that doctors command huge professional fame and influence in healthcare and society. Virtually all nursing respondents including some doctors describe doctors as powerful professionals that are highly recognised. Copiously, respondents describe doctors with words such as demi-god, small gods and all-knowing reflecting power and influence. For instance, doctors are widely respected and revered for knowledge. This has been traced to the duration of doctors training in medical school and specialisation relative to other HCPs. Medical school being 7 years in Ghana in addition to other years of specialisation training exacerbates knowledge assumption of doctors. It is however important to note that doctors' years in training does not take away the knowledge and

experiences nurses acquire through years of practice. Besides, nurses spend years in further education that may be near commensurate with doctors' years in training. Nevertheless, the assumption of knowledge from training is a strong basis for doctors' power over nurses. Respondents recount derogatory remarks by doctors belittling nurses' knowledge. For instance, House Officer 2 MH observes doctors telling nurses:

> Oooh you [a nurse] have you have been to medical school?

Doctors are therefore cast in high professional esteem in healthcare and society at large. Respondents note that doctors receive preferential treatment both within and outside healthcare. They note that preferential treatment for doctors permeates the entire healthcare hierarchy and affects how doctors relate to others and how others relate with them. According to them, healthcare managers, other professionals and cleaners all relate to doctors differently. A Surgical Ward Nurse 2 KBTH observes how a vociferous cleaner sternly warns off anyone including patients when mopping but look on helplessly when doctors walk over while mopping without saying a word. Emphasizing doctors fame in Ghana, respondents describe them as respected professional with no co-equals. This is illustrated in the quote below:

> So, I always say that in Ghana, if you are not a doctor in the health profession then forget it. You [other HCPs] need to humble yourself because the doctors see themselves as superior and expect certain things from you – the way you talk with them in the theatre. In a way, they want to be worshipped. - Nurse Anaesthetists 1 KBTH

Doctors' authority also reflects in their behaviour. According to respondents' doctors act with authority in relation to nurses and other HCPs. Responses show that professional identity as a doctor embolden even junior doctors to speak up better than comparative higher ranks in other professional groups. House Officer 3 MH confirms this:

> I mean I don't know whether it is Africa or Ghana but here once you are a doctor people respect you and people are willing to listen to you and gives you some confidence.

These findings reflect how high power-distance values intensify authority in superior-subordinate relationships.

Responses show doctors' authority undermines nurses' voice. Respondents note that the authority, status and respect that is associated with doctors in relation to other HCPs, such as nurses, hinder teamwork and voice on patient safety. Although responses show some nurses

conveniently speak up to doctors in some circumstances (details on this is presented in the fourth major section of finding in this chapter), this is said to be quite uncommon. A Senior Specialist Surgeon 4 KBT attests:

> nurses will have to be a very senior nurse to conveniently suggest to a surgeon or the relationship has to be good

An experienced Matron, Ward Nurse 3 MH, confirms in a quote below:

> Most of the time they [nurses] are not able to speak up – it is just a handful of nurses who are able to speak out

Sharing her personal experiences and observations, she recalls that when she took over the ward she manages, chest water drainage of patients is emptied every 24 hours irrespective of the quantity of fluid drained. This regular emptying, she notes is not a standard practice and unnecessarily exposes patients to infection. She therefore dialogued with doctors to change this practice to the containers being ¾ full before emptying to avoid infections. However, it is evident that not all senior nurses do really speak up. According to respondents although some senior nurses act and insist on standards with junior doctors, most remain silent on concerns with senior surgeons. They note that except for a few matrons who stand their ground and speak up, the authority of doctors cowers most matrons, who are managers of surgical wards and theatres, into silence. Surgical Ward Nurse 2 KBTH observes:

> It happens [Nurses Speaking up] but rare, I can say the matron on the next floor of this department is the only one

This respondent is referring to 1 matron out of 5 in a particular building who is vocal towards doctors. This points to the prevalence of doctors' authority. According to responses, this power relationship undermines nurses' voice as presented in the next subsections.

4.3.3.1 Doctors' Authority and Futility of Nurses' Voice

Doctors' authority directly undermines nurses' voice. A cross-section of responses notes that doctors are not obliged to take nurses' inputs. According to them, doctors feel they are in control and know what they are doing. As a result, although nurses say they identify safety concerns and make needful suggestions, doctors easily override them and make them look bad instead. For instance, a nurse notes that directly dressing open fractured wounds where bones are exposed often lead to complications such as the bone getting discoloured and drying up with time. As a result, they [nurses] prefer using wet and squeezed gauze to protect the bone before

dressing an open wound. However, surgeons simply instruct them to dress the wound in the exposed bone and they are forced to oblige. A nurse laments:

> But in all these what can you do they are your superiors, so you just respond yes sir – Surgical Ward Nurse 1 MH

Respondents recount instances where failure to listen to nurses has resulted in irrecoverable harm and even death. A classical instance cited in the previous major section is when a surgeon disregarded warning of nurses not to remove a little fibroid on the uterus called a myoma during Caesarean Section. The removal of the fibroid resulted in unceasing bleeding and failure of the uterus to contract to a point where the womb was removed to save the patient's life. Unfortunately, the woman lost her only baby shortly after delivery. Surgical Ward Nurse Matron 3 MH narrates how a doctor disregarded a nurse's suggestion leading to the death of a patient. According to her, while the surgeon recommended giving Pethidine through Intravenous (IV) to a patient who complained of chest pains, a nurse advised that would not be appropriate and recommended Intramuscular Injection (IM). However, the surgeon did not listen and proceeded with an Intravenous (IV) leading to the death of the patient.

In addition to nurses' voice going unheeded, doctors compel nurses to compromise on patient safety standards. Respondents attest to how doctors wrongly instruct and coerce nurses in their primary roles to conform. This contrasts with nurses' hesitation to speak up in core doctors' roles. This means although nurses are more inclined to speak up in their core work domain, they are yet easily overridden by doctors. A senior Nurse Anaesthetist 1 MH confirms reflectively:

> I don't know how to put it a doctor is a doctor – I don't know how to put it, but I am the doctor and the head of this team what I want is what goes – yes. And you are the nurse maybe I am the nurse and I am saying do this and do that. It may be outside your domain or in your domain, but I am the doctor I am ordering you to do it! - Senior Nurse Anaesthetist 1 MH

Some doctors confirm this attitude among colleagues. Consultant Anaesthesiologist 3 KBTH acknowledges:

> the doctor is the boss! You [the nurse] are there to help me and without me [the doctor] the patient wouldn't come. So, do what I say!

Respondents describe how doctors compel nurses to accept ill-prepared patients for surgery. For instance, surgeons may not inform nurses about procedures or patients but only appear in the theatre and force them into the surgery. Likewise, surgical ward nurses and nurse anaesthetists note that while patients need to be properly prepared for surgery and do appropriate tests, except for emergency cases, this standard is often not followed. Rather,

surgeons force them to prepare or anaesthetise patients in haste in a manner that is potentially harmful. A Senior Surgical Ward Nurse 1 MH shares:

> You know surgery is something very critical – you don't just wake up and go for surgery. The patient comes to ward you prepare him. But the next day you will be there, and a patient will come from nowhere with folder in hand and a surgeon tells you prepare this patient for surgery. But you are to do it!

Responses therefore show that nurses are not that silent on patient safety concerns in relation to doctors. Nursing respondents share frustrating voice experiences with doctors. According to them, doctors disregard their concerns and at times compel them into wrong and questionable procedures. This, they note, often makes them reluctant to speak up on safety. Some therefore argue that they are not silent but often forced into silence. An observation of a nurse below best describes the phenomenon:

> what I have experience now is that this era a lot of nurses do voice out their concerns but on the other hand most of them are not taken …. So, the person folds the arms and watch – Senior Peri-Operative Nurse 2 KBTH

These experiences reflect and reinforce silence out of apathy as evident in Deaf Ear Syndrome (Harlos, 2001; Pinder & Harlos, 2001) which reinforces silence presented next.

4.3.3.2 Doctors' Authority and Nurses' Silence

Responses reveal that doctors use of authority and superior knowledge posture give rise to apathy and silence among nurses. Some nursing respondents say doctor's authority and superior knowledge quite intimidate them from speaking up towards them. According to them, doctors know better or are expected to know better. As a result, although these nurses admit to seeing safety concerns, perceived superior knowledge of doctors restrain them from speaking up. They feel they know less to speak up or think it is simply not their duty to correct doctors. A Surgical Ward Nurse 4 KBTH admits:

> I would say a superior knowledge because they [surgeons/doctors] definitely know more than you [nurse] do so you have to be careful with what you say if you are with them

Strong social construction of doctors' authority in healthcare can therefore cow nurses into silence naturally. This can be reinforced by uncertainty and lack of clinical knowledge of nurses. However, responses reveal that most nurses who know doctors are not always right and have the right clinical knowledge are silent due to apathy towards doctors' authoritative posture. Responses reveal that this inclination to silence is heightened when a safety concern is perceived

as a core role of doctors. For instance, surgical ward nurses work with surgeons as a team member, they perceive surgical decisions as primary surgeons' roles. Consequently, while they admit to knowledge of patients' conditions that are not ideal for surgery, they are unable to speak up. The scenario is not any different in a more interdependent theatre where nursing respondents perceive surgical procedures as a remote doctor role and resort to silence on safety observations. The following quotations illustrate:

> …power [works] because sometimes you are a Certified Registered Anaesthetist working with a professor or the professor is the surgeon, what do you have to suggest? You don't have anything to suggest. …So, if the one he is working with [the junior doctor] is just silence and watching and following, YOU [the nurse] who is standing by who are you going to suggest to? - Nurse Anaesthetist 2 KBTH

> [When surgeons decide who is going to the theatre] Who are you to go and ask why they are taking that patient to theatre and that the patient doesn't need surgery - Ward Nurse 4 KBTH

Responses further show that nurses may choose to exercise some level of voice while remaining silent on real safety observations. Describing their experiences, nurses note that while they may know what exactly is wrong with a patient and what must be done, the aura and attitude of doctors do not allow them to express their true observation. Instead, they only point out the general problems by merely drawing doctors' attention to unpleasant patients' development but allow them to figure out the real problem and what to do. Recovery Nurse narrates:

> Errrrh hmm (pause in silence) you know for doctors; they always want to be doctors. Yes, there is something that needs to be done and they think their way is right. Do you understand? You [the nurse] are not a doctor, they think they are the doctors, so you tell them that this is the problem, but you don't give them the solution. You don't tell them what to do and they don't really need your suggestion that much - Recovery Nurse 8 KBTH

This means nurses may be exercising silence on patient safety concerns in the disguise of voice. The finding reflects doctor-nurse game (Stein, 1967) and multifaceted nature of silence that is not limited lack of speech or voice (Pinder & Harlos, 2001; Van Dyne & Botero, 2003). In contrast to silence towards perceived safety concerns considered as doctors core role, responses show that nurses are likely to speak up on safety concerns which are in their core work domain and fall under their primary responsibility. A Senior Recovery Nurse 5 KBTH asserts:

> In the theatre I can't really talk about that one. But once it is coming to my side [recovery] I will step in and talk

This means although surgery is teamwork where an input of any team member is critical for a good outcome, perceived work domain influences voice and silence, especially for nurses.

Moreover, considerably nurses consciously choose silence as punishment for doctors' professional disrespect for them. Respondents attest to grave lack of respect and professional recognition for nurses. Nurses admit to being treated with disrespect, belittled and looked down upon. Other times, they are abused and made to feel their role is less relevant in surgery and healthcare generally. For instance, Peri-Operative Nurse 2 MH recounts a personal instance, where he opted to assist in suturing after a long surgery to save time. According to him, even though he is experienced in suturing, the surgeon retorted at him saying he does not even allow house officers to suture how much more he 'a nurse.' While this offer to assist may be outside the nurse's direct role, the response is contempt on the professional identity of nurses. According to most nurses, these experiences disrespect them and incline them to apathy and withholding of important patient concerns from doctors. Nursing respondents admit to consciously choosing to remain silent on patient's development based on how doctors' authoritative and arrogant posture that disregard and look down upon them. Others say they wouldn't speak up for some patients even when they are dying because of the posture of doctors treating them. This means doctors' attitude towards nurses is key to nurses' voice and patient safety. Surgical Ward Nurse 3 KBTH attests:

> Once you [doctor] declare yourself that without nurses you can take care of your patients, the nurse will allow you to fail and when that happens it is the patient that suffers.

Surgical Ward Nurse 2 MH confirms:

> they [doctors/surgeons] claim they are the champions, so you leave it on them. Even though you [the nurse] have seen it [safety concern] but he [doctor/surgeon] claims to be learned more than you so you leave it for him to see it

Other team members including doctor respondents confirmed this. According to them, once team members feel respected and valued, they become forthcoming with input. On the other hand, when they feel disrespected and not valued, they incline to silence. Resident Surgeon 1 KBTH observes:

> Once you treat them [nurses] with respect and let them feel that the patient care is paramount to everybody that turns to give a better outcome

Findings demonstrate that doctors' professional disrespect for nurses is a major cause of silence in surgery.

Although the doctor-nurse power relationship and voice and silence are common with all nursing groups, findings reveal quite unique and severe forms of powerlessness among nurse anaesthetists in the study hospitals. This is presented next.

4.3.3.3 Power Relationship Between Nurse Anaesthetists and Doctors

Responses reveal that nurse anaesthetists are further powerless due to their direct subjection to the authority of doctors in hierarchy. Compared to other nurses, who are under nursing units and headed by nurse managers, nurse anaesthetists are directly placed under anaesthesia department and headed by doctors.

Respondents note that nurse anaesthetists have no real decision-making power on patient care because they are directly subjected to the authority of anaesthesiologists (doctors in anaesthesia). According to them, nurse anaesthetists take instruction from anaesthesiologists and report any patient safety concerns to them to take decisions. As a result, even though nurse anaesthetists do work alone with surgeons, they are unable to make direct decisions with surgeons but merely report their observations to anaesthesiologists, who take decisions or engage with surgeons. As a result, respondents note that nurse anaesthetists do not have the power to directly challenge surgeons on critical surgical decisions, neither do surgeons tolerate their direct intervention. Responses reveal that the phenomenon is profound in KBTH, where there are more anaesthesiologists compared to 37 Military Hospital. The high number of anaesthesiologists in KBTH make nurse anaesthetists quite supplementary subordinate and more subjected to doctors' authority. However, fewer anaesthesiologists in 37 Military Hospital somewhat make nurse anaesthetists indispensable in day to day patient decision making. According to respondents, this quite empowers nurse anaesthetists in 37 Military Hospital in decision making and voice on patient safety compared to KBTH. A quote from a senior specialist below confirms:

> Here [KBTH], nurse anaesthetists have no power, they take no decisions, they don't start a case without doctor anaesthetist…. So, you will not find a situation here where a nurse anaesthetist will have the audacity to come and stand and say – you Dr your patient is this [not ideal for surgery] so I am cancelling the case. It is quite different in 37 Military Hospital where most are nurse anaesthetist and they are running the show. Here [KBTH] nurse anaesthetists are powerless! - Snr Specialist Surgeon 3 KBTH

Meanwhile, responses reveal that surgeons and anaesthesiologists often collaborate to compel nurse anaesthetists to compromise on patient safety standards even when they speak up. According to them, when nurse anaesthetists express safety concerns to anaesthesiologists, surgeons often talk directly with anaesthesiologist, who are often not present with patients, and convince them to authorize procedures. According to nurse anaesthetists, surgeons either compel them to overlook safety concerns or use anaesthesiologists to silence them when they speak up. For instance, other respondents including nurse anaesthetists recount several

incidents where patients who are not ideal for surgery based on clear safety indicators are brought for surgical procedures. However, when nurse anaesthetists decline to undertake anaesthesia, surgeons often talk to anaesthesiologists, who then instruct them to go ahead with it. Some responses reveal that the tendency of surgeons and anaesthesiologists to compel nurse anaesthetists to compromise on patient safety standards is sometimes motivated by systemic challenges such as delays in laboratory results. However, responses generally show that these compromises are often clear breaches of patient safety standards enabled by power differences. Again, respondents note that because surgeons and anaesthesiologists are often colleagues, they easily collaborate to silence nurse anaesthetists and do what they want. While responses reveal that nurse anaesthetists do get some support from anaesthesiologists when they speak up on patient safety in connection to surgeons, this is rare. Again, as indicated earlier, such support for nurse anaesthetists is quite common in 37 Military Hospital, where nurse anaesthetists are quite indispensable in anaesthesia. Nevertheless, nurse anaesthetists are often compelled by surgeons and anaesthesiologists to compromise on patient safety standards. The following quotes confirm:

> … I might have a case on my list and the patient condition is not ideal for surgery. So, I call my superior and inform him on why I don't want to do the anaesthesia. But they [surgeons] call them [anaesthesiologists] and say – Charlie, I have this case I want to do and the nurse anaesthetist is proving stubborn. Then they will call. And all he says is direction from above [your superior] you do the case – Nurse Anaesthetist 3 KBTH

> Sometimes there are some cases you feel you don't have to do because the patient has issues but because the surgeon is a consultant or senior specialist, he will go behind you and call your bosses elsewhere and tell them something and your boss will call you okay do it in my name…. you are forced to do it - Nurse Anaesthetist 7KBTH

Findings generally show that unequal power relationship between doctors and nurses generally undermines nurses' voice on patient safety. Beyond the doctor-nurse power relationship, responses reveal a deep-seated power struggle between surgeons and anaesthesiologists that affects voice and silence on patient safety. This is presented next.

4.3.4 Surgeons-Anaesthesiologists Interdisciplinary Power and Voice

The interdisciplinary power relationship between surgeons and anaesthesiologists emerged as one of the key power relationships that affect voice and silence on patient safety in surgery. Responses reveal that this both encourages and undermines voice.

According to respondents, the relationship between surgeons and anaesthesiologists is characterised by power struggle which is rooted in unanswered question as to which of them is

the leader in surgery. Surgeon-anaesthesiologist relationship is described as one marked by constant explicit or implicit tussle for power and control. According to respondents, although surgeons generally lead surgical teams, there is an unending contest of power between these specialities in a manner that hinders teamwork and voice. They note that the power tussle is often heightened by dynamic compositions of ranks of surgeons and anaesthesiologists in teams. For instance, consultant anaesthesiologists may not be happy when a colleague consultant surgeon is leading especially when the surgeon has a 'bossy' posture. However, respondents note the scenario becomes more sensitive when a lower-ranked surgeon [e.g. senior specialist] leads a team in which a consultant anaesthesiologist is a part. According to respondents' the lack of clear consensus on who is leading in teams often result in breakdown in communication altogether. A Senior Specialist Anaesthesiologist 2 KBTH attests:

> The trivial ones [hindrance] are who is superior in theatre…. who is the big man who direct communication, who is the boss there? And as far as that is not settled sometimes communication even doesn't take place at all

According to respondents, conflict and power struggles manifest in differences in professional values between surgeons and anaesthesiologists in decision making. Respondents note that surgeons are often proactive to get patients to the theatre for procedures and tend to overlook some important safety indicators that anaesthesiologists insist on. For instance, surgeons accuse anaesthesiologists of putting impediments on their way by insisting on petty requirements to cancel or delay procedures. Anaesthesiologists on the other hand blame surgeons for circumventing important safety standards and attempt to control the entire surgical team including the work of anaesthesia. According to anaesthesiologists, surgeons see them as professional subordinates, who are there to assist them to do surgery instead of team members. Anaesthesiologist 3 KBTH asserts:

> …They [surgeons] think they are coming to do their job and you [anaesthesiologists] are just helping them to do their job so put the patient to sleep and let them have their way

Another important aspect of this power relationship is that it manifests in a sense of autonomy over speciality knowledge and expertise to hinder voice across speciality. Respondents across these specialities and other HCPs note that surgeons and anaesthesiologists are self-absorbed and assume authority of knowledge in their respective speciality. According to them, each speciality assumes to be an expert and conclude that each other has no right to suggest or correct them. Both surgeons and anaesthesiologists note that this makes voice on important patient safety observations difficult or near impossible across speciality. Consequently, they admit it is very difficult to question, suggest or intervene once safety concerns are outside their

speciality even when these are obvious. Quotes below from a cross-section of respondents confirm the phenomenon:

> You know people think they are big people in their area. People don't want to be seen as intrusive you are entering somebody's area to make comments - Senior Specialist Anaesthesiologist 2 KBTH

> [Voice across professional groups] is a big issue. Across teams and fields that are not necessarily the surgeons' field – you can ask but you may not have the courage to ask because that person is expected to be the guru in that field - Manager/Consultant Surgeon 1 KBTH

Across specialities voice is not only difficult but resisted. According to respondents, voice across speciality is often clearly resisted by colleagues on the basis that they know what they are doing. A Senior Nurse Anaesthetist 2 MH attests:

> …Sometimes you [anaesthetist] may see something and point it out and the surgeon can tell you my brother concentrate on your anaesthesia. Yes, it happens – yes, I have to be frank!

This rivalry intensifies silence in superior-subordinate relationship across speciality. Respondents note that voice is virtually non-existent in subordinate-superior relationship across speciality. According to them, subordinate surgeons or anaesthesiologists hardly dare to suggest to superiors across speciality neither will they be listened to when they do. The following quotations attest:

> If it is with anaesthetist or something, they have their way of doing their things … Then if you are even a junior doctor or a resident you are even a nobody to talk to their boss [anaesthesiologists] in the first place so. You either get a shouting or a talking down to. So, you just keep quiet– Resident 2 MH

> And at my stage [Resident] all the anaesthetists are higher than me in terms of age and experience, education….so I can't walk to theatre and cross to talk to someone like that – Resident 2 KBTH

Although silence in surgeon-anaesthesiologist relation reflects professional courtesy, it is distinct in that it is underlined by power struggles.

However, the power relationship between surgeons and anaesthesiologists quite encourage voice in their respective speciality. According to respondents, surgeons and anaesthesiologists both speak up effectively on patient safety in their respective speciality. For instance, because anaesthesiologists are colleague specialists to surgeons and have autonomous department, they speak up and insist on patient safety standards in anaesthesia. Respondents note that while surgeons easily override nurses on safety concerns, anaesthesiologists do stand their ground

against surgeons on right patient preparations and anaesthesia requirements. They therefore resist surgeons' tendencies to control and force other HCPs such as nurses into compromising patient safety standards. A senior anaesthesiologist states:

> Hey - very easy for us to express concerns to surgeons – we can stop them unlike nurse anaesthetist who could be bullied – Anaesthesiologist 1 MH

This means equal power relationship strengthen voice in surgeon-anaesthesiologist relationship in their respective speciality compared to nurses. However, responses reveal that this power is can be used negatively. According to respondents, although surgeons and anaesthesiologists speak up legitimately to ensure patient safety, this can be ill-motivated. According to them, voice is at times driven by power and control over each other rather than in the real interest of patients. For instance, some respondents note that anaesthesiologists may simply not be pleased with a colleague surgeon leading a surgery or due to the surgeon's bossy posture and may consciously use voice on speciality safety concerns merely as power to impede surgeons. Peri-Operative Nurse 4 MH confirms this in the quote below:

> You know they are all doctors and the surgeon is always the leader of every surgical team. He leads the surgical team and then here is the case you have your colleague who is a doctor and if he or her input doesn't come in the success of your procedure cannot come on. Because you assume to be the leader, I also have power against you

Moreover, surgeon-anaesthesiologist power relationship affects surgeon-nurse anaesthetist power relationship and voice. Besides surgeons and anaesthesiologists collaborating to silence nurse anaesthetists presented earlier, respondents, note that anaesthesiologists do support nurse anaesthetists in some instances against surgeons' tendencies to control nurses. According to responses, although this support is often driven by genuine patient safety, it is at times motivated by powerplay from speciality rivalry. Resident Surgeon 2 MH notes:

> if you ask nurse anaesthetists to do something, they will say they have to tell their bosses [doctor anaesthesiologists] and their bosses will also come and support them

This confirms that although nurse anaesthetists are often powerless in surgeons-anaesthesiologists relationship, they do get some support from anaesthesiologists when they speak up towards surgeons. This support is influenced by the sense of rivalry between surgeons and anaesthesiologists.

4.3.5 Summary of Section

This section presented findings on the implications of professional identity from interdisciplinary power relationships on voice and silence on patient safety in surgery. One of the major findings is that doctors' authority undermines nurses' voice. Doctors' authority enables them to disregard nurses' voice and compel them to compromise on patient safety standards. Consequently, although some nurses feel doctors know better to be corrected, most choose to silence due to resentment and apathy to authoritative posture. For instance, some nurses consciously choose silence as punishment to doctors use of authority and superior knowledge posture that disrespect nurses. Similarly, nurses do choose to talk around patient safety concerns without pointing out the real problem or solution but leave it to doctors to figure it out and fix. Also, nurse anaesthetists are often compelled by surgeons and anaesthesiologists to compromise on patient safety because they are directly placed under an anaesthesia department and headed by doctors. The second major finding is that interdisciplinary power struggle and a quest for control between surgeons and anaesthesiologists has a mixed implication for voice and silence. First, power struggles and a quest for control discourages and resists voice across speciality resulting in silence on important safety concerns. At the same time, because surgeons and anaesthesiologists are colleagues, they speak up on patient safety concerns in their respective speciality compared to nurses. Yet still, power struggles sometimes result in legitimate voice authority in each speciality being used as a control rather than in the real interest of patient safety.

The next major section presents findings on power induced risk to voice in surgery.

4.4 Power Induced Risk to Voice and its Effect on Voice and Silence

4.4.1 Introduction to Section

This major section of findings presents on risk to voice in power relationships and how this affects voice and silence on patient safety in surgery. These findings describe victimisation and ill-treatment suffered by those who speak up in the context of organisational support. Beyond the hindrances posed by power to voice presented in the previous sections of this chapter, power makes voice risky. Findings in this section reflect risk and psychological safety of voice (e.g Milliken et al., 2003; Sutcliffe et al., 2004; Blatt et al., 2006; Detert & Burris, 2007; Detert & Trevino, 2010; Souba et al., 2011) and implication organisational support for voice and silence (Simpson & Lyndon, 2009; Churchman & Doherty, 2010). The section begins with findings on organisational support perspective to risk which demonstrates that the lack of management support is a major source of risk to voice. Next, experiences of victimisations for voice in power relationship is presented. This describes a range of unfair treatments those who speak up are subjected to. Under this, two subsections focus on career risk among subordinate groups [junior doctors and nurses] and nurses. Next, career risk among HCPs is presented. Three subsections under this present on career risk to voice among resident, nurses and military HCPs. Findings in this section contribute to addressing research objective three (3):

To understand and critically evaluate how power of rank and professional identity induces risk of voice and influences voice and silence on patient safety in surgery

4.4.2 Lack of Management Support and Risk to Voice

Management inaction and lack of organisational support emerged as a fundamental and defining factors to voice in power relations. An overwhelming sentiment shared by respondents is the lack of organisational support for voice in hospitals and broader healthcare in Ghana. According to them, besides professional ethics and conscience requiring them to speak up for patient safety, there is no real healthcare and hospital policy that promotes voice and protects those who speak up. As part of these, they note that there is a lack of procedures and working documents to manage voice incidents on patient safety. For instance, they note there are no forms to complete or ways to report critical suggestions that are ignored in surgery. Respondents bemoan the phenomenon, describing how it hinders voice and makes it risky: A resident relates:

> Institutions should add something to their motto that creates an enabling environment for people to speak up and not victimised but there is none! Resident 2 KBTH

Respondents in management roles confirmed the lack of policies on voice on patient safety. One has this to say:

> I do not know about any of such policies where people may insist, and it is documented because if there is no policy then it becomes a word of mouth if there is trouble. And people will say we did insist but he overruled it. But I don't think we are alone I don't think there is any hospital in Ghana that has such policy- Consultant Surgeon 1 KBTH

These are consistent with the lack of policy on voice with healthcare stakeholders. Examining organisational document, professional values and codes of conduct of hospitals and professional groups [e.g. doctors and nurses] showed the lack of clear policies on voice on patient safety. Likewise, the examination of policy documents of stakeholders and regulators of healthcare including Ghana's Ministry of Health showed the lack of clear policy to encourage and protect those who speak up for patient safety. Although policy documents of stakeholders are patient-centred, the lack of clear mention of voice an essential part of this is an important missing link needed to boost and support voice.

Moreover, there is grave distrust in management for support for voice on patient safety. According to respondents although management encourages voice, they perceive this as mere rhetoric that is not backed by action. In their experience and observation, management do not really mean what they say as they leave those who speak up in the lurch. As a result, they note that the fact that potential policies will be administered by the same superiors who oppress them means they cannot trust any management policy that seeks to encourage voice. Consequently, while respondents generally welcome policies for voice, others are sceptical saying they cannot trust management policies to speak up. Nurse Anaesthetists 4 KBTH admits:

> So, I don't know if there is any policy on that but even if there is I don't think anybody will count on that – me I won't take that seriously.

Mistrust in management is also rooted in poor enforcement of surgical protocols. According to respondents, standard operating procedures such as the use of the World Health Organisation (WHO) Safety Checklist are poorly implemented and enforced. For instance, although respondents say WHO safety checklist encourages voice on patients, senior doctors often ignore it at will and are not made to answer questions by management. Most respondents note that standard operations are often disregarded. Consultant Anaesthetist 3 KBTH confidently asserts:

> WHO checklist is pasted there but 70% of the time it is not done. Take it from me – it is not done!

This demonstrates poor implementation and management's enforcement of safety protocols and procedures.

Although findings on the lack of management support apply to the two hospitals, there is quite a better sense of discipline in 37 military hospital which encourages adherence to standard procedures. Responses show that as a military hospital there are stronger disciplinary measures on harmful outcomes. According to respondents, harmful outcomes are strictly questioned to establish what was not said or what was said and ignored. Consequently, HCPs in the military hospital feel more compelled to adhere to standard protocols and speak on certain things to an extent compared to the civilian teaching hospital -KBTH. A house officer narrates:

> Here you are taught not to hide things because if there is a problem and we trace that you could have told us earlier, you could be sanctioned - House Officer 2 37

However, a close examination of responses reveals that team members often speak up in self-protection and defence rather than real prosocial voice for patient safety. This reflects Defensive Voice (Van Dyne & Botero, 2003). The disciplinary approach of the military hospital therefore may not necessarily translate into an ideal sense of support for people to speak up on discretional observations for patient safety. Besides, this observation, respondents across the two hospitals generally note there is a lack of management support and policies for voice. Responses reveal those who speak up are subjected to unfair and ill-treatment as well as career setbacks. These are presented next.

4.4.3 Victimisation for Voice

Responses show different forms of risk to voice including ill-treatments and victimisations. Nearly all respondents share personal experiences or knowledge of unpleasant negative consequences for speaking up for patient safety and defying wrongful or questionable orders of superiors. Risk described by respondents includes career setbacks, being blacklisted, reported for insubordination, and made to answer questions or given query letters unjustifiably without a fair hearing or management support. Responses show these experiences are common in superior-subordinate relationships. As a result, while it is profound among subordinate groups, superior groups are not exempt.

Superior groups such as specialists, consultants and nursing matrons share experiences on the phenomenon. According to them speaking up often incurs the displeasure of higher authorities such as managers who control resources and take major decisions. As a result, speaking makes such authorities to turn a blind eye to subsequent concerns and the personal interest of those

who advocate for the right things to be done. According to them, the fear of being in the bad books of managers or other superiors makes them careful about speaking up. Consultant Surgeon 2 MH warns:

> If you are not careful some statements will go to your senior manager or colleague who is responsible will let the person close his mind against you that tomorrow even if you have something good to offer, he will not listen

This concurs with the observation of an experienced nurse matron:

> When you say the truth, they will say you are stepping on your boss's toes and the next minute it is everywhere, and you are seen as the black cat. So why do you want to talk? – Peri-Operative Nurse Matron 1 MH

Although some of these experiences among superior professionals relate more to contextual safety concerns such as resources and logistics, it equally occurs in real-time patient safety scenarios. For instance, a consultant narrates his ordeals for speaking up and insisting on the right procedures against what some top ranks wanted. He recounts a difficult surgery where the patient has reached a stage termed Disseminated Intravascular Coagulation (DIC), where bleeding becomes uncontrollable because all clotting factors in the body are lost. According to him, the ideal practice is to give the patient clotting factors before carrying out any further procedure. Although he suggested this, the professor surgeon he was working with instructed him to anaesthetise the patient for further procedures, which he knew could be fatal. He therefore declined and insisted that clotting factors be given to the patient to control bleeding first. According to him, although the surgeon resisted his suggestion, he stood his ground until this was done after which he administered the anaesthesia for a successful surgery. Despite this, he recounts being reported for deviant behaviour and caught up in a long battle that ended up with the medical directorate of the hospital. He describes the helplessness of those who speak up in the quote below:

> You may need to stand your ground and insist on some of the things [aftermath of speaking up]. It is not easy; I have been reported severally to my HOD. …they don't like me very much in this hospital - Consultant Anaesthesiologist 3 KBTH

While superior groups are subjected to such ill-treatment, responses reveal victimisation is prevalent among subordinate groups such as junior doctors and nurses. These are presented in the next two subsections.

4.4.3.1 Victimisation of Subordinates and Silence

Subordinate groups report harrowing experiences for speaking up for patient safety. They describe being victimized and subjected to unfair treatments when they speak up on patient safety. According to them, besides not being heeded, they are often reported for insubordination, made to answer questions and given query letters for rightly speaking up or declining questionable and wrongful orders. They note that lack of fair organisational support allows superiors to unfairly punish them for seeking to do what is right for patients. A nurse shares a common experience of subordinates in a quote below:

> …if you even stand by your point and is reported, if you are not able to argue your case out too some are given query letters here and there to answer. Some too you will not know you have been reported you will be there and they will bring your letter- Peri-Operative Nurse 2 KBTH

For instance, Senior Recovery Nurse 5 KBTH recalls being reported to her Head of Department for declining doctors' instruction to administer Atropine to a patient whose pulse level was inappropriate for that drug. According to her, although she explained why that drug could be fatal to the doctors, she was reported for insubordination and had to defend herself. Although some subordinates successfully defend themselves, responses show that justice is rarely served even when they speak up legitimately on patient safety.

According to respondents, superiors are always covered and protected even when they are wrong while blame is pushed on subordinates, who are eventually get punished or unpunished after long ordeals. A cross-section of respondents including very senior ranks admits that justice is rarely served in superior-subordinate incidents. Nurse Anaesthetist 2 KBTH recounts an incident where team members called a consultant to attend to a bleeding patient in critical condition. According to her, the consultant failed to attend to the patient for over 12 hours and when he finally came, he was at the entrance giving instructions on what to do instead of going into the theatre to help. When the patient passed away and a report was written mentioning the name of the consultant, he was angry and asked that his name to be taken off the report on the note that he was not part of the procedure. According to her although team members were quizzed, the consultant was not questioned. In another instance, anaesthesiologist instructed a nurse Anaesthetist to intubate a patient. Unfortunately, after the intubation, the patient suffered a cardiac arrest and died. However, writing a report on the incident, the superior denied being in theatre during the incident and was absolved while the nurse faced trials. She narrates:

> …The man [Anaesthesiologists] denied heaven and earth that he was not in the theatre. His name has just appeared on the report because he is the leader of the theatre. But they covered him up - Nurse Anaesthetist 2 KBTH

These experiences are therefore precedents that affect real-time voice and silence on patient safety. For instance, respondents' note that although they observe patient safety incidents that should be expressed, personal experiences and knowledge of injustices intensify fears of victimisation and incline them to silence. As a result, they admit to approaching imperative patient safety concerns with high sensitivity to risk. Nurse Anaesthetist 5 KBTH reflects:

> Because sometimes you know that this thing that is unfolding when everything gets out there you are a scapegoat. There is a problem, you need to voice out. Now in voicing out, there may be issues and your superior may not come and ask you what happens but will listen to the other person and judge from the person's perspective but not from the two sides

This is consistent with safety consideration to voice (e.g Morrison, 2014). This means only daring observers, who are prepared to endure trials, will speak up. This means there is high inclination to silence in surgery even in imminent harm.

Beyond the conscious consideration of risk prior to voice, others simply choose silence in response to risk. A considerable number of respondents admit that because voice is risky, they opt for silence to keep their peace. Responses reveal subordinates choosing silence on patient safety concerns is prevalent especially when superiors instruct them to do what they know is harmful or not ideal. The following quotes confirm:

> So, for me, I do what you want me to do for you and I go my way - Nurse Anaesthetist 2 KBTH

> So, you decide that this case is not good [patient is not ideal for surgery] but the person will be like - I want you to go ahead. What do you do? You just have to keep quiet. There is nothing you can do – Nurse Anaesthetist 4 KBTH

The sense of vulnerability therefore compels subordinates into silence on harmful clinical concerns.

At the same time, the fear of victimisation restrains subordinates from relaying information on harm by superiors for remedy. Respondents note that it is uneasy, rare and weird to talk about harm caused by superiors or relate the information for remedy. Some relate to harmful or poorly performed surgeries which team members dare not say anything about. A senior specialist surgeon cites an instance while he was a resident. According to him, they realised an intestine they had cut and joined during surgery was turned upside down. When the surgeon was prompted, he simply ignored it and did nothing about it. However, team members could not relay the incident for remedy due to fear of victimisation. He asserts:

> Some people will come and hunt you or they will look for who reported and eventually you may be victimised. And there are stories of victimisation here in the past and all that so people may be a little careful going about this – Specialist Surgeon 5 KBTH

Beyond this, some respondents perceive that subordinates who report harmful acts of superiors are deliberately exposed by authorities. According to these, superiors often have a common interest and perceive subordinates who speak against their colleagues as traitors capable of reporting them. This notion in their view motivates authorities to deliberately divulge informants to suffer victimisation. A Senior Surgical Ward Nurse 1 MH narrates:

> You may go and report, but do you know what will happen? They will call that surgeon and tell him that this particular nurse has come to report you. It like they are in a team

The fear of victimisation therefore does not only restrain subordinates from timely voice interventions but from using formal structures to remedy wrongful acts. The ease at which subordinates are victimized for speaking up legitimately and also restrained from speaking up on harm caused by superiors' points to considerable power gap among HCPs. These findings are underpinned by Approach, Inhibition Theory of Power (Keltner et al, 2003) in that power enhances approach and violation of others while powerlessness increases sensitivity to risk and inhibits approach. Although nurses are part of the general victimisation of subordinates presented, as professional subordinates to doctors, they are further vulnerable. This is presented next.

4.4.3.2 Victimisation of Nurses and Silence

As a professional subordinate of doctors, nurses are further exposed to risk and vulnerability for speaking up. According to respondents, nurses are more vulnerable to risk when they speak up on patient safety. A cross-section of respondents traces the vulnerability of nurses to the lack of impartial organisational support and authority of doctors over nurses in healthcare. They note that when patient safety incidents occur, professional groups [e.g. doctors or nurses] marshal support to defend their members. Nurse Anaesthetist 6 KBTH narrates:

> If an issue comes up now the doctors, nurses, nurse anaesthetists will go and get themselves organised, and say that this thing, we should have done it this way but because we didn't when they ask you to tell them this was how it was done and present the case like this!

Such mobilizations stand in the way of justice and favour powerful professional groups. For instance, nursing respondents lament that mobilization of support on professional lines put

them in a disadvantageous position since most superiors and managers at the departmental and broader hospital are doctors. According to them, this results in an unfair hearing in favour of doctors even when nurses are right. This makes speaking up particularly to doctors on patient safety risky for nurses. Respondents relate to instances where concerns raised by nurses are subsequently used against them because things went wrong. For instance, Surgical Ward Nurse Matron 3 MH recalls a nurse was blamed for the death of a respiratory distress patient after her calling doctors to attend to the patient was not heeded for hours. A consultant surgeon confirms this in the quote below:

> Because I have seen a few occasions especially the nurses, they have a problem with patients they make a report and the thing is turned against them - Consultant Surgeon/Unit Manager 2 KBTH

Moreover, there is a lack of support for nurses within the nursing hierarchy. Nursing respondents note that although doctors actively seek to protect their subordinates and even shield them when things go wrong, they lack support and protection from their superiors. According to nurses, their superiors often do not listen to them on patient care incidents but easily side with doctors to blame and victimize them. Nurses therefore say their superiors and managers wilfully betray them to show loyalty to doctors for selfish purposes. Peri-Operative Nurse 2 KBTH describes:

> On the nursing side, I don't see any support. We nurses are our own enemies. But for favouritism sake and saving ones face they know that in this case what was done isn't right. But to save the face of the so-called boss, they rather come to attack you the person everybody knows is innocent. Just to show that you are on the side of the so-called big person [doctors]

This reflects evidence of superior nurses showing favouritism to doctors to betray nurses (Valentine, 1992; Roberts, 2000; Daiski, 2004). This heightens risk and vulnerability of nurses.

4.4.4 Career Risk to Voice

Another major risk to voice on patient safety among HCPs is career setback. Respondents recount and describe the risk of unpleasant work transfers, resignations and career stagnation associated with speaking up for patient safety. Although responses show career risk to voice permeates ranks and professional groups, it is prevalent among subordinate groups presented in subsequent subsections.

Superior groups such as senior doctors and senior nurses relate to career risk to voice on patient safety. According to them, speaking up on patient safety with higher ranks and hospital

management expose them to career risks and setbacks. They note this incurs the wrath of top ranks who seek to blacklist them in a manner to hinder their career progression. Some recount personal experiences and knowledge of colleagues who resign or are transferred to other hospitals or departments as punishment for being vocal on patient safety. Although some of these experiences relate to voice on contextual hospital concerns such as resources and logistics which are beyond the scope of this study, others relate to real-time patient safety incidents. For instance, a senior nursing matron described her transfer to her present hospital and position as punishment for being vocal against wrong actions of surgeons in theatre. She narrates:

> That [speaking up] has even ended in authorities posting me to this place because virtually I am not too relevant here…But I don't mind that doesn't mean I should keep quiet…. Even if you take me to mortuary I will still talk - A Peri-Operative Nurse/Matron 8 KBTH

Besides such daring personalities who defy odds to speak up, considerable superior ranks admit that career risk makes them careful speaking up. The phenomenon is however profound among trainee doctors, nurses, and military HCPs. These are presented next.

4.4.4.1 Career Risk of Voice and Silence of Residents Doctors

Career risk of speaking up is profound for residents in specialisation training. According to respondents, because residents are in examinable training towards specialisation, they are more susceptible to punitive career risk when they speak up towards trainers. Respondents describe specialisation training as a defining moment in a doctor's career that can easily be jeopardised when trainees are assertive towards trainers, who often have a direct or indirect role in their final assessment. Likewise, respondents note that trainees are dependent on trainers for references and recommendations for future career and job prospects. This makes challenging superiors sensitive and career-threatening for a trainee resident. A cross-section of respondents including trainees and trainers attest to this risk. A Senior Specialist Anaesthesiologist 2 KBTH warns:

> If you are in training how can you go and correct a consultant because he is going to examine you. So, if you are perceived as somebody who correct your bosses, some of them may not take that lightly

Although a few respondents' feel this risk may not be prevalent as often talked about, respondents generally perceive this as real. For instance, resident share strong views on the phenomenon. According to them, besides trainers having a direct role in their exams, they give recommendation and word of mouth report to their peer examiners that can ruin or engender

success in their specialisation. As a result, most residents admit to relating carefully with trainers to avoid falling out of favour with them and getting into their bad books. This they admit leads to silence towards superior trainers. A Senior Resident 3 KBTH shares a common experience of residents in a quote below:

> Normally, we [residents] don't get to talk too much because normally you are scared if you talk too much and the boss – he is the one who will sign you [say you are well trained] for the exams –if this guy doesn't approve you – you are not going anywhere. If he signs you and you go to the exams and he talks to the examiners – this is my boy and I just want him to come and observe what is going on – not that you should pass him but let him have a feel - that is the end[sabotage]. You see! So, you need some of them to talk on your behalf because it is not just that you have written the exams. Someone has to speak for you that – he is good – I trained him so let him go. So, if you have scored all the marks and someone says heeey - this one no no no I think he should come back [re-train]…that is why when they do certain things you cannot talk too much!

This demonstrates that career risk is a major source of risk that silence trainee doctors towards superior trainers. It is important to note that although such fears may not be as real as described, the level of perceived fear by trainees is enough reason for silence.

4.4.4.2 Career Risk of Voice and Silence of Nurses

Nurses, as a professional group, describe experiences of career setbacks for speaking up on patient safety. Although some respondents acknowledge career risk from nursing hierarchies, most trace career risk to doctor's domination and influence within and outside their hospitals. Internally, nurses note that some doctors interpret past voice incidents during interviews as defiance. According to them, this result in failing promotion interviews, not getting deserved promotions, and getting unfavourable appraisals. A Senior Surgical Ward Nurse 1MH narrates:

> …. sometimes if you don't know how to go about it you are marked down – they tag you, so it becomes a problem you see your colleagues being promoted but you go to the interview board you think you performed well but you are not promoted

This level of career risk may be heightened by the semi-autonomous nature of teaching hospitals where considerable processes such as promotions are internalized. Besides, responses show career risk transcends individual hospitals. Respondents note that doctors have a wide scope of influence in broader healthcare settings in the country. According to them, this makes speaking up to powerful doctors risky for career prospects in other hospitals. A senior Nurse Anaesthetist shares his experience and fears in a quote below:

> I went for an interview at some private hospitals where there is better remuneration. When I went to the panel my bosses were on it – about three of them. So, if you are here and you oppose them, they will fail you – you see? So, me my yes sir, yes sir I will do it - Nurse Anaesthetist 1 KBTH

Doctors' sphere of influence in broader healthcare is therefore a source of power that intensify career risk for nurses and undermines their voice.

4.4.4.3 Risk of Voice and Silence among Subordinate Military HCPs

Career risk to voice is further profound for military HCPs. Responses show that besides career risk as HCPs, military HCPs are exposed to career risk in military circles. Respondents note that military HCPs are confronted with negative career consequences in military circles such as lack of promotion and resignation when they speak up and challenge senior military HCPs. For instance, a Senior Surgical Ward Nurse 3 MH describes how a lower military rank nurse, who manages a theatre, resigned after challenging a colonel military surgeon. According to him, the colonel surgeon was using emergency theatre supplies for his private surgeries leaving the theatre with no supplies for emergencies thereby exposing patients to risk. When the theatre manager spoke up against the issue, the colonel military surgeon reprimanded and threatened him with his military rank resulting in the resignation of the theatre manager from the army and the hospital. Responses show that career risk for military HCPs is more sensitive as most senior HCPs in the military hospital are also senior military ranks while most subordinates in terms of healthcare are junior military ranks. The risk of career setbacks also engenders a desire to please superior military ranks. Some respondents describe what is termed 'eye-service' in the military where junior ranks portray acts of blind loyalty and respect to superiors for promotion purposes. Consequently, respondents note that detrimental career consequences of speaking up to authority among military HCPs lead to silence. A Senior Specialist Surgeon 3 MH, who is a military officer asserts:

> if you are in uniform [military HCP] you can't do that [speak up] you will be gaged up – because if your name comes up somebody will just put a red pen by your name confidentially and then you will remain in the same rank for a long time

A civilian Surgical Ward Nurse 1 MH C confirms:

> They call something in military culture 'eye-service'. People want to please their bosses just to get their ranks

Career risk to voice is therefore complex and profound in the military healthcare context where subordinates are often exposed to career setbacks in healthcare and military circles.

Generally, respondents perceive voice on patient safety as risky. Although responses show that HCPs are generally exposed to risk when they speak up, the phenomenon is profound among subordinates and lower professional groups such as nurses. It is therefore evident that risk is reinforced by powerlessness and lack of organisational support for voice and those who speak up. This explains the high sense of risk for speaking up among HCPs. A Peri-Operative Nurse/Matron 1 KBTH affirms:

> Some people say that you go protecting the patient and the patient doesn't know and is gone but you are the one working here, and you are the one going to suffer the consequences of your action

The high sense of risk associated with voice explains why some HCPs simply choose silence or are hesitant to speak up even when harm is imminent.

4.4.5 Summary of Section

This major section presented findings on how risk from power differences and organisational support influence voice and silence on patient safety in surgery. The section establishes that lack of organisational support reinforces power induced risk to voice where superior ranks and professional groups victimize the less powerful ranks and groups who speak up. HCPs who speak up and insist on legitimate patient safety standards or decline to execute questionable procedures are often victimized by superiors without a fair hearing and management support. Although superior groups are not exempt, the phenomenon is prevalent among subordinates such as nurses and junior doctors. Moreover, HCPs suffer career setbacks for speaking up. For instance, career risk and setbacks are severe for residents, nurses, and military HCPs. Resident doctors in specialisation risk passing specialisation training and future career prospects when they speak up against superior trainers. Likewise, nurses in teaching hospitals risk missing promotional opportunities and career prospects in broader healthcare context when they speak up and get into the bad books of powerful doctors. Finally, beyond career risk in terms of healthcare, military HCPs confront career risks including lack of promotions in military circles when they speak up on patient safety and fall out of relationship with senior military HCPs. These risks to voice directly and indirectly lead to silence on patient safety in diverse ways.

The next major section presents findings on how HCPs manage power barriers to voice in surgery.

4.5 Managing Power Barriers to Voice

4.5.1 Introduction to Section

This major section presents findings on strategies HCPs use to manage power barriers to voice described in the previous major sections. HCPs strive to manage power relationships and risk to exercise some forms of voice on patient safety. These findings, therefore, reflect limited research on intermediary voice behaviour (e.g Maxfield et al., 2005; Lewis & Tully, 2009), the role collectivist cultural values in relationships (Hofstede, 1984) and ingenuity in power relationships (e.g Garon, 2006; McBride‐Henry & Foureur, 2007; Gardezi et al., 2009; Malloy et al., 2009; Schwappach & Gehring, 2014a). The section begins by presenting findings on the use of intermediary voice where HCPs speak through third parties instead of actors of potential harm. Next, it presents on the use of rare positive interpersonal relationships to speak up to authority. Finally, it presents the use of ingenious voice strategies that seek to avoid offence to authority and enhance receptivity. Findings in this section contribute to addressing research objective four (4):

To identify and analyse strategies healthcare professionals adopt to manage power barriers to voice on patient safety in surgery

4.5.2 Intermediary Voice

One of the findings is that HCPs leverage intermediary voice to address patient safety concerns in surgery. This is when observers of safety incidents speak through third parties instead of speaking up directly with a target of voice. Virtually all respondents admit to speaking up through others and others speaking through them to address patient safety. Although this often falls short of a direct voice to avoid harm, it is perceived as a real attempt to solve problems amidst obstacles. Consultant Surgeon 1 KBTH reflects:

> … people will use the other approach going to the peers or seniors rather than the direct confrontation. I think that is really an attempt to solve that issue…but in theatre and acute setting that is a difficult one

Responses reveal two major approaches to intermediary voice. First, HCPs speak within ranks or merely follow hierarchy to pass on safety information even when timely voice is required to avoid harm. Secondly, a more active and timely intermediary voice is used to stop or avoid harm.

On a more passive intermediary voice, HCPs use a range of strategies that are generally not active approaches to addressing safety issues. For instance, respondents admit to talking about patient safety primarily among colleagues and strive to solve problems on the blind side of

leaders. This relates to a team disconnect and silence described in the first major section of finding where hierarchy isolates subordinates who are closer to patients from superiors. House Officer 2 MH admits:

> So, then the best way is to keep the information and he or she would then on the blind side of the team would try to correct those problems

Other times, subordinates convey concerns to trusted superiors. According to respondents, although they do keep information and knowledge to themselves, they rarely convey such to similar ranks or superiors they trust. Consultant/Unit Manager 2 KBTH confirms the phenomenon in the quote below:

> I have come across people behind the scene after the thing happens, go and tell somebody I came across this what do you think about it? And I have personally had those kinds of experiences

However, most HCPs who speak up follow laid down hierarchical norms even at the expense of real-time threats to patients. Responses show that HCPs are consciously or unconsciously cultured to follow hierarchy through strict adherence to hierarchy and unheeded voice experiences [presented under, Futility of Voice in Upward Relationships]. According to respondents' personal experiences and observations, it is common to follow routine voice procedures along hierarchy even in emergent situations where timely and direct voice is required. For instance, they note junior ranks report safety concerns to next ranks on the chain of command. Although this is an ideal manner of voice in routine and non-emergent scenarios, responses reveal it is commonly used even in emergencies. According to them, it is an unwritten rule to voice which is considered polite, less confrontational and appeasing to hierarchy. House Officer 2 KBTH observes:

> What I have realised is that the best way to go about things [voicing safety concerns] in this particular hospital is to appease the hierarchy – make sure you go through the hierarchy

Surgical Ward Nurse Matron -1 KBTH confirms:

> …because of hierarchy the junior will not easily approach a higher hierarchy when it comes to speaking. So, you prefer passing it to somebody before it gets to the higher hierarchy so it has affected the way people can correct people on the spot

This also manifests with professional identity. Respondents admit to speaking up through superiors of their professional groups. For instance, nurses speaking through senior nurses to surgeons and junior doctors speak through other senior doctors. This describes how hierarchy controls behaviour. The following quotes confirm:

> If you are a nurse, physiotherapy, a doctor, house officer - you notice something you think is wrong …you just mention to someone in your line of authority - Resident Anaesthesiologists 1 KBTH

> You are all nurses. So, you are able to share your concern with a colleague who may be in a higher rank but not going straight to the doctor or surgeon – Peri-Operative Nurse 4 KBTH

The practice is profound among nurses. Nurse respondents generally admit it is normal for them to talk through matrons on what could be directly related to surgeons in real-time. Nurses describe this as a norm and standard work practice in hesitation. A Surgical Ward Nurse 2 KBTH affirms:

> [speaking through Matrons] I wouldn't say that is the protocol but that is how it is done

A Matron Surgical Ward Nurse 1 KBTH confirms below:

> In general, I can easily approach them [surgeons] than my subordinates. So, they will normally talk to me and I will approach them

Although these range of voice strategies presented up to this stage helps to an extent in less pressing safety issues, these are generally unhelpful for patient safety in emergent scenarios. These strategies reflect a sense of helplessness and acquiescence (Pinder & Harlos, 2001; Van Dyne & Botero, 2003) in an attempt to solve problems.

Beyond these, HCPs actively speak through others in an emergent manner to address safety concerns. According to respondents, observers of wrongful or harmful acts who feel they wouldn't be listened to or do not have the confidence or rapport to speak up, speak through others to intervene in quite a timely manner. A Senior Specialist recounts his experience as a junior doctor. He narrates:

> there was a bleeding vessel that my boss didn't notice so I saw that the whole field was bloody, and I had to find a way of drawing his attention. So, I whispered to one of my seniors and he was able to draw his attention - Senior Specialist Surgeon 1KBTH

Responses reveal that such intermediary voice is imperative when observers have reasons to think their concerns will not be listened to or when they speak up and are not heeded while there is a real threat of harm. A cross-section of respondents share experiences of rushing out of the theatre to call superior ranks to intervene with those who do not accept corrections or suggestions or who they are not able to correct because they know they wouldn't listen.

Respondents note they choose intermediaries who by rank or relationship can compel actors to listen. Specialist Surgeon 6 KBTH narrates:

> Sometimes you may have to use that approach because the person you need to communicate with may not be the kind of person receptive to your critique or the information you are giving…So you try to get someone who they relate with very well or somebody who they are obliged to accommodate and then listen to for the person to deliver that information

This is consistent with the narration of Recovery Nurse 6 KBTH:

> Mostly our bosses are around on the ward. So, if you are doing something and I feel it is not right for the patient, I communicate it to you once and I see that still you are going on, I have to inform someone who is higher than me in hierarchy so that the person can act

Although some responses reveal rare instances where subordinates scrub out of theatre because surgeons or superiors are taking harmful decisions and actions and will not listen to suggestions or warnings, responses generally show team members leverage on higher authorities who are capable of intervening where observers are not capable. This is consistent with the recommendation for an emergent approach of getting third-parties assistance to avoid looming harm in healthcare (Green et al., 2017a).

Besides rank power, the choice of an intermediary is driven by relationships. Respondents admit to choosing intermediaries with whom they have good interpersonal relationships and who also relate well with the voice target. For instance, this explains why subordinates can speak to skip-level ranks to intervene with middle-level professionals who are being recalcitrant. At the same time, based on relationships, intermediaries may not necessarily be higher ranks than an actor but anyone with a good interpersonal relationship with an observer and an actor of harm. For instance, apart from nurses speaking through matrons on professional lines, most junior doctors admit to being comfortable relaying information through matrons to surgeons. House Officer 2 MH narrates:

> … felt more comfortable speaking to the nurse in charge [matrons] of the ward so if we are going on rounds then she will tell my boss [surgeon]

The relationship factor explains why observers can talk to skip-level ranks but may not talk to an immediate superior. According to respondents, although this is a more proactive intermediary voice or emergent intermediary voice important to preventing harm, it does come late for harm prevention and results in complications in certain circumstances. Consultant Anaesthesiologists 3 KBTH reflects:

> sometimes if it is in an emergency situation before you can do all these things it may be too late

The success or failure of emergent intermediary voice will therefore depend on patient safety scenario, swiftness of observers' intervention and the response of an intermediary.

The role of relationships in intermediary voice becomes further evident where team members leverage on interpersonal relationships as a source of power to speak directly irrespective of rank differences.

4.5.3 Rare Positive Interpersonal Relationships

Responses reveal a rare use of rational power through positive interpersonal relationships to speak up in power barriers. Virtually, all respondents note that strong interpersonal relationships permeate rank and professional barriers to enable voice on patient safety. While acknowledging that negative interpersonal relationships equally hinder voice, positive interpersonal relationship is described as a major driver of voice on patient safety. In their experiences, positive interpersonal relationship is not only a prerequisite to voice but makes it easy to suggest or correct team members and superiors. According to them, the kind of interpersonal relationship one has with team members determines one's ability to speak up towards them and if the voice will be heeded. The following quotes confirm:

> … you must have a good working interpersonal relationship with doctors, nurses, anaesthetist, surgeons and all of them to suggest - Recovery Nurse 8 KBTH:

> …relationship is very key because I will ask a surgeon or colleague a question and another person will come and ask the same question a different way but the surgeon is going to respond to you better than the other person despite you said the same thing. So, I think relationship is almost everything – Matron, Peri-Operative Nurse 1 MH

Although respondents use relationship and interpersonal relationship interchangeably, their experiences describe a personal relationship which is driven by friendship rather than a professional relationship that is driven by work values. For instance, Resident 2 MH describes how he easily prompted a superior on a patient who was taking a medication called Aspirin for some other reason unknown to his superior and was to undergo prostatectomy. Knowing this was not appropriate, he prompted the superior and that medication was put on hold for the purpose of the surgery. According to him, the good personal relationship between them made it possible to prompt him. He added he wouldn't have mentioned this with other superiors. This is consistent with the experiences of other superiors who said subordinates speak up on patient

safety concerns with them freely based on a good interpersonal relationship. A Senior Specialist Surgeon 5 KBTH attests:

> One of my colleagues … hierarchically I am ahead of him, but we are very good friends, so we have frank discussions about patients and then he makes his suggestions boldly. He is not intimidated by anything

Power of interpersonal relationship is, therefore an ice breaker to rank and professional power barriers for real-time voice on patient safety. Experiences of respondents show that positive interpersonal relationship is often a foremost motivator for voice in most safety incidents. Subordinate team members such as junior doctors and nurses admit that positive personal relationships pave a way for them to speak up when silence would have been the only option. According to respondents, this breaks down obstacles to voice from ranks, authority gradient and hostile personality factors. House Officer 1 KBTH assets:

> … Some of us are just passing through and we develop relationships along the line and so when I come to a certain ward, it is easy to talk to the people there that I have a strong relationship – House Officer 1KBTH

Similarly, even though most nurses traditionally speak through matrons to surgeons, good interpersonal relationships allow them to speak up directly with surgeons on patient safety. Peri-Operative Nurse 6 KBTH asserts:

> when we have issues with them [surgeons] we don't go directly to them but through our matrons, unless you have a personal relationship with them [surgeons]

Moreover, responses establish that the use of this unique positive interpersonal relationships for voice is common with senior nurses (matrons). According to respondents, these senior nurses, who manage theatres and wards, often have years of rich experience and working relationships with surgeons. This helps develop strong personal relationship bonds that enable these nurses to correct, prompt and suggest to consultants and other senior doctors in a manner that most middle level and junior doctors cannot do. A Specialist Anaesthesiologist 2 KBTH succinctly captures this in the quote below:

> … sometimes you see it is done so beautifully in surgery and anaesthesia. Sometimes you may see a senior theatre nurse who is offering a consultant a word of advice and the consultant listens. …. I think relationship has a way of dissolving all those barriers. Because they have worked with the people, they trust them, they like them, they are their friends and they correct each other.

A resident confirms:

> Across to senior level, hmmmm matrons are closer to the consultants than the junior doctors. For instance, if a matron tells consultant that this is going on in my ward and this is what I want, he is likely to listen better than you a younger colleague- Resident 3 KBTH

Responses from matron nurses confirm this. Considerable nursing matrons admit to being able to speak up with senior doctors when other doctors and nurses cannot. For instance, a matron recalled an instance where a junior doctor who knew a consultant was shaving the wrong side of a patient's head for a burr hole [drilling a hole in the skull to drain fluid] failed to prompt him. However, the junior doctor managed to alert her after the consultant stepped out for her to intervene. She recounts the incident below:

> … it was when the surgeon went out before the junior doctor prompted me; He is shaving the wrong side of the head …. So, I went out and asked him, please have you checked the site well? And he came back and checked truly it was wrong – Matron/Peri-Operative Nurse 7 KBTH

The cultural authority of age also explains the strong interpersonal relationship between senior nurses and surgeons as explained in the first major section of findings. Because most senior nurses and matrons are often older, they command certain cultural authority that mitigates rank and professional power with surgeons and enhances better interpersonal relationship for voice compared to other team members. Beyond this, the role of strong interpersonal relationships is generally explained by collectivist cultural values that encourage strong social and interpersonal ties (Hofstede, 1984; Hofstede et al., 2010; Hofstede, 2011). However, this can be counterproductive in organisations since people do not necessarily need to be friends to work together. These are further discussed in the analysis chapter. Another important strategy in managing power barriers to voice is the act ingenuity to voice. This is presented next.

4.5.4 Ingenuity in Speaking Up

A further finding is that HCPs manage power relationships by being ingenious and circumspect when speaking up. Virtually all respondents attach extreme emphasis on the manner of speaking up. According to them, the way voice is presented is as important as the concern itself and determines whether voice is accepted or rejected. Although respondents acknowledge there are difficult team members who will not accept voice irrespective of how well it is presented, it is generally agreed that voice is often received well and acted upon once concerns are presented ingeniously without offence. Respondents describe this manner of voice as speaking up respectfully and politely. This comprises being indirect, the use of appropriate tones, as well as avoid shouting, embarrassment and appearing to usurp authority. The following quotes illustrate:

> If you are able to come out without causing embarrassment almost everybody accepts what you want to say or will give you a hearing and try to consider what you say – Peri-Operative Nurse/Matron 1 KBTH

> I don't know the word to use but you must do it diplomatically then the person can look at your face and see what you are saying is right. This is what I use to get their ears if I have any concern, they listen to me very well - Nurse Anaesthetist 2 MH

On the other hand, respondents note that lack of circumspection hinders receptivity to voice. According to them, being straightforward, blunt, shouting and not recognizing authority while expressing concerns render very useful suggestions and ideas futile and unheeded. Senior Specialist Surgeon 4 KBTH cautions:

> The point is you also have to know how to carry your message. You can have a very good message but the way you transmit it may make it useless

These suggest that the success of voice does not only depend on the receptivity of the recipient but also the manner of speaking up. Speaking up in a socially acceptable manner is therefore a skill that can be learned especially in teams replete with status disparity.

Responses reveal that the need for ingenuity to voice is reinforced by status disparity. According to respondents, surgery is characterised with professional diversity, status differences and ego., This according to them intensifies sensitivity and touchiness to power where people expect to be spoken to in a certain way based on professional identify and rank. In the experiences of respondents, this can make an innocent and legitimate voice on patient safety offensive to powerful individuals and groups. As a result, respondents see ingenuity to voice as a prerequisite to receptivity in power relations. A Matron Peri-Operative Nurse/Matron 1 MH C shares this:

> … you should know how to talk…Because already in the theatre there is a lot of different groups coming like nurses, doctors, anaesthetist and everyone thinks I am what I am so how you talk is very important and you should know how to do it

Consequently, although ingenuity and circumspection to voice is key across ranks in surgery, it is sensitive and imperative in subordinate-superior relationships. Responses show that ingenuity is imperative and commonly used by nurses and junior doctors towards superiors. Respondents note that it is very difficult to point out mistakes or suggest to superiors directly. As a result, they often find indirect ways of saying things to avoid offence and to enhance receptivity. Nurse Anaesthetist 3 KBTH narrates:

> You cannot tell them [superiors] you are wrong, as much as possible you don't want to sound offending so even if you want to tell them that they are wrong, you may say it in an indirect way but you cannot go directly to say things like that to them

Consultant Anaesthesiologist 3 KBTH recalling his experience on this as a subordinate, describes explicit suggestions or corrections as politically incorrect:

> You can't just say oooh prof I think we should rather do it this way. It will be politically incorrect to say that!

This gives rise to various ingenious strategies to voice on patient safety concerns towards superiors. One of these strategies, according to responses, is that observers of an act deserving of corrections or suggestions often disguise suggestions in a form of questions. According to respondents, although one may have clear ideas on a clinical issue and know exactly what is wrong or right, they would rather put this in a form of a question to superiors than an explicit input or suggestion. This approach is commonly used to avoid appearing disrespectful or usurping authority. House Officers 3 KBTH admits:

> One of the ways I personally use is by asking questions. So, I ask even if I know the thing, I will ask it in a form of a question

Likewise, a Senior Nurse Anaesthetist 3 MH C confirms:

> The best you can do is to tell them [superiors] by effective communication in quote – by putting it in such a way that it doesn't seem you are denigrating authority. So, you put it in a milder way even though it could have been put right as it is when you are in a different setting

Although asking a question is generally acceptable, respondents note that questions must demonstrate a genuine lack of knowledge and not sound instructive. According to them, if the observer's question comes in a certain manner it could lead to unpleasant responses. Resident Anaesthesiologist 1 KBTH warns:

> If your question is coming out as a statement – instructive you are not going to get a perfect feedback from the person you are asking

This explains the experience of a specialist while he was a junior doctor. According to him, a senior doctor mistakenly asked him to prepare a given dose of anaesthesia drug which based on his knowledge of the patient was far below an ideal dosage. However, the fear of challenging authority restrained him from seeking clarification. He, however, decided to follow the given instruction and confirm the dosage in word to the superior while giving it out in the expectation that any mistake will be realised and corrected. Although his strategy succeeded in correcting the superiors unconscious mistake, he was reprimanded for perhaps being incompetent. He narrates:

> what I did was that I still drew the 5mgs and when I was giving it to her I said – madam this is 5 mgs and she turned back to me and said, how do you give this patient 5mgs don't you know this patient need 50 mgs? And I said sorry -Specialist Anaesthesiologist 2 KBTH

Moreover, HCPs attribute inputs to other sources rather than themselves when speaking up on patient safety. Respondents note that it is common for team members to refer to what they have read somewhere from an authority or seen from other senior doctors that are contrary to what is being done rather than saying something is wrong or indicating how it should be done. According to them, this is an easy and common way of putting across suggestions or correcting superiors without attracting attention to oneself. For instance, respondents note that subordinates smartly correct and prompt senior team members by referring to how other senior colleagues went about a given procedure that is different from what is being done. Consultant Surgeon 7 KBTH in his 50 years in surgery observes that nurses and junior doctors often indirectly correct middle-level surgeons by saying things like – 'the boss usually likes to do it this way.' This is when subordinates clearly know what superiors are doing is wrong but cannot say it directly. House Officer 5 MH shares his experience on this with nurses in the quote below:

> Sometimes they [nurses], if they see you going wrong, they can approach you – oooh doctor what you are doing usually the senior doctors don't do it that way, but this way. They have corrected you but in a polite way!

Although ingenuity enhances voice and receptivity in power relationships, it poses limitations to the needed voice for patient safety in acute surgery. Extreme emphasis on ingenuity to voice out of fear of usurping authority means some may simply choose silence instead of voice. This may also come in the way of critical incidents of harm. For instance, respondents note that although a severe threat to life often generates spontaneous voice reactions that can be harsh,

they are extremely careful about such when superiors are involved. Recovery Nurse 9 KBTH attests:

> Sometimes there is spontaneous reaction, so you apologise afterwards that it wasn't intentional. Yet it will be very difficult for you to shout on your superior like that

This suggests that although courtesy is an ideal value that helps overcome barriers to voice, overemphasis on this pose considerable limitations to frank expressions required for patient safety in acute surgical teams.

4.5.5 Summary of Section

This section presented on how HCPs manage power barriers to voice in surgery. One of the key findings is the use of intermediary voice. HCPs speak up within same ranks and attempt to address safety concerns in isolation of superiors or confine voice to routine hierarchy even when they must speak up directly with higher ranks to avoid harm or ensure a better patient outcome. Beyond these, HCPs adopt a more proactive and an emergent intermediary voice by speaking up through other HCPs who by rank or relationship can compel actors in potential harm to order. Secondly, HCPs leverage positive interpersonal relationships to break rank and professional power barriers to successfully speak up on patient safety. This is very common among very senior nurses' and matrons who have worked for years with doctors, become friends with them and have their trust. Finally, HCPs adopt ingenious strategies by being highly discretional and circumspect in speaking upwards to avoid appearing offensive and enhance receptivity. For instance, they disguise suggestions as questions and attribute corrections or suggestions to other sources and authorities rather than themselves. Although these strategies present opportunities for voice in hierarchy, these equally have limitations to effective voice for patient safety in acute surgery.

4.6 Summary of Chapter

This chapter presented findings of research in four thematic sections according to research objectives. The first major section presented findings on rank and sociocultural authority and voice. The second section presented on professional identity and interdisciplinary power to voice and silence. The third section presented on risk of voice in power relations. Finally, the last section presented on how HCPs manage power barriers to voice to exercise some forms of voice on patient safety.

Chapter 5 ANALYSIS OF FINDINGS

5.1 Introduction to Chapter

This chapter presents the analysis of findings in four thematic areas major sections in line with the research objectives. Each section begins with a summary of findings and proceeds to a detailed analysis in relation to literature and theory. The first section presents the implications of rank and sociocultural power on voice and silence in surgery. The second section presents the effect of professional identity from interdisciplinary power relation on voice and silence. The third section presents the risk to voice in power relationships. The last section of analysis presents on how HCPs manage power barriers to voice in surgery. The chapter ends with a theoretical summary of the analysis and the study's conceptual framework.

5.2 Rank and Sociocultural Authority: Voice and Silence in Surgery

5.2.1 Summary of Findings

This section addresses research objective one (1): *To identify and examine how rank and sociocultural power affect voice and silence on patient safety in surgery*. This section found that sociocultural authority reinforces rank power and hierarchy to undermine voice on patient safety. Although the sociocultural authority of age rarely mitigates rank power, this often strengthens formal rank power as most superior ranks are older. Leaders and superiors in surgery exercise extreme power and responsibility in connection to teams and subordinates by taking unilateral decisions and ignoring critical patient safety concerns leading to preventable harm and death. Consequently, besides the inclination to silence in upward relationships, authoritative use of power strengthens apathy and silence on patient safety towards superiors. Moreover, silence is profound at both interpersonal and broad surgical level in authority gradient where leaders and superiors are isolated and disconnected from broader surgical team members. In authority gradient, next rank superior's voice behaviour and sociocultural authority of age either mitigate or reinforce rank power. Finally, military authority interferes and conflicts with healthcare ranks to stifle voice among both military and civilian HCPs in the military hospital.

5.2.2 Implications of Rank and Sociocultural Power on Voice and Silence

This study found that extreme use of power by superior ranks including strict adherence to hierarchy poses a major hindrance to voice on patient safety in surgery. Superiors and leaders appropriate for themselves extreme power and responsibility for patient care which enable them to take unilateral decisions and disregard inputs of team members resulting in avoidable harm and death. Although such extreme use of power manifests across all levels in surgery, it is particularly common with some senior doctors such as surgeons who lead teams. Previous studies found that rank power and authority hinder voice in healthcare (e.g Lempp & Seale, 2004; Edmondson, 2007; Ogle & Glass, 2014; Schwappach & Gehring, 2014b; Schwappach & Gehring, 2015; Reed, 2016; Crowe et al., 2017). For instance, unilateral decisions by leaders and surgeons confirm previous research that surgeons often assume excessive responsibility and control to undertake questionable practises to solve problems in a manner that team members are unable to talk about (Waring et al., 2007; Lewis et al., 2011). These are explained by unequal power in favour of senior doctors in connection to nurses and junior doctors which hinder free expressions on potential harm (Edmondson, 2003; Greenberg et al., 2007). Such unequal power distribution creates unhealthy platforms for teamwork and deprives team members of the required voice for patient safety. Compared to previous research, the level at which superiors use power even at the risk of harm is quite worrying. As demonstrated in this study, superiors and leaders often feel they are in total control. This enables superiors to disregard inputs and show little or no sense of obligation towards team members for their actions and inactions. Besides this being engendered primarily by power inequality, the behaviour of superiors may also be explained by systemic challenges in Ghana's healthcare and surgery. Typically, developing countries like Ghana's surgery is characterised by the lack of or inadequate logistics, faulty equipment, and high workload. The challenges and stress of managing basic logistics and faulty equipment could incline leaders and superiors to the posture of not listening to others and justify unilateral decisions they perceive best under some circumstances which may yet lead to harm. Again, as found in this study, superior power is often legitimised by sociocultural values and norms.

Formal rank power is often strengthened by the sociocultural authority that ascribes extreme respect for older people and superior ranks. Although respect for older people mitigates rank power to enhance upward voice for older team members, age authority often complements rank power to undermine voice since most superiors are older than subordinates. This heightens a sense of authority gradient and makes voice toward superiors an ordeal for young subordinates. These unique findings reflect informal hierarchies (Mousnier, 1973; Diefenbach & Sillince, 2011) and respect for authority which is prevalent in high power-distance cultural

regimes (e.g Sarpong, 1974; Hofstede, 1984; Van der Geest, 1997; Morrison & Milliken, 2000; Yang, 2003; Hofstede et al., 2010). These studies establish the role of social and cultural values in formal relationships in organisations. As established in this present study, sociocultural values and norms manifest as authority in formal power relationships and affect voice and silence in interesting ways. For instance, besides respect for older age, superior ranks are culturally referred to as the 'elderly' translating as the 'superior'. Again, as indicated earlier, because most superiors are older compared to younger subordinates, cultural respect for the authority of age and rank reinforces authority to stifle upward voice. The prevalence of sociocultural authority in the context of formal power relationships is explained by broad socialisation into high power-distance values that ascribe respect to authority (Hofstede et al., 2010). Because sociocultural norms and values define social participation, it is expected that superior-subordinate relationships in hierarchical organisations such as healthcare, especially in high power-distance regimes will be strengthened by these values to inhibit voice.

Another important finding is the considerable unheeded upward voice on critical patient safety leading to avoidable harm and death. This finding confirms previous research (e.g Edmondson, 2007; Waring et al., 2007; Lewis et al., 2011; Ogle & Glass, 2014; Schwappach & Gehring, 2014b; Schwappach & Gehring, 2015; Reed, 2016). However, the extent to which critical interventions on patient safety concerns are ignored as found in this study is quite disturbing. Timely warnings and cautions on critical safety observations are at times ignored. Other times, superiors demand strict adherence to hierarchy when immediate and direct voice is required to prevent harm. For instance, a patient with broken veins died in a surgical ward because a nurse's distress call for a nurse anaesthetist [in the theatre] to help set Intravenous (IV) was declined. It was insisted that the doctor of the patient, who was not available, should call the nurse anaesthetist's superior [a doctor] before she could be released to assist. Similarly, some team leaders and surgeons ignore critical warnings of harm and proceed on life-threatening actions. These corroborate unequal power relationships that enable unilateral decisions of superiors discussed earlier.

Moreover, the considerable evidence on upward voice established in this study is notable. Such upward voice is likely explained by a real sense of altruism and motivation to prevent harm to patients. This is consistent with prosocial voice where people speak up for the interest of others (Van Dyne & Botero, 2003). For instance, HCPs speak up primarily in the interest of patients (e.g Okuyama et al., 2014) and the desire to prevent severe harm has been found as a major impetus for voice in patient care (e.g Kish-Gephart et al., 2009; Detert & Edmondson, 2011). The considerable upward voice in this study quite contradicts extant research that highlights upward silence (Ryan & Oestreich, 1991; Milliken et al., 2003; Maxfield et al., 2005; Detert & Trevino, 2010; Souba et al., 2011; Schwappach & Gehring, 2015). The present finding supports evidence

of some level of voice in upward relationships (Firth‐Cozens et al., 2003; Adelman, 2012; Moore & McAuliffe, 2012) and Deaf Ear Syndrome in organisations (Harlos, 2001; Pinder & Harlos, 2001). This study, therefore, establishes that upward voice is not necessarily lacking as often thought, rather subordinates are silenced by power which in turn reinforces silence. This corroborates a deep sense of apathy and silence among HCPs.

This study found a significant degree of apathy and silence on patient safety which is attributed to superiors' use of power. Extreme appropriation of power and authority manifest in unilateral decisions and unheeded voice experiences that give rise to endemic silence in upward relationships. This is consistent with acquiescence silence (Van Dyne & Botero, 2003) and Deaf Ear Syndrome (Peirce et al., 1998; Harlos, 2001). Consequently, although the evidence on upward silence is consistent with previous research (Ryan & Oestreich, 1991; Toft, 2001; Milliken et al., 2003; Maxfield et al., 2005; Detert & Trevino, 2010; Souba et al., 2011; Schwappach & Gehring, 2015), this study demonstrates that silence is often motivated by superiors abuse of power. For instance, superiors' use of power makes subordinates feel they have little or no responsibility in patient safety and thereby inclining them to apathy and silence. The emphasis on superior power also heightens the fear of usurping authority and appearing disrespectful, especially when perceived safety concerns contradict superior's decision or action. These are explained by power disparity in surgery which is reinforced by prevalent high power-distance values in Ghana (Hofstede et al., 2010). The sense of power and powerlessness of team members therefore manifests in professional relationships as behaviour described in Approach, Inhibition Theory of Power (Keltner et al., 2003). For instance, superiors and leaders propensity to make unilateral decisions and impede legitimate voice on patient safety reflects a sense of power while subordinates inclination to restrain and choose silence reflects a sense of powerlessness (Keltner et al., 2003).

Another important finding is that sociocultural respect for authority reinforces apathy and silence. Although silence of some HCPs is rooted in sociocultural respect that perceives superiors as knowing better, most are silent because they feel socially and culturally compelled to conform to respect to authority. They do not believe superiors always know better, neither do they feel it is right to withhold voice out of respect for authority but succumb to this out of helplessness. This reflects 'thin' acquiescence in domination where subjects are compelled to conform to values that dominate them despite not actively believing in these (Scott, 1990). As found in this study, subordinates do not actively believe in values and norms that keep them in silence towards senior ranks or older people but are coerced into conforming to these out of helplessness. This quite contradicts implicit theories that say some subordinates choose silence because they simply feel it is inappropriate to speak up to authority (Kish-Gephart et al., 2009;

Detert & Edmondson, 2011; Morrison, 2014). The present finding suggests that subordinates may not necessarily be happy with shared norms on unequal power in high power-distance regimes as often thought (Hofstede, 1984; Hofstede et al., 2010). This means established cultural values and norms equally give rise to acquiescence silence when people do not actively believe in these but are compelled to conform.

Although this study does not attempt to overlook other important predictors of voice, it demonstrates that power and its use is fundamental to voice and silence. For instance, while team members may have the necessary clinical knowledge to speak up, they may not be listened to when they do. Other times, they may simply resort to silence due to apathy and resentment to the authoritative posture of superiors. This implies that management effort at promoting voice should focus on mitigating power barriers by promoting shared responsibility in teams and encourage superiors to have a listening ear than encouraging subordinates to speak up. The implications of rank and sociocultural authority on voice and silence become profound in authority gradient. This is presented next.

5.2.3 Voice and Silence in Authority Gradient and Hierarchy

The study found that rank disparity deepens work and psychological barriers among HCPs to intensify silence at interpersonal and broad surgical levels. Rank disparity isolates and disconnects leaders and superiors [e.g. specialists and consultants] who take big patient decisions from subordinates [junior doctors and nurses], who are close to patients and are privy to safety information. Previous research has established how authority gradient and hierarchy stifle voice in healthcare (Waldman & Yammarino, 1999; Samuel et al., 2012), create a code of silence (Rosenthal & Sutcliffe, 2002) and lead to harm (Blatt et al., 2006; Belyansky et al., 2011). This study gives a graphical illustration of how this develops at interpersonal and broad surgical levels. It found that career progression and hierarchy tend to isolate superiors from broader HCPs in surgery. As a result, superiors often lead surgical teams from 'the outside' without becoming an integral part of teams. This explains why most surgical team members lack personal identification to speak up to consultants they have worked with for years. This has important application in the Tuckman Model that describes stages of team development namely: forming, storming, norming, performing and adjourning (Tuckman, 1965; Tuckman & Jensen, 1977). The stage of 'performing' is where team members have gone through rough stages of knowing individual and team dynamics termed 'storming' and proceed to build cohesion necessary for effective teamwork. However, because entrenched hierarchy isolates superior and subordinate groups, surgical teams may not develop through 'storming' to 'norming' and 'performing' to an

ideal atmosphere for voice despite working together for years. Although effective team building could be hindered by other factors, hierarchy and authority gradient in no small way deprive surgical teams of the needed interpersonal access for bond and cohesion for effective voice. This is consistent with previous findings that teams may never get to normalization and performing stage as suggested by Tuckman (Rickards & Moger, 2000b; 2000a).

The phenomenon equally explains rank disconnect and silence between superior and subordinate groups at a broader surgical level. This means important patient observations and information held by subordinates, who are closer to patients, rarely get to superiors who take major surgical decisions. This explains why subordinate groups such as nurses and junior doctors often choose to talk among themselves and strive to solve problems in isolation of superiors. This means instead of subordinate and superior groups working in tandem, they literally work in isolation in an atmosphere of silence. Findings further reveal that next rank voice behaviour and cultural authority play active roles in voice and silence in authority gradient. These are presented in the next two subsections.

5.2.3.1 Next Rank Voice Behaviour and Voice and Silence

The study found that next rank superior's voice behaviour has a profound effect on voice and silence in hierarchy in that when immediate superiors speak upward and are heeded, subordinates turn to exercise some level of voice towards skip-level ranks. However, when immediate superiors do not speak up towards upper ranks or speak up but are not heeded, subordinates give up speaking towards skip-level ranks. This further limit voice of subordinates whose immediate superiors do not speak up towards next ranks or are not listened to when they do. The phenomenon is quite common with nurses, who by professional identity are often restrained from speaking up to doctors. The finding reflects the complex role of skip-level superiors' influences on employee voice behaviour in organisations (Detert & Trevino, 2010; Liu et al., 2013). Detert and Trevino (2010) found that subordinates turn to be silent when their immediate superiors lack the power to execute actions or fail to voice in support of what they say in the presence of higher ranks. In light of the present finding, it is important to note that immediate superiors' ability to speak up or be heard in upward relationships lessen sense of authority gradient for subordinates and encourages them to speak up as well. On the other hand, next immediate superiors' inability to speak up or not being heard in upward relationships intensify authority gradient and risk in voice towards skip-level ranks for subordinates. Moreover, when immediate ranks are silent, subordinates speaking up to skip-level ranks may imply disrespect to either or both superiors. This resonates with the finding of Schwappach and Gehring (2014b) that culturally it becomes nearly impossible for lower ranks to speak up to skip-

level leaders on patient safety concerns when their immediate supervisors are unable to speak up. A broader implication of sociocultural authority in authority gradient is presented next.

5.2.3.2 Cultural Authority and Voice and Silence

As indicated earlier, this study found that sociocultural authority of age either reinforces or mitigates formal rank power to affect voice and silence on patient safety among HCPs. In terms of encouraging voice, older subordinates leverage age authority to better speak up with superior ranks compared to younger subordinates of the same rank. This explains why older junior doctors and nurses often have a better voice opportunity with senior doctors. Nevertheless, age and rank power often complement each other to reinforce authority and silence since most superior ranks are also older than subordinates. This explains why young subordinates are deprived of voice towards older superiors, who are literally perceived as 'fathers' or 'mothers.' It is important to note that because high power-distance cultures accord older people with respect, this serves as a social power which gives older subordinates a better voice opportunity with superior ranks. On the other hand, age disparity further restricts young subordinates' social relationship with older superior ranks and stifle voice. Although the latter may have good relationships, this often reflects typical superior-subordinate or father-son relationships in high power-distance cultures that have little room for honest professional voice required for patient safety.

These findings are underlined by high power-distance cultural values and norms (e.g Masalika, 1994; Rooney, 2007; Hofstede et al., 2010; Sesanti, 2010) but offer a rare insight and unique contributions to voice literature. This study establishes that superior rank power is actively enforced or mitigated by sociocultural elements to shape voice behaviour in a more complex manner in high power-distance regimes such as Ghana. In broader implications, rank authority will be sophisticated in high power-distance regimes where authority is not merely formal but cultural. Although age authority can have a positive effect on voice on patient safety, this is often limited when teams have superior ranks who are generally older compared to younger subordinates. This means age composition in teams will be an important determinant in how sociocultural authority of age moderates rank authority to affect voice and silence. This study, however, found that gender plays a marginal role in voice and silence compared with age. This suggests that the role of gender may be diminishing in modern healthcare compared to the past when nursing was a traditional role of females in connection to male-dominated doctors. For instance, while there is an increasing number of male nurses and there are equally more female

doctors who occupy different superior roles and specialisations just like their male colleagues in modern healthcare. This is expected to balance the gender power relations among HCPs.

5.2.4 Military Authority and Voice and Silence

This study establishes that military authority interferes and conflicts with healthcare authority to impede voice among both military and civilian HCPs. In terms of how this affects voice among military HCPs, military authority often reinforces healthcare authority or overrides healthcare authority to undermine voice on patient safety. Military HCPs are more bounded by core military ranks and authority in the discharge of healthcare. This makes upward voice difficult for military HCPs, especially as most superior military ranks are also superiors in terms of healthcare ranks. Besides, military authority at times overrides superior healthcare authority and stifle the voice of senior healthcare professionals who are civilians or subordinates in terms of military rank.

These unique contributions to voice literature in military healthcare context are explained by the typical characteristics of the military. The military is a regimental organisation that is characterised by hierarchy, order and respect for authority (e.g Burk, 1999; Soeters et al., 2006; Wilson, 2008). Beyond this, it is important to note that these military values are further strengthened by high power-distance values prevalent in Ghana. As a result, the partnership of the military and healthcare is expected to generate frictions or reinforce authority. For instance, although management claim healthcare rank precedes military ranks in healthcare, because the hospital is managed by the military, it is quite difficult to put healthcare ahead of the military in practise. It is also important to note that because the military is a regimental organisation with deterring disciplinary measures, it has a stronger influence than healthcare. Meanwhile, because senior military ranks are not always superiors in terms of healthcare, this presents potential conflicts in day to day patient care between professionals with different healthcare and military ranks. This explains why military authority at times interferes and conflicts with healthcare to undermine voice on patient safety. However, beyond this conflict, military and healthcare authority often complement each other to reinforce authority gradient and stifle voice. As found in this study, most superior military ranks are also superiors by healthcare ranks while junior military ranks are subordinates in terms of healthcare. This reinforces authority gradient in both military and healthcare professional fronts and explains why upward voice is generally difficult among the military HCPs compared with civilian HCPs. For instance, a military corporal nurse will find it more difficult to speak up to a colonel surgeon compared to a civilian nurse.

Despite the limitation to voice imposed by military authority among military HCPs, the general military authority and entitlement equally stifle voice among civilian HCPs. The typical military

approach of command intimidates some civilian HCPs into silence. This explains why experiences of being shut down and ordered to be quiet are more prevalent in the military hospital than the civilian hospital. Similarly, a sense of military entitlement leads to the appropriation of power by military HCPs to silence civilian HCPs, who may be of equal or superior ranks in terms of healthcare.

These are unique findings to voice literature in the civilian-military healthcare context. It reflects challenges in military-civilian power relations in broader society, national governments and political regimes (Burk, 2002; Schiff, 2008; Owens, 2010). These findings are therefore explained by the general culture of the military and sense of friction between the military and civilian healthcare professionals. First, core military culture and values such as obedience and respect for authority are autocratic and contrary to ideal surgical values such as teamwork and voice. As a result, a military hospital that has considerable military workforce is expected to be quite authoritative and potentially intimidating to civilian HCPs. Moreover, it is important to note that although the hospital has both civilian and military HCPs, it is a military facility managed by the military. Consequently, broader hospital structures, management and policies are driven by the military, which can easily be used in favour of the military. This explains power appropriation at both hospital and individual levels against civilians in professional relationships. This means while military culture heightens authority in upward relationship to stifle the voice of military HCPs in military circles, it generally strengthens the authority of military HCPs to silence civilian HCPs. What is interesting is that the military authority over civilians manifests more at the senior HCPs level than among lower ranks. This may be due to higher stakes of power at superior rank levels where the military will be more interested in securing control. Silence in upward relationships towards superior military ranks as well as military HCPs inclination to silence civilian HCPs is therefore explained by a sense of power and powerlessness inherent in power inequalities described earlier (Keltner et al., 2003; Hofstede et al., 2010).

As presented in this section, general superior power and sociocultural authority affect voice and silence on patient safety in surgery in complex ways. Military authority prevalent in the military healthcare settings adds unique power dynamics that further inhibit voice.

The next major section of analysis presents the implications of professional identity from interdisciplinary power relations on voice and silence in surgery.

5.3 Professional Identity and Interdisciplinary Power: Voice and Silence in Surgery

5.3.1 Summary of Findings

This section of analysis addresses research objective two (2): *To examine how professional identity from interdisciplinary power relationships affects voice and silence on patient safety in surgery*. The study found that professional identity and interdisciplinary power has a multifaceted effect on voice and silence in surgery. Doctors' professional identity and power enable them to disregard nurses' voice and even compel them to compromise on patient safety standards. As a result, although some nurses would not speak up because they simply feel doctors know better, most are silent due to apathy to doctors' use of authority especially on perceived core roles of doctors. For instance, many nurses consciously choose silence as punishment to doctors' use of authority and pride which tend to belittle them. Beyond this, the study establishes unique powerlessness and silence of nurse anaesthetists, who by hierarchy are placed under the anaesthesia department and headed by doctors. Besides the unequal doctor-nurse power relationship, a sense of an equal interdisciplinary power relationship between surgeons and anaesthesiologists promotes and undermines voice. The surgeon-anaesthesiologist relationship is marked by speciality pride over knowledge and power struggles in a manner that discourages and resists voice across speciality. At the same time, as colleague doctors, they speak up and insist on patient safety standards in their respective speciality compared to nurses who are overridden on safety concerns in their professional domain by doctors. Nevertheless, power struggles and a sense of rivalry between surgeons and anaesthesiologists often lead to ill-motivated voice as a way of control which is often not in the real interest of patient safety.

5.3.2 Doctor-Nurse Power Relations: Voice and Silence

A central finding in this section is that professional identity from interdisciplinary power relationship undermines nurses' voice towards doctors on patient safety. Considerable nurses' voice on patient safety is unheeded and overridden by doctors. Beyond this, doctors use coercive power to compel nurses to undertake perceived harmful and questionable procedures even in the core work domain of nurses. Surgical ward nurses, theatre nurses and nurse anaesthetists are often coerced by doctors to prepare or anaesthetise patients who are not ideal for surgery or have not undertaken appropriate tests for given procedures. This contrasts nurses' hesitation to speak up on safety concerns perceived as core roles of doctors.

Although this finding reveals a startling exercise of doctors' power over nurses, these reflect doctors' socialization into knowledge and leadership (Hall, 2005; Whitehead, 2007; Lingard et al., 2012) and power discrepancy in the doctor-nurse relationship that stifles nurses' voice (Edmondson, 2003). It is important to note that doctors' power over nurses is a major phenomenon in healthcare across countries (e.g Malloy et al., 2009). For instance, in the UK, Kellie et al. (2012) found that nurses are often hindered by hierarchy to challenge doctors' behaviour that violates infection control protocols. Nevertheless, the unusual use of power in this present finding more accurately support evidence of doctors' inclination to control nurses in high power-distance regimes and developing countries. For instance, it has been found that surgeons flout safety rules and disregard nurses' voice leading to harm in African healthcare context (Aveling et al., 2013; Aveling et al., 2015). This is explained by high power-distance values which often intensify authority gradient between doctors and nurses. This is further elaborated subsequently in this section.

Another notable finding on doctors' professional authority is knowledge power. This study found that nurses are often belittled based on a strong shared norm that perceives doctors as an embodiment of knowledge. Doctors' knowledge authority is aligned with their years in education and training. For instance, in Ghana, it takes six years to complete medical school and about seven years of training to become a specialist. It therefore takes about thirteen years to become a specialist compared to three or four years of nursing training. The duration of doctors' education is often used to ridicule and belittle nurses. Previous research attests that doctors justify their superior knowledge and unilateral decisions in connection to nurses by their longer duration of education and training (Baker et al., 2011; Lingard et al., 2012). For instance, in Canada and the United States of America, specialist physicians completing a minimum of six years formal education and training after the completion of an undergraduate degree is a common basis for superior knowledge over nurses (Lingard et al., 2012). However, it is important to note that doctor's superior knowledge posture based on years of formal education may not be a tenable argument since nurses equally undertake further healthcare studies after their initial education. Besides, nurses often have considerable years of surgical experience that may be commensurate with or perhaps be more relevant to patient outcomes than the years of doctors formal training. For instance, superior knowledge doctors do not substitute for important safety observations by nurses, who are often closer to patients.

As indicated earlier, professional subordination of nurses to doctors is further explained by unequal power distribution in favour of doctors as a superior professional group in high power-distance regimes (Hofstede, 1984; Hofstede et al., 2010). This strengthens authority gradient in the doctor-nurse relationship. For instance, Aveling et al. (2013) found that hierarchy poses a

major hindrance to implementation and compliance with the WHO safety checklist in African hospitals than UK hospitals. Similarly, this study found that while nurses strive to adhere to the safety checklist, senior doctors such as surgeons flout checklist procedures and sometimes ignore it altogether. Although systemic factors such as workload and resource constraints may partially explain these, unequal power remains fundamental to doctors' propensity to control and flout safety standards against nurses' voice in most developing countries. As explained in Approach, Inhibition Theory of Power (Keltner et al., 2003), because nurses have a low sense of power as a professional group, they are inclined to restraint and inhibited behaviour such as silence.

Another important finding is the endemic apathy and silence of nurses on patient safety towards doctors. Although some nurses simply feel doctors know better to be corrected, most nurses are silent due to resignation to doctors' use of authority and superior knowledge posture that tend to belittle them. Previous research has predominantly attributed nurses' apathy and silence to unfavourable hierarchy and organisational support (Sinclair, 2000; Rodney et al., 2002; Newton et al., 2012). For instance, nurses active voice on patient safety it is often frustrated by doctors domination giving way to resignation (Newton et al., 2012). Favourable organisational support for doctors makes nurses' voice fruitless (Mitchell & Ferguson-Pare, 2002; Simpson & Lyndon, 2009). Beyond confirming these, this study establishes that a deep sense of apathy towards doctors' use of power and superior knowledge posture is a subtle but major cause of silence among nurses. Although this use of power is an integral part of hierarchy, this study found that the sense of apathy towards doctors on this plays a key role in nurses' silence than often thought of.

For instance, beyond direct silence, this study found nurses exercise silence under the disguise of voice due to apathy to doctors' authority and superior knowledge posture. Nurses generally perceive doctors as authoritative and proud professionals who do not expect to be corrected. As a result, nurses often choose to describe general observations about patients without saying what they [nurses] know as the real problems or solution but leave it to doctors to figure it out. Some of these may be explained by nurses' uncertainty about safety and the fear of appearing disrespectful to doctors by telling them what to do. However, it is important to note that because nurses resent doctors authority, it is easy for them to consciously make blanket indications to problems to partially satisfy professional obligation while leaving the burden of patient responsibility on doctors. Consequently, while this reflects the Doctor-Nurse Game where power relationship make nurses circumspect in correcting doctors (Stein, 1967), it more accurately describes apathy towards doctors. The finding is consistent with the description of voice and silence as a multifaceted phenomenon that is not limited to the presence or absence

of speech (Pinder & Harlos, 2001; Van Dyne & Botero, 2003). As this study establishes, nurses consciously choose to speak around problems broadly to doctors but consciously withhold what they know as the actual problem or what can be done about it.

Moreover, another interesting finding on apathy and silence towards doctors' authority is that nurses consciously choose silence as punishment to doctors' authority and superior knowledge posture that disrespects them. Although this may also explain why nurses choose to talk around patient safety without telling doctors the actual problem, this represents a clear ill-motivated behaviour as punishment to doctors. This is therefore quite distinct and represents a higher form of apathy towards doctors. As expected, team members who feel disrespected are most likely to withhold important observations and information, especially towards those who look down upon them. Previous research found the lack of professional recognition and respect for nurses who are often looked down upon, disrespected and even demeaned by doctors (e.g Sirota, 2008; Malloy et al., 2009; Simpson & Lyndon, 2009; Aveling et al., 2015). The present finding further demonstrates that professional disrespect for nurses directly undermines their voice on patient safety. This means while mutual professional respect of team members encourages voice, disrespect and belittling engenders silence.

Findings on the doctor-nurse power relationship confirm research that entrenched subordination of nurses to doctors undermine nurses' voice on patient safety (e.g Stein, 1967; Mitchell & Ferguson-Pare, 2002; Daiski, 2004; Sirota, 2008; Malloy et al., 2009; Simpson & Lyndon, 2009; Churchman & Doherty, 2010). These findings generally contradict research that the traditional doctor-nurse relationship is changing and allowing nurses to better speak up to doctors (Stein et al., 1990; Svensson, 1996; Snelgrove & Hughes, 2000).

The present findings suggest that although nurses are increasingly being empowered and are knowledgeable enough to speak up to doctors, little has changed in the status quo of this power relationship. This means while the lack of clinical knowledge is often cited for nurses' silence, they may have the requisite knowledge and speak up but may not be listened to or simply choose silence due to apathy and resignation to the authority of doctors. This does not suggest that nurses do not have successful voice experiences with doctors. For instance, nurses may speak up to doctors based on other favourable factors such as personal relationships and personality factors. However, professional identity from interdisciplinary power relationship generally undermines nurses' voice towards doctors.

Beyond the general powerlessness of nurses towards doctors, this study establishes that nurse anaesthetists experience unique powerlessness towards doctors in surgery. This is presented next.

5.3.2.1 Power Relation and voice behaviour: Nurses Anaesthetists and Doctors

Another unique finding is that surgeons and anaesthesiologists often collaborate to deprive nurse anaesthetists of power and voice. Compared to other nurses, nurse anaesthetists in the study hospitals are hierarchically placed directly under anaesthesia department and headed by doctors (anaesthesiologists). Nurse anaesthetists therefore report and take instructions from anaesthesiologists, unlike other nurses who are directly managed by matrons. However, when nurse anaesthetists refer safety concerns to anaesthesiologists, surgeons often communicate directly with anaesthesiologists to convince them about the safety of procedures. Anaesthesiologists then instruct nurse anaesthetists to ignore safety concerns and undertake procedures. Nurse anaesthetists are therefore either directly compelled by surgeons, as presented earlier in the doctor-nurse power relationship, or silenced through anaesthesiologists.

Although nurse anaesthetists rarely get support from anaesthesiologists on some safety concerns raised with surgeons, they are often forced to compromise due to a more collegial partnership between doctor superiors as specialist colleagues. Consequently, although the surgeon-anaesthesiologist relationship is marked by power struggles, these get on well against subordinate nurse anaesthetists to get their bidding done although this may fall short of standard practises. The profound level of the phenomenon in KBTH compared to 37 Military Hospital is explained by the composition of nurse anaesthetists and anaesthesiologists. KBTH is a bigger teaching hospital with more anaesthesiologists to whom nurse anaesthetists are subjected to and therefore have little or no direct decision-making power in connection to doctors, especially surgeons. This further disempowers nurse anaesthetists in KBTH. However, because 37 Military Hospital has only a few anaesthesiologists, nurse anaesthetists are quite indispensable in day to day patient care. As a result, anaesthesiologists seek to empower nurse anaesthetists in 37 Military Hospital since they [anaesthesiologists] are busier and may not be available for contact physically or by phone calls during every surgery compared to KBTH. This quite empowers nurse anaesthetists in 37 Military Hospital and gives them better decision-making power, especially towards surgeons as compared to KBTH.

This powerlessness of nurse anaesthetist is distinct and a peculiar finding in light of the general doctor-nurse power relationship. The finding adds empirical evidence to the observation that surgeon-anaesthesiologist power relations have a prevalent effect on nurses' voice (Cooper, 2018). This generally confirms the powerlessness of nurses in relation to doctors (e.g Malloy et al., 2009; Reed, 2016) but quite contradict previous research that traditional top-down surgeon-nurse anaesthetist relationship is increasingly being challenged (e.g Lingard et al., 2002; Aberese-Ako et al., 2015). For instance, a study in Ghana found that nurse anaesthetists better challenge surgeons on patient safety than other nurses (Aberese-Ako et al., 2015). It is important

to note that the critical role of anaesthesia generally empowers anaesthetists, including nurse anaesthetists, in relation to surgeons. However, as nurses, nurse anaesthetists remain quite restrained by doctors' professional identity and power. Further to this, nurse anaesthetists' level of autonomy in different hospitals will affect their ability to challenge doctors. As found in this study, nurse anaesthetists are directly placed under doctors by hierarchy and are headed by anaesthesiologists. This defeats nurse anaesthetists' sense of autonomy and independence to challenge surgeons and doctors on patient safety. This suggests that nurse anaesthetists in other hospitals who are not directly subordinated to doctors but work as independent professionals can better challenge doctors and surgeons. In the context of broader nurses' experience, this reveals that although healthcare hierarchy subordinates nurses to doctors, a sense of autonomy from being an independent professional group and managed by nursing managers quite empowers and enhances nurses' voice. On the other hand, the powerlessness of nurses is heightened when hierarchy directly allow doctors to manage them as in the case of nurse anaesthetists as this study establishes.

Next, the analysis of interdisciplinary power relationship between surgeons and anaesthesiologist is presented.

5.3.3 Surgeon -Anaesthesiologist Power Relations

A further major finding is that a sense of equal interdisciplinary power between surgeons and anaesthesiologists leads to power struggles and a quest for control that both encourages and discourages voice on patient safety. In terms of how this undermines voice, surgeons and anaesthesiologists working relationship is characterised by power struggles and a quest for control as to who is superior in surgery. Although surgeons generally lead surgery, the lack of clear convention on who is the leader in surgery makes this contestable. This power scenario significantly hinders voice when a surgeon or anaesthesiologist is unhappy that the other is leading. For instance, an anaesthesiologist who is unhappy with a colleague surgeon leading may choose silence on perceived safety concerns as a way of leaving problems for the surgeon to figure out and fix. This reflects the Diffusion of Responsibility where people turn blind eye to emergencies they are not solely observing (Darley & Latané, 1968). However, the phenomenon between surgeons and anaesthesiologist is underlined by power as elaborated subsequently. Besides the inclination to overlook safety concerns, power struggles and a quest for control most often manifest in extreme claims of autonomy over speciality knowledge and expertise. Each speciality therefore gives little or no opportunity to the other to speak up on patient safety across speciality. The fear of appearing intrusive and invoking the wrath of colleagues therefore

generally hinder voice across speciality and makes voice almost impossible in superior-subordinate relationships across speciality.

These are unique findings in surgeon-anaesthesiologist power relationship. Previous research examined surgeon-anaesthesiologist relationship in terms of power and conflict (Fox, 1994; El-Masry et al., 2013; Cooper, 2018; Helmreich & Merritt, 2019) without exploring how these affect voice and silence. In terms of conflict in professional values, while surgeons are generally proactive and tend to focus on getting rid of patients immediate problems, anaesthesiologists are more pessimistic and pay attention to broader safety considerations in surgery (Fox, 1994; El-Masry et al., 2013; Cooper, 2018). Besides, Helmreich and Merritt (2019) found that the ultimate authority between surgeons and anaesthesiologists is often unclear in surgery. Although surgeons generally lead surgery and have the power to plan surgical procedures, the critical role of anaesthesia makes anaesthesiologists indispensable in surgery (Fox, 1994; Aberese-Ako et al., 2015; Helmreich & Merritt, 2019). Previous research, therefore, helps explain the present findings. For instance, a sense of rivalry between surgeons and anaesthesiologists explains why they contend for power and control in a manner that undermines voice. Again, a sense of rivalry, the lack of a clear line of authority and a quest for control between surgeons and anaesthesiologists suggest that proactiveness by either may be perceived negatively as an appropriation of power. Meanwhile, because surgeons often lead in surgery (Fox, 1994) and are often perceived as aggressive and dominating (Mitra et al., 2003), this may displease anaesthesiologists to contest for control or choose silence as punishment to surgeons who lead surgical teams.

Moreover, although the differences in professional values between surgeons and anaesthesiologists (Fox, 1994; El-Masry et al., 2013; Cooper, 2018) could be used in synergy for patient safety, power struggles and a quest for control explain its negative use to undermine voice. As this study establishes, surgeons and anaesthesiologists exercise excessive claim to speciality knowledge and expertise as a source of power and control that resist and discourage voice on patient safety across speciality. This almost makes upward voice across speciality impossible. This is understandable because if consultants can rarely express safety concerns to one another across speciality and are resisted when they do, how can a lower rank speak up across speciality to a superior rank? Power struggle therefore results in the negative use of speciality knowledge to limit teamwork and voice across speciality. Meanwhile, because it is often easier to notice potential harm as an observer than an actor in a procedure, silence across speciality can be detrimental to patient safety.

Despite the hindrances to voice across speciality, this study found that surgeons and anaesthesiologists do speak up and insist on patient safety standards in their respective speciality compared to nurses, who are dominated by doctors. For instance, anaesthesiologists confidently resist surgeons' inclinations to control and breach of patient safety standards. This is expected since surgeons and anaesthesiologists as colleague doctors would not give in to intimidation or coercion as evident in the doctor-nurse relationship. At the same time, the study establishes that the effective voice of surgeons and anaesthesiologists in their respective speciality can be ill-motivated as power of control rather than for real patient safety interest. This corroborates the earlier presentation on the negative use of speciality knowledge and expertise to hinder voice across speciality. It substantiates previous research on power and conflicts in surgeon-anaesthesiologist relationships (Fox, 1994; Aberese-Ako et al., 2015; Cooper, 2018). The negative use of power therefore overshadows professional values and teamwork needed to drive genuine voice for patient safety. As a result, although surgeons and anaesthesiologists do speak up in their respective speciality, these are not always driven by genuine patient safety interest but can be a mere exercise of power over each other. A sense of power and powerlessness in the surgeon-anaesthesiologist relationship therefore transcends rank power to speciality knowledge. This equally reflects a sense of power and powerlessness (Keltner et al., 2003). As a result, although surgeons and anaesthesiologists may be of a comparable rank, the use of speciality knowledge authority becomes a key determinant to voice and silence on patient safety.

Whereas a sense of equal interdisciplinary power between surgeons and anaesthesiologists promotes and discourages voice, unequal interdisciplinary power between nurses and doctors generally undermines nurses' voice. For instance, besides nurses' inclination to remain silent on safety perceived as doctors' core role, doctors compel nurses to compromise on safety standards even in core nursing work domain. This means although interdisciplinary power relationships equally undermine voice among doctors, it has a profound negative effect on nurses' voice due to their professional subordination to doctors. These interdisciplinary power barriers to voice in interdependent surgery require careful management attention.

The next major section of analysis presents on power induced risk to voice in surgery.

5.4 Power Induced Risk to Voice in Surgery

5.4.1 Summary of Findings

This section addresses research objective three (3): *To understand and critically evaluate how power of rank and professional identity induces risk of voice and influences voice and silence on patient safety in surgery.* The study found that powerlessness in upward relationships coupled with the lack of organisational support make voice risky and lead to silence on patient safety in surgery. HCPs who speak up and insist on legitimate patient safety standards or decline to execute questionable procedures are often subjected to victimisation and unfair treatment without a fair hearing and management support. These include facing disciplinary measures such as being made to answer questions for insubordination or queried. Although superior groups are not exempted from this, the phenomenon is prevalent for subordinates (middle to junior doctors and nurses) in upward relationships. Beyond this, nurses are further vulnerable to victimisation due to their professional subordination to doctors and lack of support from nursing managers, who often choose loyalty to doctors at the detriment of nurses. Another major risk to voice is career setbacks for HCPs. Like other forms of victimisations, although superior ranks and elite professional groups are not exempt, subordinate groups are most vulnerable. Typically, resident doctors in specialisation training, military HCPs and nurses are most vulnerable to career setbacks for speaking up. Nurses risk missing promotional opportunities in their hospitals and career prospect in broader healthcare settings when they speak up and get into the bad books of powerful doctors. Resident doctors risk career prospects such as jeopardising specialisation training and future career references when they speak up towards superior trainers. Military HCPs do not only face healthcare career risk but the risk of military disciplinary measures and being denied military promotion when they speak up and fall out of relationship with senior military HCPs. The study establishes that the use of power and the lack of organisational support and policies to encourage and protect those who speak up reinforce risk and silence on critical patient safety concerns in surgery.

5.4.2 Risk of Victimisation for Voice on Patient Safety

This study establishes that HCPs who speak up or insist on patient safety are often subjected to victimisation and unfair treatment such as being blacklisted, reported for insubordination, and queried without a fair hearing and management support. Although senior ranks are not exempt from victimisation, subordinates [middle to junior doctors and nurses] are mostly victimised. Subordinates are easily victimised for exercising legitimate voice on patient safety and at the same time dare not relay harm caused by superiors for remedy due to the fear of victimisation.

Earlier studies demonstrate that challenging status quo in hierarchy often results in negative personal consequences (e.g Milliken et al., 2003; Attree, 2007; Kish-Gephart et al., 2009; Detert & Trevino, 2010; Detert & Edmondson, 2011; Francis, 2013; Grant, 2013; Schwappach & Gehring, 2015). More dramatic consequences are reported in whistleblowing (McDonald et al., 2000; Ahern & Mcdonald, 2002; Jackson et al., 2010a; Jackson et al., 2010b; Mannion & Davies, 2015). Nevertheless, the unpleasant consequences of voice in this study are somewhat comparable to the experiences of whistle-blowers. This demonstrates that although speaking up internally in teams and organisations is often considered as a friendlier form of voice, it has quite negative consequences as whistleblowing. Finding of superiors' propensity to victimize subordinates and other major findings in this section are explained by unequal power relationships and the lack of organisational support. These reflect Approach, Inhibition Theory of Power (Keltner et al., 2003). As explained by Keltner et al. (2003) power increases the inclination to act and abuse of less powerful people. This explains why superiors easily subject subordinates to unfair treatments for exercising voice on patient safety while subordinates are restrained by a sense of powerlessness from speaking up on perceived harm caused by superiors.

In addition to the general victimisation of subordinates, the study found that nurses are further vulnerable due to their professional subordination to doctors. This has to do with professional identity from interdisciplinary power relationship. Professional identity and domination of doctors give them better control over organisational support systems which put nurses in disadvantage and expose them to risk. It is important to note that in the absence of fair management and organisational support, less powerful individuals, and professional groups such as nurses become more vulnerable. Henceforth, although this study found a general lack of organisational support for voice among HCPs, doctors as a superior professional group easily leverage their influence in hierarchy to the disadvantage of less powerful groups such as nurses and expose them to further victimisation. This explains why nurses generally suffer severe victimisation, particularly in relation to doctors. This confirms previous studies demonstrating unfair organisational support for doctors over nurses (Booij, 2007; Simpson & Lyndon, 2009; Churchman & Doherty, 2010; Aberese-Ako et al., 2015). This study further establishes that nursing superiors and managers often choose loyalty to doctors and betray their subordinates for the purpose of gaining acceptance among doctors. This also confirms previous research that nursing superiors often betray their subordinates to please doctors (Valentine, 1992; Roberts, 2000; Daiski, 2004). This reflects Referent Power which explains that the desire for identification with powerful groups becomes a source of influence on the behaviour of people (French & Raven, 1959; Raven, 1992). When senior nurses who are expected to offer immediate support to nurses are won into the ranks of doctors, nurses become further vulnerable. This weakens

the nurses' professional frontier and strengthens doctors' domination. A sense of vulnerability of nurses therefore drives nursing superiors quest of seeking personal security in doctors identity which further exposes nurses to victimisation. For instance, this explains why nurses are easily blamed and victimised unfairly for negative patient outcomes in connection to doctors after initially speaking up on such concerns as found in this study.

Another major risk to voice is career setback such as resignations, punitive transfers, and career stagnations. Here again, although superior groups are not exempt, subordinate groups, especially resident doctors, nurses, and military HCPs are most vulnerable. For instance, resident doctors stand a high risk of jeopardising their career when they speak up and challenge trainers who often play a role in their specialisation exams and future career prospects. Moreover, nurses risk being denied promotions in their hospitals. For instance, nurses who insist on certain safety standards or decline to undertake perceived wrong procedures as instructed by doctors are personalised against them as defiance during promotion interviews. Beyond this, nurses risk ruining career prospects in other government and private hospitals where senior doctors have influence. In addition to healthcare career risks, military HCPs risk being denied military promotions since senior healthcare ranks are often senior military ranks, who play important roles in the military circles.

These findings confirm the negative career consequences in previous research (Ritchie et al., 2000; Milliken et al., 2003; Crowe et al., 2017). It has been found that trainee doctors fear criticising or expressing true emotions towards trainers because this may jeopardise specialisation and future career references (Ritchie et al., 2000; Crowe et al., 2017). This study adds to experiences on the phenomenon. For instance, resident doctors feel vulnerable to trainers and fear that criticising them can harm their career. Besides direct involvement of trainers in specialisation exams, a trainer's positive or negative word of mouth to colleague examiners is noted to play an important role in trainees passing their specialisation exams and securing future job opportunities. The fear of getting into the bad books of trainers and jeopardising career prospects keep trainees in a careful relationship with trainers in a manner that lead to silence on patient safety. The profound career risk among military HCPs is explained by the fact that these professionals are both military officers and healthcare professionals and face risk in both careers. Again, while junior military officers are often juniors in terms of healthcare, superior healthcare ranks are often superiors in terms of the military. This intensifies career risk for subordinate military HCPs in both healthcare and military fronts compared to civilian HCPs who only face healthcare career risks. Similarly, this study establishes a far-reaching career risk to nurses from exercising voice. Firstly, the internalization of organisational processes such as promotion in teaching hospitals increases the stakes of power. In Ghana, teaching

hospitals are semi-autonomous institutions as compared to most government hospitals governed under the Ghana Health Service. Beyond this, senior doctors in these teaching hospitals are often very influential in broader healthcare circles such as other government and private hospitals. These explain why falling out of relationships or getting into bad books of such doctors intensify career risk for nurses in such unusual ways. The far-reaching negative career consequences to voice among nurses point to the high level of doctors' authority and influence in healthcare.

Career risks established in this study is explained by unequal power relationships (Keltner et al., 2003) and the lack of psychological safety (e.g Milliken et al., 2003; Sutcliffe et al., 2004; Blatt et al., 2006; Detert & Burris, 2007; Detert & Trevino, 2010; Souba et al., 2011). For instance, it has been established that employees often choose to speak up when they perceive high psychological safety (Detert & Burris, 2007; Chiaburu et al., 2008; Detert & Trevino, 2010; Schwappach & Gehring, 2015). Fear of personal victimisations including career setbacks in this study demonstrate that HCPs do not feel psychologically safe to speak up in upward relationships on patient safety. A recurring theme to risk in this study is the lack of organisational support for voice. This is presented next.

5.4.3 Lack of Organisational Support for Voice on Patient Safety

An underlying finding on risk to voice in this study is the lack of organisational support for voice. This is a major hindrance to voice by itself and reinforces risk to voice on patient safety. This study found that there is lack of organisational policies and support in wider Ghanaian healthcare circles, hospitals, and professional groups to promote voice and protect those who speak up. For instance, besides routine error reporting systems which occur after error or harm, there is no policy or procedures to report clear defiance of critical and harmful safety concerns in surgery. Moreover, although professional values and codes of conduct of healthcare regulators, hospitals and HCP groups require doctors and nurses to act responsibly for patient safety, there is no clear mandate that makes voice on patient safety an imperative and organisationally sanctioned act. This means there is little or no institutional support and protection for those who speak up on patient safety. This translates into increased personal risk for those who speak up, especially towards authority. This echoes the importance of hospital policies and support systems to voice (Porto & Lauve, 2006; Simpson & Lyndon, 2009; Churchman & Doherty, 2010). For instance, nurses only challenge doctors on safety issues when they are confident that hospital policies and management systems will protect them from conflict and reprisal attacks (Churchman & Doherty, 2010). This implies that institutional support

and policy on voice is fundamental to psychological safety for voice in interdisciplinary teams such as surgery where power difference is evident.

As part of the lack of organisational support, this study establishes a grave mistrust towards management for justice and protection when they exercise voice. Although subordinates are often left in the lurch by management to suffer victimisation for legitimately speaking up for patient safety, superiors easily disregard key patient safety protocols such as the WHO safety checklist without management action. Again, incidents of voice disputes and harm are managed by heads of departments who are generally perceived to favour superiors against subordinates and doctors against nurses. These explain the intense vulnerability of subordinate doctors and nurses who speak up. This means subordinates are exposed to higher risk because they often do not get fair organisational support in relation to superiors whom they are often required to speak up to. This confirms previous research establishing favourable healthcare management support for doctors and superior ranks (Simpson & Lyndon, 2009; Churchman & Doherty, 2010; Schwappach & Gehring, 2015). This suggests that besides the lack of clear management support engendering abuse of power by the powerful, power generally undermines formal organisational systems to favour superiors to the disadvantage of subordinates. This in turn hinders trust required for voice.

Consequently, this study found that most HCPs have mistrust towards the ability of management to administer any foreseeable fair policies and support systems for voice. Although HCPs generally express the need for support systems for voice, there is considerable mistrust and scepticism that these may never be fair to guarantee safety and protection for voice. This confirms that lack of trust in leadership often leads to mistrust in organisational support systems (Goffman, 1974; Schein, 1992; Leavitt, 2005; Detert & Trevino, 2010). This suggests that voice support systems and policies may not necessarily encourage voice without trust in leadership and management. Leadership and management assurance in action and words over time will therefore be an important complement to support systems that seek to promote voice in organisations where such support has been lacking.

5.4.4 Risk to voice and silence on patient safety

This study establishes that risk to voice leads to silence on patient safety. HCPs perceive voice as a risky act that is not supported by organisations nor recognised by patients. For instance, HCPs feel patients do not recognise or acknowledge the risk they face by speaking up for them. This, directly and indirectly, lead to silence on important patient safety concerns. These confirm risk and silence in upward relationships (e.g Milliken et al., 2003; Kish-Gephart et al., 2009;

Detert & Trevino, 2010; Detert & Edmondson, 2011; Grant, 2013; Schwappach & Gehring, 2015). Safety consideration is therefore an important determinant of employee voice (e.g Morrison, 2014). This study establishes a strong link between risk and prosocial voice among HCPs. For instance, HCPs feel they expose themselves to risk by speaking up for patients who are not aware of or recognise their sacrifices. This resonates with prosocial voice (Van Dyne & Botero, 2003). Although speaking up or exposing harm to patients may be motivated by self-interest (e.g Mannion & Davies, 2015; Mannion et al., 2018), it is important to note that suggestions, promptings and corrections on potential harm in teams are largely driven by patient interest. As a result, because HCPs generally speak for the interest of patients, this makes their voice distinct from employee voice in other organisations where voice is often driven by personal or organisational interests (Okuyama et al., 2014). This means although a sense of altruism motivates voice for patient safety, high sense of risk and the lack of personal benefit associated with it may undermine the voice of HCPs compared to other organisations. This may therefore explain the high level of silence as a response to risk among HCPs. For instance, this study found that some HCPs simply choose silence and comply with perceived harmful instructions of superiors to avoid negative personal consequences while others are hesitant to speak up in imminent harm.

As indicated, beyond risk leading to direct silence on patient safety, it often inclines HCPs to extreme hesitation to timely voice required to prevent harm to patients. The fear of becoming the next victim of voice put HCPs in a dilemma of speaking up or remaining silent even when harm is imminent. This reflects safety considerations to voice where observers of harm carefully consider personal risk and safety in decision making to speak up or remain silent (e.g Morrison, 2014). The phenomenon is explained by low psychological safety and deliberate information processing described in Approach, Inhibition Theory of Power (Keltner et al., 2003). According to the theory, those with a low sense of power are sensitive to environmental and relational risk as well as resistances. This results in exercising extreme caution and circumspection in voice towards powerful targets. Similarly, powerlessness results in deliberate and conscious information processing and presentation toward powerful targets (Keltner et al., 2003). Consequently, a sense of powerlessness among subordinates and lower professional groups such as nurses either make them silent on perceived harm or incline them to extreme hesitation to speak up even in scenarios of looming harm. These are consistent with defensive silence (Van Dyne & Botero, 2003) where the fear of unpleasant consequences inform silence on problems. The hesitation of HCPs to speak up during unfolding harm suggests that a sense of powerlessness undermines the needed timely voice to prevent harm in acute surgery. On the other hand, while a sense of power enables superior HCPs to speak up promptly to avoid harm, it also enables

them to victimize subordinates who express legitimate patient safety concerns that may be contrary to their actions.

Another interesting finding is that HCPs engage in some level of voice out of self-protection. This reflects defensive voice where employees selectively choose information to give out to protect themselves from potential blame and other undesirable personal outcomes (Van Dyne & Botero, 2003). As this study establishes, HCPs speak up when they perceive the likelihood of being at fault for negative patient outcomes. This manner of voice is primarily motivated by self-protection and is likely to be limited to basic duties and primary work requirements to avoid negative personal consequences. This form of voice will therefore often exclude important voluntary observations and suggestions that are critical to harm prevention and better patient outcomes. Although defensive voice is evident in both hospitals, it appears slightly common in the military hospital than the civilian hospital. This may be due to the disciplinary approach of the military hospital that could intensify the fear of being at fault and facing disciplinary measures. This means although disciplinary measure in the military hospital could better enhance a sense of responsibility, this may not lead to discretional voice for patient safety, especially in scenarios where HCPs stand no chance of being found at fault for negative patient outcomes. The phenomenon may also explain inclination to voice and silence on perceived core work domain in interdisciplinary relationships, especially between nurses and doctors. As discussed earlier, nurses have a higher inclination to silence on safety concerns that are perceived as doctors' core roles than those within their own core work domain. While different reasons explain nurses' hesitation to comment on safety concerns that are perceived as core roles of doctors, the fear of being held accountable for harm in core nursing work domain is expected to motivate nurses' voice on such. This suggests that nurses may not really care about safety concerns which they are unlikely to be blamed for when things go wrong. In broader application, HCPs may speak up on patient safety out of responsibility, especially when they are likely to be held accountable when things go wrong but may withhold other important safety concerns that they may not be liable for. This suggests that employee voice is not purely an extra role affair in organisations. How a sense of risk motivates some kind of voice corroborates systemic confinement of safety concerns to next ranks in hierarchy, presented as part of broader strategies, HCPs adopt to manage power barriers to voice in the next major section of analysis.

5.5 Managing Power Barriers to Voice in Surgery

5.5.1 Summary of findings

This section of analysis addresses research objective four (4): To identify and analyse strategies Healthcare Professionals (HCPs) adopt to manage power barriers to voice on patient safety in surgery. The first finding relates to the use of intermediary voice. HCPs speak up within the same ranks to address safety concerns in isolation of superiors. Similarly, most HCPs tend to confine voice to next rank superiors in hierarchy on safety concerns even when a timely and direct voice with actors is required to avoid harm. A notable finding on intermediary voice is the use of a more proactive intermediary voice where observers of harm speak up timely through superior ranks to stop harm. Secondly, HCPs leverage rare positive interpersonal relationships, which is often enhanced by collectivist social values, to break rank and professional power barriers for successful voice. Finally, HCPs adopt highly ingenious voice strategies to avoid appearing offensive and to enhance receptivity. Although these strategies offer opportunities to break through power barriers for voice, these equally have limitations to effective voice for patient safety.

5.5.2 Intermediary voice

As indicated earlier, one of the major findings is that HCPs speak up through other team members either actively or passively to address patient safety concerns. Previous studies have found that HCPs speak through other colleagues instead of the actors of potential harm (Maxfield et al., 2005; Lewis & Tully, 2009; Schwappach & Gehring, 2014a). For instance, HCPs mostly speak to colleagues or superiors on patient safety concerns instead of actors involved (Maxfield et al., 2005). These are mostly passive forms of voice that rarely address timely patient safety problems. Similarly, the present study establishes that HCPs speak within ranks on patient safety concerns and strive to solve problems on the blind side of superiors. This is consistent with previous research that subordinate ranks learn to work around problems to rectify them tactfully without confronting superiors involved (Schwappach & Gehring, 2014a). Although this is really an attempt at solving problems, it represents silence in disguise since information is not properly relayed to superiors who can take appropriate actions and address problems holistically with teams.

This manner of voice is explained by entrenched hierarchy in surgery that engenders rank and team disconnect between subordinate and superior groups described in the first section of this chapter. Healthcare hierarchy isolates subordinates in hierarchy who then tend to solve problems on their own. Again, subordinates feel safer talking on safety concerns among

themselves than with superiors. For instance, besides not being listened to, subordinates who speak up on patient safety face different forms of risk including blames for subsequent undesirable patient outcomes. These among others explain why subordinates will incline to addressing some patient safety observations among themselves rather than telling superiors.

Beyond this, the study found a more systemic way of relaying patient safety concerns to next ranks in hierarchy even when a timely and direct voice with actors is best to avoid harm or improve patient outcome. This form of intermediary voice is prevalent than the former. Subordinates (house officers, residents, and nurses) often speak through specialists or matrons to consultants even when direct voice intervention is critical for safety. Although upward voice is an ordeal, it is generally less difficult for HCPs to speak up to immediate ranks who they relate well with on concerns of harm than talking directly to skip-rank actors they are working with. Beyond these, a more cogent explanation for this systemic relaying of safety concerns is the hierarchical hindrances to voice. As described earlier authorities insist on hierarchy to the extent that adhering to hierarchical protocols is considered a norm and appeasing to in hierarchy. As a result, although sociocultural values and norms engender some level of willingness to adhere to hierarchy consistent with obedience to authority (Milgram, 1963) and social conformity (Asch, 1955) in high power-distance cultures (Hofstede, 1984; Hofstede et al., 2010), this finding is largely explained by enforced hierarchy. For instance, because hierarchy is often enforced to frustrate timely upward voice, HCPs do not merely accept adherence to hierarchy as a cultural norm but are rather forced to conform due to helplessness. Again, in such powerlessness, HCPs may simply choose to speak up on safety to next rank superiors to partially fulfil professional obligations and prevent future blame when things go wrong. This is consistent with defensive voice which is motivated by self-protection (Van Dyne & Botero, 2003). For instance, previous research demonstrates that hierarchy frustrates nurses' voice to an extent where they decide not to actively advocate for patient safety but simply stick to hierarchical norms with passive voice to minimize distress (Newton et al., 2012; Kim & Oh, 2016). Although previous research primarily describes the phenomenon among nurses, this study found that this is prevalent among doctors and nurses in general upward relationships. This suggests that although there is genuine voice in hierarchy, this may be driven largely by apathy, helplessness, and self-protection than real hopeful effort at solving safety problems.

Further to these, this study establishes the use of a more proactive or emergent intermediary voice through skip-level ranks to stop harm by other superiors. Subordinates who are unable to speak up on looming harm or are not heeded by actors resort to other higher ranks, who by rank or relationship can compel actors to avoid harm. Often, subordinates have good relationships with these skip-level ranks. At the same time, skip-level ranks often have the power or personal

influence with actors to stop harm. For instance, nurses or residents sometimes rush out of theatres to call on consultants to intervene in looming harm when specialists are not heeding caution. Although the use of such proactive intermediary voice is recommended to prevent harm in healthcare (Green et al., 2017a), there is literally no empirical evidence on how this occurs, especially in surgical teams as this study found. Compared to previous research that focuses on passive intermediary voice (Maxfield et al., 2005; Lewis & Tully, 2009; Schwappach & Gehring, 2014a), this finding represents a proactive or emergent voice that effectively deals with difficult team scenarios to avoid harm to some extent. The use of such unconventional voice strategy corroborates finding on hindrances to voice including unheeded voice experiences. The imperative need to prevent harm amidst these challenges explain subordinates' effort at solving problems through any possible strategy.

A noteworthy finding regarding the use of active intermediary voice is the relationship considerations to choosing intermediaries to intervene. Observers of harm often have a good interpersonal relationship with skip-level ranks. At the same time, potential intermediaries need to have a good interpersonal relationship with actors of harm, especially if these two are of the same rank. However, the positive interpersonal relationship with actors is often not required since most intermediaries are higher ranks who can compel actor to change a course of action to prevent harm. The perceived friendliness to choosing an intermediary to intervene reflects target openness to voice where observers of harm assess actor's receptivity to voice before speaking up or remaining silent (e.g Morrison et al., 2015). Considering the present finding, the concept of target openness has a broader implication in teams beyond interpersonal levels. This is shown in how team members examine receptivity among themselves (observers of harm), skip-level ranks and actors of harm to make an informed decision on who can effectively stop harm in given situations. The ability of team members to talk to other superiors to intervene in harm is enhanced by collectivist cultural values that encourage some level of interpersonal relationship irrespective of formal power barriers. This is elaborated in the role of positive interpersonal relationships to voice in the next section.

5.5.3 Interpersonal Relationship

The study found a rare use of positive interpersonal relationship that provides unique opportunity to unlock rank and professional power barriers to voice. This serves as an 'ice breaker' that dissolves power barriers and drives voice among subordinates who would not speak up to superiors under normal circumstances. For instance, this enables nurses and junior doctors, who normally speak through next ranks or intermediaries to superiors, to speak up

timely and directly to prevent harm. The phenomenon is common with very superior nurses (matrons) who speak up effectively with senior doctors when other team members including doctors dare not.

Although these generally reflect research that positive social and co-worker relationships facilitate voice (e.g Morrison & Milliken, 2000; Blatt et al., 2006; Schwappach & Gehring, 2014b), the present findings demonstrate a rare use of interpersonal relationships for voice. This is elaborated later in this section. Meanwhile, it is important to note that good and positive interpersonal relationships generally reduce the sense of risk to voice. Again, positive relationships make voice friendly and enhance receptivity in contrast to negative relationships that could make well-intended voice overly critical to hinder receptivity. Although a good interpersonal relationship is equally important for voice among same rank colleagues, it particularly helps to lessen power differences in upward relationships. While the positive use of relationships for voice appears to contradict evidence of silence in upward relationships due to the fear of falling out of good relationships (e.g Rosen & Tesser, 1970; Blatt et al., 2006; Lyndon, 2008; Harvey et al., 2009), this is likely explained by varying level of confidence, trust and dependence in relationships. For instance, subordinates who have good interpersonal relationships with superiors but feel dependent and vulnerable to them may not have the needed trust and confidence to speak up. This explains why resident doctors, military HCPs and most nurses who feel dependent and vulnerable to superiors often resort to silence. Moreover, because relationships develop better over time as team members get to know themselves better (e.g Okhuysen, 2001; Blatt et al., 2006; Schwappach & Gehring, 2014b), team duration and opportunity for interpersonal interaction will affect the level of confidence for voice in good interpersonal relationships. This may explain why personal relationships better enhance voice for matrons, who often have long working relationships and frequent contact with senior doctors. Again, these nursing managers are less dependent on senior doctors compared with other team members. These better engender the development of positive interpersonal relationships that encourage voice.

Beyond these, the use of positive interpersonal relationship is generally ascribed in strong social and personal ties which is common with collectivist cultural values. Collectivist culture emphasises group identity, encourages stronger interpersonal relationships and often places interpersonal relationships above professional relationships (Hofstede, 1984). This means although hierarchy hinders ideal team cohesion for voice, social and personal ties give individuals some level of interpersonal access for voice in upward relationships. This explains why subordinates may develop rare positive interpersonal relationships to conveniently speak up to very superior ranks. Henceforth, although high power-distance cultures, such as Ghana,

generally reinforce authority, its collectivist values give some level of interpersonal access for closer relationships and voice towards authority. Moreover, respect for the authority of age in high power-distance cultures gives authority to older team members. This in addition to strong social and interpersonal ties from collectivists cultural values better enhance the voice of older subordinates in upward relationships. This further explains why older nurses and junior doctors better leverage positive interpersonal relationships to speak up with senior doctors than other team members.

Despite the positive effects of sociocultural values on voice towards superior ranks, this study found that sociocultural values equally undermine voice. The emphasis on interpersonal relationship as a prerequisite to voice stifles professional relationship that should drive voice and makes negative interpersonal relationships major hindrance to voice. This is worrying since people do not need to be friends or may not always be friends to work together as professionals. As explained earlier, the central role of interpersonal relationship to voice and silence is rooted in collectivist culture. Collectivists cultural values often place personal relationships ahead of other relationships (Hofstede, 1984; Hofstede et al., 2010). While this explains why positive interpersonal relationships promote voice, negative interpersonal relationships equally undermine voice. Although personal relationships cannot be discounted in professional values in any culture, findings suggest that interpersonal relationships have more impact on voice and silence in collectivist cultures than individualistic cultures. Collectivist cultures, such as Ghana, therefore have a far-reaching effect of interpersonal relationships on voice and silence. For instance, while the emphasis on interpersonal relationships stifles professionalism to undermine voice, this also gives rare and unique voice opportunities despite prevailing formal power barriers to voice.

5.5.4 Ingenuity of voice

A further finding is that HCPs adopt highly ingenious strategies to speak up on patient safety to avoid appearing offensive to authority and enhance receptivity. For instance, HCPs ask cunning questions or refer to how another superior carried out a procedure as a way of drawing attention to perceived harm or wrong clinical procedure instead of directly suggesting or correcting. Although concerns expressed respectfully with an appropriate tone is often acted upon, failing to adhere to this renders legitimate and important patient safety concerns futile.

Ingenious strategies to voice are consistent with the use of quiet speech, manipulation of speech, use of subversive or tactical silence among nurses (Garon, 2006; McBride‐Henry & Foureur,

2007; Gardezi et al., 2009; Malloy et al., 2009; Schwappach & Gehring, 2014a; Morrow et al., 2016). This is consistent with the classical work termed the Doctor-Nurse Game where nurses are expected to raise patient safety concerns indirectly and tactfully to avoid appearing to affront the authority of doctors (Stein, 1967). While previous research largely examined the phenomenon as nurses' behaviour towards doctors, this study found that ingenuity to voice is prevalent in broader upward relationships among doctors and nurses. Schwappach and Gehring (2014a) recognised the use of ingenious voice among both doctors and nurses. They also found that the fear of exposing colleagues and hospitals in the presence of patients or guardians as well as the fear of looking incompetent before superiors are other reasons for ingenuity to voice (e.g Schwappach & Gehring, 2014a). Beyond these, the present study establishes that respect for authority in high power-distance cultures (Hofstede et al., 2010) makes ingenuity prevalent and imperative to voice. Culturally, it is nearly impossible to tell superiors that they are wrong. This explains why this manner of speaking up is an imperative strategy in navigating power barriers to enhance receptivity to voice on patient safety.

This suggests that the way voice is expressed either enhances receptivity or ruins it. This means the manner or act of speaking up is as important as safety concerns. The efficacy of ingenious voice in upward relationships supports previous studies (Sydor et al., 2013; Green et al., 2017a) that a poor manner of raising safety concerns [impolite, judgemental or rudeness manner] hinders receptivity. Naturally, people appreciate being spoken to politely rather than harshly and judgementally. The present findings imply that being heard is not merely dependent on the posture of the person receiving voice as described in target openness (e.g Morrison et al., 2015) but also how an observer expresses voice. Ingenuity to voice will therefore be imperative in power disparity which is often common in high power-distance organisations

Ingenuity to voice reflects how powerlessness leads to sensitivity to risk and make people resort to conscious and deliberate information processing and reasoning towards powerful targets (Keltner et al., 2003). Although such behaviour is often described as powerlessness, as demonstrated in this study, ingenuity aids being heard on patient safety when subordinates cannot speak up directly. The apparent powerlessness of subordinates is therefore power in disguise. This is consistent with Indirect Informational Power where less powerful people actively engage in strategic information processing and indirect presentation to powerful target to achieve effectiveness (Raven, 1965; Raven, 1992; 1993). Although ingenuity to voice enhances receptivity to voice, the level of emphasis on the phenomenon as found in this study presents some limitations to voice.

However, the extreme emphasis on the manner of speaking up to avoid offence to authority limits voice. For instance, the need to challenge authority (Green et al., 2017a) including harsh spontaneous voice imperative to avoid harm in emergent safety scenarios (e.g Schwappach & Gehring, 2014a) is restrained by the emphasis on ingenuity. For instance, this study found that HCPs fear they would not be forgiven for spontaneous and harsh voice reactions towards superiors to prevent harm. This means extreme ingenuity to voice consciously or unconsciously restrains voice during critical moments where spontaneous voice, which could be harsh, is imperative to prevent harm. Moreover, ingenious approaches to voice may not always be observed or can be easily ignored compared to explicit voice that draws attention of other team members to facilitate informed discussions for patient safety. For instance, subordinates asking cunning and naïve questions instead of direct suggestions may not succeed in attracting attention of superiors to lifesaving suggestions. Meanwhile, because it is not everyone who will be skilful in cunning approach to voice, some HCPs may simply resort to silence due to the fear of offending superiors. Consequently, although ingenuity to voice helps manage power barriers, as other strategies discussed earlier, it has limitations.

The next section presents a summary of analysis from a theoretical perspective.

5.6 Summary of Analysis: Theoretical Perspective

The analysis of findings in this chapter presented how power enshrined in general superior-subordinate relationships, sociocultural values, interdisciplinary relationships affect voice and silence and also make voice risky. It also discussed how HCPs manage these power barriers to exercise some forms of voice. The findings reflect key conceptualisation of voice and silence by Van Dyne and Botero (2003) and are explained by unequal power relationships described by Hofstede's Power Distance, Collectivism and Individualism (Hofstede, 1984; Hofstede et al., 2010) and a sense of power and powerlessness in Approach, Inhibition Theory of Power (Keltner et al., 2003).

The study demonstrates that power inequality in surgery undermines voice on patient safety. This enables superiors and leaders to take unilateral decisions and disregard critical patient safety concerns of team members. Such unusual use of power leads to apathy and silence in upward relationships. Moreover, silence is profound in authority gradient where lack of interpersonal access between superiors and subordinates creates a psychological barrier to undermine voice at interpersonal and broad surgical levels. In the context of authority gradient, voice behaviour of next rank superiors and sociocultural authority either strengthens inclination

to silence or quite enhances voice. For instance, although the sociocultural authority of age enables older subordinates to speak up to superior ranks, age authority often complements rank power to reinforce authority and silence since most superiors are older than subordinates. As described by Hofstede (Hofstede, 1984; Hofstede et al., 2010), power is inherently cultural. High power-distance cultural regimes, such as Ghana, distribute power more unequally in favour of superiors. This is described by Hofstede as part of a shared norm among members of society in different cultural regimes. For instance, unequal power distribution in high power-distance culture is described as a shared norm that is agreed to by members of society. However, this study found that subordinate ranks and young people rarely willingly agree to unequal power distribution in principle but are compelled to conform to this. This leads to a subtle form of apathy and silence as people feel compelled to conform to social and cultural values that restrain them from speaking up. The phenomenon complements acquiescence to authority in formal organisational hierarchy and reinforces silence in upward relationships

In terms of professional identity and interdisciplinary power relationships, unequal power is profound between doctors and nurses. Besides nurses being subordinates to doctors in general superior-subordinate relationships, they are also subordinated to doctors by interdisciplinary relationship. For instance, while doctors may be subordinated to senior doctors, nurses are generally subordinated to doctors by hierarchy and interdisciplinary power relationship. This heightens the sense of power for doctors and powerlessness for nurses and intensifies nurses' silence. This interdisciplinary power relationship contrasts what prevails between surgeons and anaesthesiologists, where a sense of equal power as specialist doctors both encourage and discourage voice on patient safety. Surgeons and anaesthesiologists speak up on patient safety in their respective speciality. On the other hand, power struggles and a quest for control result in each resisting voice across speciality. Similarly, power struggles sometimes lead to ill-motivated voice within speciality driven by control over each other rather than in the real interest of patients. This means a sense of equal interdisciplinary power heightens knowledge authority between surgeons and anaesthesiologists to encourage and discourage voice. On the other hand, unequal power in general superior-subordinate relationships and the doctor-nurse relationships often override knowledge of subordinates and undermine voice. As established in this study, power is often enforced and utilized in a manner that limits social and professional behaviour of the powerless. Beyond Hofstede's Power Distance, findings are therefore explained by the way personal sense of power encourages approach while a sense of powerlessness inhibits approach in social and professional behaviour (Keltner et al., 2003). A sense of power therefore explains superiors inclination to make unilateral decisions and impede

voice while powerlessness explains subordinates inhibited behaviour such as hesitation to voice and silence on patient safety.

Moreover, the significant negative repercussions of voice which lead to silence is explained by power differences. Power differences manifests in contrasting experiences of risk and vulnerability in superior-subordinate relationships. For instance, besides subordinates' inclination to silence based on a sense of risk, they are victimized for speaking up legitimately on patient safety. At the same time, superiors disregards safety protocols at will and subordinates are restrained from relaying obvious harm caused by superiors for remedy due to the fear of victimisation. This is explained by the personal sense of power and powerlessness (Keltner et al., 2003). As described in the theory, personal sense of powerlessness makes people vulnerable and sensitive to environmental risk and resistance in contrast to a sense of power that makes people act to an extent of abusing the powerless. Consequently, while a sense of powerlessness keeps subordinates from speaking up, it enables superiors not only to speak up but victimize subordinates for exercising legitimate voice contrary to their actions or decisions. This study therefore confirms the central role of safety and efficacy considerations to voice (e.g Near & Miceli, 1985; Attree, 2007; Morrison, 2014). As demonstrated, safety and efficacy of voice is often compromised by power differences as subordinates encounter higher risk and low chances of being heard. This leads to silence out of fear of negative repercussion which undermines discretional voice which is imperative for patient safety. These are explained by the conceptualisation of silence as prosocial and defensive respectively (Van Dyne & Botero, 2003). At the same time, risk of blame gives rise to voice out of responsibility and self-protection which often excludes discretional voice for patient safety. This reflects conceptualisation of defensive voice (Van Dyne & Botero, 2003).

Finally, approaches HCPs adopt to managing power barriers such as the use of rare positive interpersonal relationships, ingenuity voice and intermediary voice are explained by a sense of power and powerlessness (Keltner et al., 2003), power distance and collectivism values (Hofstede et al., 2010). Power differences coupled with cultural respect for authority intensify the need for ingenuity in upward voice relationships to avoid appearing offensive and enhance receptivity to voice. This is explained by the way a sense of powerlessness inclines people to deliberate and conscious information processing and presentation to avoid offence to powerful targets (Keltner et al., 2003) and the use of indirect informational power (French & Raven, 1959; Raven, 1992). Although high power-distance cultural values intensify power differences and requirement for ingenuity, these values equally provide opportunities to manage power. For instance, high power-distance values give rare voice opportunity to older subordinates towards superior ranks. Again, collectivist cultural values enhance strong interpersonal relationships that

give rare interpersonal access for direct voice with superior ranks or through third-party superiors to stop harm. Consequently, while high power-distance and collectivist cultural values often reinforce authority to undermine voice, these also present rare and unique opportunities in managing formal rank barriers to voice.

These findings are illustrated in conceptual framework in figure 5.2 below.

5.6.1 Conceptual Framework

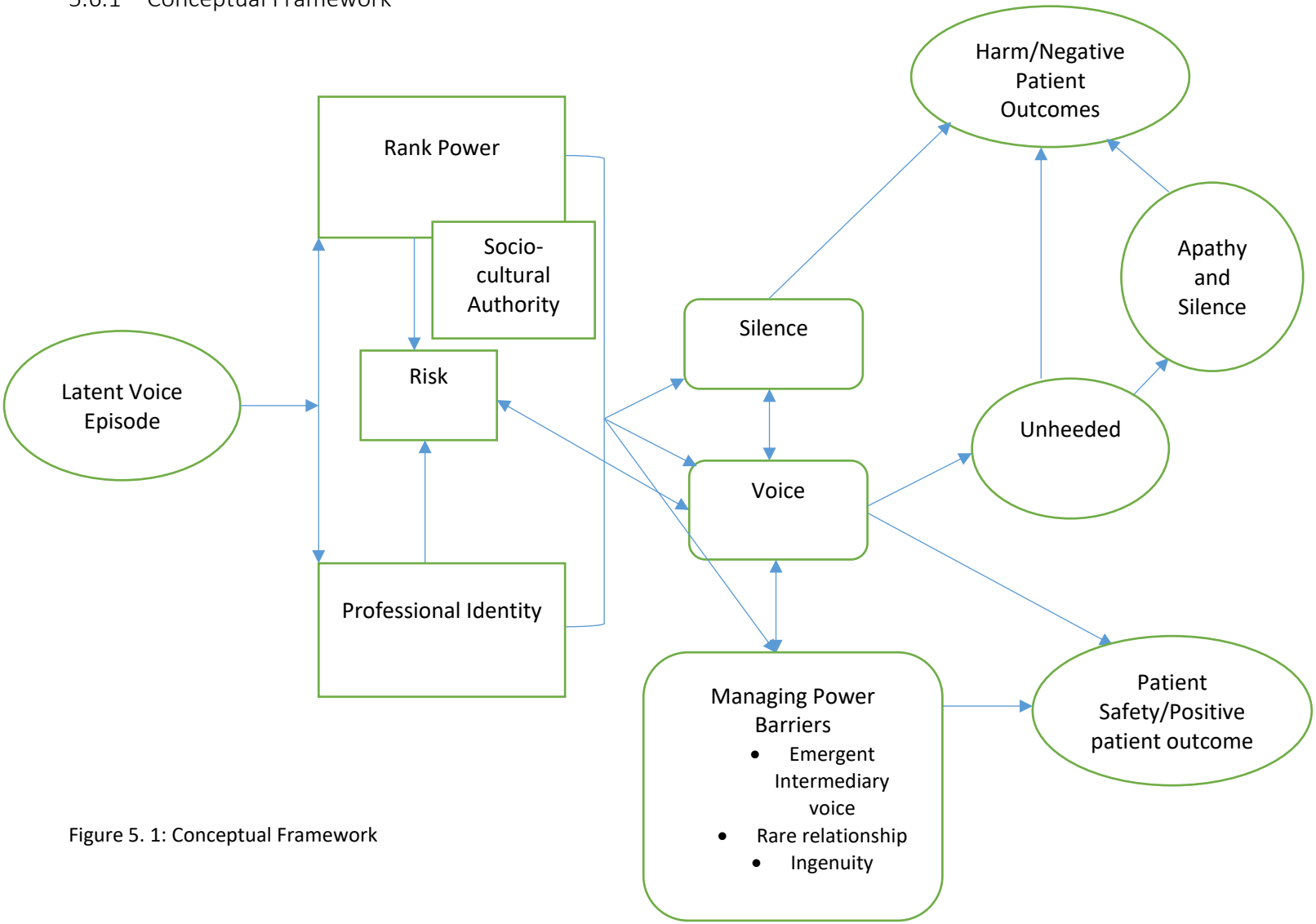

Figure 5. 1: Conceptual Framework

The general implications of power on voice and silence on patient safety is illustrated in the conceptual framework above (Figure 5.2). The need for voice arises when an observation of patient incident requires attention or action to prevent harm or ensure a better patient outcome. This scenario is often described as a latent voice episode (Detert & Edmondson, 2011) or a critical moment (Blatt et al., 2006). For instance, this could be when a team member has an important piece of information that could change a course of treatment or sees a wrong blood vessel about to be cut in a surgical procedure. It could also be when a team member realises that all swabs used on a patient during a surgical procedure have not been retrieved at the closing stage of surgery.

The next major stage is where the need for voice is subjected to power considerations such as rank power, sociocultural authority, and interdisciplinary power. As demonstrated earlier, except for the sense of equal power relation between surgeons and anaesthesiologists, surgery is marked by unequal power relationships. Although adherence to sociocultural values and norms may lead to silence without a sense of real risk, power differences often bring to fore risk to voice. This explains the link between power and risk in the conceptual framework. Consequently, through power considerations, observers of patient safety concerns ascertain the appropriateness of voice. These include whether voice may be perceived as disrespectful or not, risky or safe, and whether it will be heeded or not. These then determine whether HCPs speak up or remain silent when they perceive patient safety concerns.

Next, a choice between voice and silence is made. A choice of silence leads to preventable harm and negative patient outcomes. On the other hand, the choice of voice leads to patient safety and positive patient outcomes. It is important to note that the choice of voice may not be heeded which may also lead to harm or negative patient outcome. Besides, unheeded voice reinforces apathy and silence to authority on subsequent patient safety observations. Meanwhile, the act of voice and silence is a complex phenomenon that interrelates. This explains the link between voice and silence in the conceptual framework. For instance, besides real voice for patient safety, team members could be exercising silence under the disguise of voice. Again, HCPs may be speaking up merely out of self-protection and exclude important discretional observations for patient safety.

Meanwhile, besides the initial risk consideration to voice, exercising voice may evoke risk. This explains the link between voice and risk. Unequal power relationships intensify a sense of risk and the likelihood of voice not being listened to. This gives rise to apathy and silence in superior-subordinate relationships in hierarchy. Apathy and silence also manifest among nurses in their interdisciplinary relationship with doctors. The phenomenon is quite different between

surgeons and anaesthesiologists, where an equal sense of power and a quest for control encourages voice in their respective speciality but discourages voice across speciality.

The final part of the conceptual framework illustrates how HCPs manage power barriers for voice. For instance, HCPs leverage rare positive interpersonal relationships to speak up to superior ranks effectively. They also adopt ingenious voice strategies to make voice acceptable to authority and enhance receptivity. Finally, HCPs who are unable to intervene in circumstances of looming harm with some superiors use emergent intermediary voice by routing voice through higher authorities to stop harm.

The next chapter presents the conclusion of the research including summary, contributions, and implications.

Chapter 6 SUMMARY, CONTRIBUTIONS AND IMPLICATIONS

6.1 Chapter Introduction

This chapter provides a summary of the research. It begins with an overview that provides brief information about the research, its purpose, objectives, and a summary of key findings. Next, it presents the contributions to empirical and theoretical knowledge. This is followed by the presentation of managerial and practical implications. The final part of this chapter presents the study's limitations and further research.

6.2 An Overview of the Research

Based on the critical role of employee voice to work outcome and harm prevention and the underlining role that power plays in this (e.g Edmondson, 2003; Van Dyne & Botero, 2003; Sutcliffe et al., 2004; Morrison, 2014), this research examined how power affects upward and interdisciplinary voice and silence on patient safety among HCPs. From a social constructionism-interpretivism perspective, in-depth interviews were used to collect data for analysis. The major theories used in the study are Power Distance, Collectivism versus Individualism (Hofstede, 1984; Hofstede et al., 2010), Approach, Inhibition Theory of Power (Keltner et al., 2003) and the Conceptualisation of Voice and Silence (Van Dyne & Botero, 2003). The purpose of this research therefore is to understand the implications of upward and interdisciplinary power relationships on voice and silence on patient safety among HCPs in the surgical departments of Ghanaian teaching hospitals. The specific objectives are:

1. To identify and examine how rank power and sociocultural authority affect voice and silence on patient safety in surgery

2. To examine how professional identity from interdisciplinary power relationships affects voice and silence on patient safety in surgery

3. To understand and critically evaluate how rank power and professional identity induces risk of voice and influences voice and silence on patient safety in surgery

4. To identify and analyse strategies Healthcare Professionals adopt to manage power barriers to voice on patient safety in surgery.

The first objective of the study on rank and sociocultural authority, establishes a prevalent use of power by superiors and leaders that result in unilateral decisions, insisting on hierarchical protocols and disregarding voice on critical patient safety leading to avoidable harm and death. Rank power is often strengthened by sociocultural authority that ascribes cultural respect for age and rank superiors. As a result, despite considerable evidence of upward voice among HCPs, these are often unheeded leading to apathy and silence in upward relationships. The phenomenon is profound in authority gradient where hierarchy isolates superiors and leaders from broader HCPs. This results in the lack of team cohesion and undermines voice at the interpersonal and broader surgical levels between superior and subordinate groups. Within authority gradient, next rank superiors voice behaviour either mitigates or reinforces silence in hierarchy. These findings generally confirm how unequal power distribution undermines voice in healthcare and surgery (e.g Sutcliffe et al., 2004; Blatt et al., 2006; Waring et al., 2007; Lewis et al., 2011). Besides, while the sociocultural authority of age enables older subordinates to speak up with superior ranks, this often complements superior rank power to reinforce silence since most superiors are older than subordinates. This reflects how sociocultural authority affects social discourse, especially in high power-distance regimes (Hofstede et al., 2010). Beyond these, this study found in the military hospital that military authority interferes and conflicts with healthcare authority. This makes upward voice difficult for military HCPs and at the same time enables military HCPs to silence civilian HCPs.

The second objective examined the implications of professional identity from interdisciplinary power relationships on voice and silence. The study found that equal and unequal interdisciplinary power relationships affect voice and silence in very interesting ways. Firstly, unequal interdisciplinary power of doctors over nurses undermines nurses' voice on patient safety. Nurses' voice is often unheeded, and doctors often compel them to compromise on patient safety standards even in core nursing work domain. Besides the unfavourable healthcare hierarchy silencing nurses, this study establishes that nurses often choose silence because of a grave apathy and resentment towards doctors' use of authority and superior knowledge posture which disrespect them. For instance, nurses choose to speak generally around patient safety observations without indicating the actual problems or consciously choose silence as punishment to doctors. These findings are generally consistent with previous research on the powerlessness of nurses towards doctors (e.g Stein, 1967; Stein et al., 1990; Sirota, 2008; Malloy et al., 2009; Reed, 2016). Secondly, although a sense of equal interdisciplinary power relationship between surgeons and anaesthesiologists encourages voice in their respective speciality, power struggles and a quest for control results in each resisting voice across speciality. This leads to silence on important patient safety across specialities. Again, voice authority in

each speciality is at times used negatively as control rather than in the real interest of patient safety. Finally, despite the power struggle between surgeons and anaesthesiologists, these often collaborate to silence the voice of nurse anaesthetists, who unlike other nurses, are directly headed by doctors in anaesthesia department.

The third objective examined how risk in upward voice affects voice and silence on patient safety. It found that a startling risk in upward voice is reinforced by the lack of organisational support in terms of promoting and protecting those who speak up. HCPs who speak up and insist on legitimate safety standards often suffer negative personal and career consequences with little or no management support. While subordinates are easily victimized for exercising legitimate voice on safety concerns, superiors often choose to ignore clear safety protocols but are not questioned or held accountable by management. In terms of career risk to voice, it is profound for subordinates, especially residents, nurses, and military HCPs. These risks have a startling effect on voice for patient safety. For instance, some HCPs simply choose silence and comply with perceived harmful instructions of superiors to avoid negative personal consequences. Others become cautious speaking up even when there is looming harm because they are wary of the negative consequences of voice. This either leads to silence on obvious preventable harm or delays timely voice required for patient safety. This reflects safety consideration to voice (e.g Morrison, 2014). Meanwhile, HCPs do exercise some forms of voice to protect themselves from blames for negative patient outcomes. These are often limited to voice as a duty and often exclude discretional voice for patient safety. This reflects defensive voice (Van Dyne & Botero, 2003). Findings in this section therefore generally confirm research on risk and the lack of psychological safety in upward voice (Morrison & Milliken, 2000; Ritchie et al., 2000; Milliken et al., 2003; Detert & Burris, 2007; Morrison, 2014; Crowe et al., 2017) and unequal management support in healthcare hierarchy (e.g Simpson & Lyndon, 2009; Churchman & Doherty, 2010).

The last objective of the study examined how HCPs manage power barriers for voice. Key findings are the use of intermediary voice, rare positive interpersonal relationships, and ingenious voice strategies. In terms of intermediary voice, HCPs speak among colleagues to address safety concerns often at the blind side of superiors. On a more prevalent note, HCPs engage in a more systemic way of relaying patient safety concerns along hierarchy even when timely and direct voice is required to prevent harm. These generally reflect previous research on intermediary voice (Maxfield et al., 2005; Schwappach & Gehring, 2014a) and tendencies to conform to healthcare hierarchy (e.g Newton et al., 2012; Kim & Oh, 2016). A notable finding is the use of a more proactive or emergent intermediary voice through skip-level ranks to stop harm when subordinates voice is ignored or when they feel they wouldn't be listened to while

there is looming harm. Moreover, strong social ties in collectivist cultures like Ghana engender rare positive interpersonal relationships that at times permeates formal power barriers for a direct and intermediary voice for patient safety. Similarly, respect for the authority of age in high power-distance cultures enables older subordinates to conveniently speak up to superior ranks. Finally, HCPs adopt highly ingenious strategies to suggest and correct in a manner that minimises the risk of appearing offensive to authority and enhance receptivity to voice. This confirms ingenuity predominantly among nurses in previous studies (Garon, 2006; McBride‐Henry & Foureur, 2007; Gardezi et al., 2009; Malloy et al., 2009; Schwappach & Gehring, 2014a; Morrow et al., 2016). While these strategies offer real opportunities for upward voice, these equally have limitations which are presented in the analysis chapter and partly in the contribution of the study.

6.3 Contributions to Knowledge

6.3.1 Empirical

This study establishes considerable evidence of upward voice and prevalent use of power to hinder voice. Compared to previous knowledge on how superior power in healthcare hierarchy undermine voice (e.g Edmondson, 2003; Sutcliffe et al., 2004; Greenberg et al., 2007; Waring et al., 2007; Lewis et al., 2011; Reed, 2016), findings in this study is quite notable. For instance, superiors and leaders assume extreme power and responsibility which enable them to take unilateral decisions and disregard critical inputs leading to avoidable harm and death. This intensifies apathy and silence in upward relationships as subordinates often resent such use of power and feel less responsible for patient outcomes. Consequently, although this study found endemic upward silence which is consistent with silence in healthcare and other organisations (Ryan & Oestreich, 1991; Maxfield et al., 2005; Blatt et al., 2006; Detert & Trevino, 2010; Bienefeld & Grote, 2012; Schwappach & Gehring, 2015), it contributes to the central role of power in this. First, it demonstrates that there might be more upward voice than often portrayed, but these are often unheeded. Secondly, upward silence may primarily be motivated by apathy to the use of power more than other factors. These call for a shift in predominant research focus from silence from subordinates' perspective to how the use of power promotes and undermines voice in organisations.

Moreover, this research contributes to how authority gradient hinders team formation and cohesion required for an ideal voice atmosphere. Although previous studies demonstrate the role of authority gradient in restricting the flow of information in healthcare (e.g Sutcliffe et al., 2004; Kobayashi et al., 2006; Detert & Trevino, 2010; Samuel et al., 2012; Schwappach & Gehring, 2014b), this study gives rare insight on how power affects team formation for effective voice.

Authority gradient creates a psychological working distance that separate leaders and superiors from subordinates and restricts team bonding for voice. With career progression, superiors and leaders in surgery increasingly become isolated from broader HCPs and tend to lead teams from afar without becoming an integral part of it. As a result, although some surgical teams have been together for years, team members often lack personal identification with leaders to speak up to them. In line with team formation models (Tuckman, 1965; Tuckman & Jensen, 1977), this suggests that surgical teams may never get through the difficult stages of team formation such as storming to normalise and reach performing stage which is ideal for voice. This occurs at interpersonal and broad surgical levels. For instance, this explains the systemic rank disconnect and silence between superior groups (who take big patient decisions) and subordinate groups (who are closer to patients and have useful patient information). This knowledge provides quite a different perspective in understanding voice and silence in healthcare authority gradient.

This research contributes to how voice and silence behaviour is affected in authority gradient through individual superiors voice behaviour (Detert & Trevino, 2010; Liu et al., 2013; Schwappach & Gehring, 2014b). Although this is known in corporate organisations and acknowledged in healthcare, this study gives an in-depth understanding of it in surgery. When next rank superiors speak up to upper-level ranks and are listened to, subordinates tend to exercise some level of voice towards skip-level ranks. However, when next rank superiors do not speak up to upper ranks or speak up but are ignored, subordinates resort to perpetual silence towards skip-level ranks. This contributes to the complex nature of voice and silence in hierarchical teams and organisations such as surgery.

Moreover, this study contributes to understanding how sociocultural authority in superior rank power relationships affect voice and silence. It contributes insight into the recognition of sociocultural authority in organisations (Botero & Van Dyne, 2009; Hofstede et al., 2010; Helmreich & Merritt, 2019). Sociocultural authority actively interrelates with formal rank power to often strengthen authority but rarely mitigates it. For instance, the sociocultural authority of age and superior ranks makes it extremely difficult for young subordinates to talk to older superiors, who are respected as rank superiors and culturally revered as mothers, fathers, uncles, or aunties. On the other hand, the sociocultural authority of age gives older subordinates a better voice opportunity with superior ranks than younger subordinates. Despite such rare opportunities, the sociocultural authority of age and superior rank often complement each other to reinforce authority and silence since most superiors are older in connection to young subordinates. Besides, a strong sense of obligation to conform to sociocultural respect for authority strengthens apathy and silence in upward relationships.

Another important and original contribution is the complex implication of military authority on voice and silence in the military healthcare setting. Military authority either reinforces or conflicts with healthcare authority to undermine voice on patient safety among both military and civilian HCPs. The regimental nature of the military characterised by respect for authority sometimes conflict with healthcare authority where superior healthcare ranks are subordinate in terms of military ranks. However, military and healthcare authority often complement to reinforce authority since most superiors in the military are also superiors in healthcare while subordinates in the military are subordinates in healthcare. This intensifies authority gradient and silence in upward relationships among military HCPs compared to civilian HCPs. At the same time, the authoritative approach of the military tends to silence some civilian HCPs. Again, a sense of military entitlement enables military HCPs to appropriate power and silence civilian HCPs who may be of same or superior ranks to them in terms of healthcare

This study makes original contributions and gives rare insight into how interdisciplinary power relationships affect voice and silence in surgery. The study adds insight into how interdisciplinary power relationships between doctors and nurses undermine nurses' voice. Although doctors' authority over nurses is widely known to undermine nurses' voice (e.g Stein, 1967; Kirkpatrick & Ackroyd, 2003; Robertson & Swan, 2003; Hall, 2005; Sirota, 2008; Malloy et al., 2009; Diefenbach & Sillince, 2011; Lingard et al., 2012), the present finding is a cause for concern. For instance, doctors often perceive nurses as merely assisting them and therefore expect them to do whatever they want. Doctors often disregard the voice of nurses on critical patient safety and compel nurses to compromise on obvious patient safety standards even in core nursing roles. Moreover, besides the direct hindrance that unfavourable hierarchy poses to nurses' voice, this study establishes that nurses are often silent due to displeasure and apathy towards doctors' authority and superior knowledge posture. Doctors use of authority often disrespect and look down upon nurses. As a result, although some nurses simply feel doctors know better to be corrected or suggested to, most nurses consciously choose silence due to displeasure towards doctors. For instance, nurses choose to talk around problems without telling doctors the actual problem or solution but leave it for them to figure out and fix. Similarly, nurses consciously choose silence as punishment to doctors. Although healthcare hierarchy legitimizes doctors' authority, nurses' silence due to displeasure towards doctors is quite distinct from the direct hindrance of hierarchy to nurses' voice. This suggests that although different reasons may account for nurses' silence towards doctors, a sense of displeasure and apathy may be a key factor. For instance, nurses with the needed clinical knowledge may still choose silence due to apathy towards doctors.

Besides the unequal doctor-nurse power relationship, this study makes a unique contribution to how a sense of equal power relationship between surgeons and anaesthesiologists affects voice and silence. Previous studies examined surgeons and anaesthesiologists relationship in terms of conflicts on patient management and professional values (Fox, 1994; Mitra et al., 2003; El-Masry et al., 2013; Villet & Collard, 2016; Cooper, 2018; Helmreich & Merritt, 2019) without addressing how this affects voice and silence on patient safety. This study found that power struggles and a quest for control between surgeons and anaesthesiologists as to who is the leader in surgery, both encourage and discourage voice. In terms of encouraging voice, because surgeons and anaesthesiologists are specialist colleagues, they speak up and insist on patient safety standards in their respective speciality compared to nurses. However, this speciality power is at times used negatively as a mere power of control rather than real voice in the interest of patient safety. Moreover, power struggles manifest in the display of extreme authority in speciality knowledge which both resists and restrains voice on important safety observations across speciality.

This research further establishes rare powerlessness of nurse anaesthetists based on hospital hierarchy and the surgeon-anaesthesiologist relationship. Unlike other nurses who are under nursing units and directly managed by nursing managers, nurse anaesthetists by hierarchy are placed under anaesthesia department and headed by doctors (anaesthesiologists). Nurse anaesthetists do not have direct decision-making power on anaesthesia but report safety concerns to anaesthesiologists, who make decisions or take issues up with surgeons with whom they may be working with. Meanwhile, when nurse anaesthetists report patient safety concerns to anaesthesiologists, surgeons often talk directly with anaesthesiologists to convince them to allow the procedure to be undertaken. This often succeeds in compelling nurse anaesthetists to undertake perceived inappropriate procedures. Other times, anaesthesiologist, may call nurse anaesthetists by phone and instruct them to undertake procedures they have expressed concern about. Despite friction between surgeons and anaesthesiologists, as colleague doctors, they often collaborate to compel nurse anaesthetists to compromise on some patient safety standards. This is quite a unique finding in that previous studies generally examine power and voice experiences of nurses towards doctors without examining the peculiar experiences of different nursing groups. It is, however, important to note that because this finding is largely dependent on hospital hierarchy, similar findings are expected in hospitals that directly subject nurses to doctors by hierarchy.

Moreover, compared to previous findings on unequal management support (e.g Simpson & Lyndon, 2009; Churchman & Doherty, 2010) and risk to voice (Morrison & Milliken, 2000; Ritchie et al., 2000; Milliken et al., 2003; Detert & Burris, 2007; Morrison, 2014; Crowe et al., 2017), this study found a close relationship between these. For instance, the lack of organisational support

and policies for voice heightens risk to voice in upward relationships. As a result, subordinates who speak up encounter high levels of risk. The victimisation of subordinates who exercise legitimate voice for patient safety in contrast to superiors disregarding clear safety protocols without query point to possible abuse of power without organisational support. This is rarely reported in previous research. This study therefore indicates that internal voice in teams and organisations for better outcome perhaps has near negative consequences as whistleblowing.

Moreover, the level at which risk undermine voice as found in this study is notable. For instance, some HCPs simply choose silence on critical patient safety concerns and undertake potential and harmful procedures as instructed simply to avoid negative personal consequences. Again, high sensitivity to risk put observers of looming harm in a fix whether to speak up or not. This often delays timely voice to prevent harm if observers ever speak up. This study further contributes to understanding prosocial voice (Van Dyne & Botero, 2003; Okuyama et al., 2014) concerning risk among HCPs. HCPs describe risk from the perspective that patients they speak up for do not acknowledge the troubles they undergo. In healthcare, HCPs speak up in the interest of patients unlike personal and organisational interest associated with employees voice in other sectors (Okuyama et al., 2014). This suggests that despite the imperative role of prosocial voice to patient safety, a sense of risk may be undermining voice among HCPs than often thought of. Although risk generally leads to silence, this study found that HCPs engage in some forms of voice to avoid blames for undesirable patient safety outcomes. These are primarily defensive voice (Van Dyne & Botero, 2003) which often exclude discretional voice required for patient safety.

Finally, in the light of the plethora of power barriers to voice and limited knowledge on how these are managed, this study makes notable contributions to strategies HCPs adopt to manage power barriers for some forms of voice on patient safety. Firstly, this study contributes to how HCPs speak through third parties on patient safety rather than the actors termed ‘intermediary voice’ (Maxfield et al., 2005; Schwappach & Gehring, 2014a). Previous studies address intermediary voice in terms of subordinates talking among themselves to solve problems or to other superiors in hierarchy. Beyond this, the present study found that intermediary voice is subtly interwoven into hierarchy in a form of adherence to routine reporting norms even when direct voice is required for patient safety. This form of voice is motivated by complex reasons such as real attempts to avoid harm amidst frustration of hierarchy, apathy to hierarchy and self-protection from blame. These forms of voice are passive and rarely help address pressing patient safety. Further to these, this study makes a notable finding on the use of an emergent intermediary voice to stop harm. In situations of imminent harm where subordinates are not listened to or feel they would not be listened to, observers of harm rush to talk to or call skip-

level ranks to compel actors to stop harm. This provides empirical evidence to the recommendation for HCPs to actively speak up through third-parties in emergencies to avoid harm when necessary (Green et al., 2017a).

Secondly, beyond previous research that describes ingenuity to voice predominantly as nurses way of managing power relationship with doctors (e.g Stein, 1967; Garon, 2006; Gardezi et al., 2009; Malloy et al., 2009; Schwappach & Gehring, 2014a), this study found that the act of ingenuity is common in general upward relationships. Nurses and doctors adopt ingenious voice strategies such as asking subtle questions to draw attention to errors and attributing suggestions or corrections to other superiors or authorities. Sociocultural respect for authority makes ingenuity imperative to avoid appearing offensive and enhance receptivity in connection to superiors. This implies that beyond the importance of target openness to voice (e.g Morrison et al., 2015), the manner of speaking up is equally an important factor to the receptivity to voice even in difficult circumstances. The manner of speaking up can therefore be a substitute or complement to target openness to voice. Finally, this contributes to the unique and complex role of sociocultural values and authority in managing barriers to voice. As established in this study, high power-distance and collectivist values (Hofstede et al., 2010) emphasizes group identity and reinforces superior rank power to undermine voice. However, these sociocultural values yet create rare and unique opportunities in upward relationships. For instance, the sociocultural respect ascribed to age enables older subordinates to speak up better to superior ranks than younger subordinates. Moreover, collectivist values enhance the development of strong interpersonal relationships that provide rare opportunities for effective voice towards superiors in hierarchy. This also provides unique interpersonal access for emergent intermediary voice through other superiors and skip-level ranks to stop harm. As a result, while sociocultural values generally reinforce formal rank power to undermine voice, it provides rare but limited voice opportunities in very unusual ways.

6.3.2 Theoretical

This study makes a theoretical contribution to Hofstede's Power Distance (Hofstede, 1984; Hofstede et al., 2010) and Approach, Inhibition Theory of Power (Keltner et al., 2003). Firstly, Hofstede Power Distance describes power differences across cultures as a mutual consensus by members of society on the extent to which power is shared equally or unequally. For instance, in high power-distance regimes, unequal power distribution in all spheres of society (e.g. superiors and subordinates, parents and children, teachers and students, national leaders and citizens) is said to be based on a consensus which is mutually acceptable to all (Hofstede, 1984;

Hofstede et al., 2010). An important aspect of Hofstede Power Distance is therefore an active resignation of the powerless to the domination of the powerful. This is consistent with the third dimension of Radical Power where the subjects of domination actively believe in values and norms that dominate them (Lukes, 2004). However, besides the shared norms on power differences, Hofstede indicates that powerful members of society dictate the pace by which power is shared with the less powerful. This therefore raises a question on whether power is really a shared norm or an enforced reality.

This study shows that sociocultural authority inhibits voice in a more obligatory manner than willingly. Although most HCPs are not happy with sociocultural values and norms such as respect for authority that stifle voice and say these are unhelpful, they feel compelled to conform to these. This knowledge suggests that Hofstede's Power Distance is perhaps more dictated by powerful groups and social structures than often thought of. Adherence to sociocultural values and norms is therefore more obligatory than voluntary for less powerful groups such as subordinates and young people in connection to the powerful. This corroborates Scott (1990) description of the 'thin' sense of acquiescence to domination where subjects do not actively believe in value systems that oppress them but are merely resigned to such due to helplessness.

Secondly, the study contributes to Approach, Inhibition Theory of Power (Keltner et al., 2003). The theory describes how power manifests in behaviour and explains inclinations to approach by the powerful and inhibition of the powerless. According to the theory, because the powerful are more sensitive to reward and less sensitive to risk, they approach confidently without conscious information processing. However, powerlessness makes people sensitive to risk and resistance which lead to extreme circumspection and detailed information processing, especially in connection to powerful people. The theory therefore explains how a personal sense of power defines perspectives on rewards and risk to affect voice and silence among HCPs in upward relationships. This study establishes that such conscious information processing and indirect presentations in voice behaviour often enhance being heard on patient safety. This corroborates indirect informational power (French & Raven, 1959; Raven, 1992) where less powerful people leverage an indirect approach to information presentation to achieve impact towards powerful targets. This means although ingenious voice behaviour which often involves conscious information processing and circumspection is perceived as powerlessness, this can be power in disguise.

6.4 Practical and Management Implications

Knowledge from this research has important implications for practice and management. It is important to state that the effectiveness of these recommendations may be quite dependent on broader ideal management systems which are beyond the scope of this research.

To begin, as this study establishes, the use of power is a critical determinant of voice and silence in surgery. For instance, the extreme appropriation of power by superiors and leaders which legitimises unilateral decisions is a major source of apathy and silence. This implies that management effort to promote voice should focus on changing the attitude of leaders and superiors to listen rather than encouraging subordinates to speak up. Similarly, the study found that leaders and superiors assume a high sense of responsibility in connection to teams. This legitimizes unilateral decisions and disregard for team members' input. To address this, surgical responsibilities could be shifted from individuals (e.g. surgeons or leaders) to entire surgical teams and system. This is consistent with an earlier recommendation to make teams rather than surgeons responsible in surgery as a way of preventing situations where surgeons are either perceived as heroes or villains (Waring et al., 2007; Lewis et al., 2011). This is important because although leaders are ultimately responsible for team outcomes, giving them excessive responsibility reinforces power differences and justifies unilateral decisions. Shifting responsibility to teams will therefore be an important step towards mitigating power disparity. This will encourage a sense of involvement of team members and promote voice on patient safety.

To mitigate silence emanating from a rank disconnect between subordinate and superior groups, management of healthcare should drive work protocols and processes towards integration of superiors and subordinates. This can be done by reducing hierarchy and undue protocols that isolate superiors from broader HCPs. This will help integrate superiors and leaders into teams and facilitate effective team cohesion for voice. This generally confirms research recognising the need for flat organisations for team cohesion and performance (e.g Festinger, 1954; Henriksen & Dayton, 2006; Diefenbach & Sillince, 2011).

Moreover, although national cultural values are integral part of life and organisations, sociocultural inhibitions to voice can be mitigated. For instance, management can undertake continuous sensitization aimed at orienting HCPs to professionalism and professional values that encourage voice irrespective of cultural values and prevailing interpersonal relationships. This can be extended to healthcare training institutions. Healthcare training institutions can develop an open organisational culture that is friendly to voice. This can be done through organisational change initiatives by mitigating power disparity in training. For instance, the adoption of a

student-centred approach to teaching can be used to enhance cordial lecturer-student relationships to help develop assertiveness among students and trainees for voice. Again, cultural education on power distance values to voice and silence can be introduced as part of HCPs training curricula to drive change. These are essential since people do not always have to be friends or have good interpersonal relationships to work together and exercise voice.

Similarly, the high level of circumspection attached to the manner of speaking up necessitates training of HCPs on communications skills and acceptable vocabularies for voice. While such training should be driven by professional ethics and values, it could incorporate sensitive sociocultural dynamics to make voice easy for subordinates and acceptable to superiors. Superiors can also be sensitised to be attentive to ingenious and cunning strategies that subordinates often use to convey patient safety concerns.

Another major implication is that based on the challenges to voice from equal and unequal interdisciplinary power relationships, surgery can consider adopting a transdisciplinary approach to blur interdisciplinary barriers and focus on goals as a team. As found in this study, unequal interdisciplinary power of doctors over nurses undermines nurses' voice on patient safety perceived to be in the work domain of doctors and those in nurses' work domain. On the other hand, although a sense of equal interdisciplinary power relationship between surgeons and anaesthesiologists promote voice in their respective speciality, a quest for control results in voice being resisted across speciality. Again, voice in each speciality is at times ill-motivated as control rather than in the real interest of patient safety. This means both equal and unequal interdisciplinary power relationships pose challenges to voice in multidisciplinary surgery. This reflects wicked problems that require a transdisciplinary solutions (Brown et al., 2010). As a result, besides the need to empower nurses as a professional group to effectively speak up, surgery can consider a 'transdisciplinary' approach as a transformative solution to challenges posed by interdisciplinary power relationships to voice.

Moreover, the prevalent risk to voice requires management action to strengthen organisational support for voice. Firstly, healthcare stakeholders in Ghana can develop a voice policy to promote and protect those who speak up. An aspect of such policies can be displayed at strategic locations of hospitals assuring HCPs to speak up when the need arises. As part of this, an independent support body for voice can be established at different levels to deal with voice incidents and protect those who are victimized for speaking up. Secondly, as done in other healthcare settings, like the UK, Ghana healthcare regulators or hospitals can develop a simple reporting procedure for HCPs to speak up on important patient safety suggestions or warnings that are ignored. This will help bring to fore potential or actual harm that go unnoticed and

provide a reference point to managing voice incidents. Such reporting systems could be done anonymously online. This is important due to the critical role of interpersonal relationships to work in Ghana. Finally, due to a deep sense of mistrust towards management on safety and efficacy of voice, management assurance in action and words should be an integral part of policy and support initiatives to promote voice.

Moreover, the critical role of voice to patient safety calls for considering voice as an imperative role rather than a discretional behaviour for HCPs. This is important because although healthcare regulators, hospitals, and HCP groups place patients at the centre of their codes of conduct and values, there is often a lack of explicit statement for voice as an important role of HCPs. For instance, professional associations of doctors and nurses can make speaking up on patient safety a clear and explicit part of their professional values and code of conduct.

Finally, management of the military hospital should take further steps to de-militarize its core values in favour of healthcare to promote voice. Although the hospital principally places healthcare profession ahead of the military profession, management commitment is required to make this real in practise to mitigate silence emanating from the influence of the military. This can be done through continuous sensitization of HCPs on the need to prioritize healthcare since patients are their foremost responsibility in the hospital. Moreover, management decisions and practices should strengthen healthcare authority to reduce scenarios where superior military ranks override and stifle the voice of senior healthcare ranks who may be civilians and junior military ranks. While the hospital is managed by the military, this should have little or no influences on day to day patient care by HCPs. Management decisions and actions should empower both military and civilian HCPs to deliver healthcare and speak up without undue military interference. Management may consider allocating some key managerial and surgical positions that are reserved for the military HCPs to civilian HCPs. Although this may be contentious, it could help mitigate the effect of military authority on voice in core healthcare. In effect, the military hospital should consider giving up some core military entitlements and values to encourage voice for both military and civilian HCPs.

6.5 Limitations and further research

Like any other interpretive study, this research does not claim to be a universal truth which is applicable or transferrable to other situations or organisations. This is because these findings are based on the interpretation of responses from specific organisations. Principally, from a qualitative research perspective, these findings cannot be generalised to other populations as

done in quantitative research. Having acknowledged this, because this study is rigorous, and findings are widely consistent with previous findings and theory, knowledge in this study will be relevant to organisations with the same or similar context. Accordingly, while the knowledge from this research may be relevant to other organisations, it should be interpreted and applied with caution. Besides, this study is limited in terms of understanding of the subject from the perspective of top healthcare management. Only a few managers were available for interview and these were mostly managers at the surgical level. Since broader management affects voice atmosphere, future studies can involve more top-level hospital managers and healthcare regulators to understand more on the subject from their perspective. Lastly, this study did not examine sociocultural risk in upward voice relationship. However, the active role of sociocultural authority reflecting in a sense of obligation to respect authority poses a social risk to voice. This can therefore be examined in line with obedience to authority (Milgram, 1963) and social conformity (Asch, 1955) prevalent in high power-distance regimes (Hofstede et al., 2010).

Moreover, some findings in this study require further and future research to expand knowledge of voice and silence. For instance, the critical role of positive interpersonal relationships in unlocking formal power barriers to voice in collectivist cultures is an interesting finding that requires further research. This research found that interpersonal relationships in collectivist culture (Hofstede, 1984; Hofstede et al., 2010) gives rare opportunity to speak up to superior ranks. At the same time, the emphasis on interpersonal relationships stifle professional relationships and make negative interpersonal relationships a major hindrance to voice. It will therefore be important to examine and understand more on the effects of interpersonal relationships on voice and silence in collectivist cultures where personal relationships often drive work.

Also, this study found that superior rank power mostly undermines voice even when subordinates have the needed clinical knowledge and in scenarios of severe risk of harm. However, there is an indication that clinical knowledge, risk of harm, personality and situational factors quite mitigate how rank power affect voice and silence. Previous studies suggest that the effect of superior rank power on voice and silence is affected by the risk of severe harm (Schwappach & Gehring, 2014b; Sundqvist & Carlsson, 2014; Todorova et al., 2014), clinical knowledge (Toft, 2001; Blatt et al., 2006; Schwappach & Gehring, 2014b), personality factors (e.g Weiss et al., 2014). As little is known about these, further research can examine how these factors interrelate with superior rank power to determine voice and silence. Another area for further research will be to examine leaders' inclination to make unilateral decisions and disregard inputs of team members in line with systemic healthcare challenges in developing countries such as lack of logistics, high work overload and long working hours. As voice is

generally regarded as a discretional behaviour (Morrison & Milliken, 2000; Van Dyne & Botero, 2003; Morrison, 2011; 2014), these systemic factors may have far-reaching implications on voice and silence on patient safety.

In addition, nurses' conscious decision to remain silent on patient safety as punishment to doctors' authoritative and superior posture is an interesting finding that requires further research. This will contribute a further understanding of nurses' silence towards doctors. Similarly, nurses exercising silence under the disguise of voice by talking around problems without telling doctors what the actual problem is can be further examined. This is consistent with the conceptualisation of voice and silence as a multidimensional phenomenon that can occur at the same time (Pinder & Harlos, 2001; Van Dyne & Botero, 2003). However, because there is little empirical evidence on how this form of silence occur, future research can explore how and under what conditions this subtle form of silence occurs in patient care.

Adding to these, this study found that the effect of authority gradient in isolating superiors and leaders from broader HCPs to undermine voice is quite profound in surgical wards than theatres. A higher sense of interdependence in theatre slightly mitigates the phenomenon compared to surgical wards. This is consistent with previous research that interdependence in the surgical theatre quite encourages voice (e.g Edmondson et al., 2001). Further research can therefore examine this phenomenon focusing on surgical wards in particular. Finally, the friction between military and healthcare authority can be examined in terms of how it affects the job satisfaction of HCPs, the retention of qualified and experienced professionals and its implications on the hospital's long-term human capital.

6.6 Chapter Conclusion

This concluding chapter presented a summary of the research. It started by presenting an overview of the research including its purpose, objectives, and key findings. It proceeded to present the research's contribution to empirical and theoretical knowledge. This is followed by the practical and managerial implications of findings. Finally, the limitations and further research were presented.

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Appendices

Appendix 1: Ethical Clearance University of Hull

UNIVERSITY OF Hull

Mr Emmanuel Mawuena
27 Cottingham Road
HULL
HU5 2PP

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Research Office
University of Hull
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E h.carpenter@hull.ac.uk

Ref: HUBSREC 2016/61

25 July 2017

Dear Emmanuel

Re: Voice and Silence Behaviour on Patient Safety Concerns among Health Workers in Ghanaian Hospitals

Thank you for your research ethics application.

I am pleased to inform you that on behalf of the Faculty of Business, Law and Politics Research Ethics Committee at the University of Hull, Dr Stephen Allen has approved your application on 24 July 2017.

I wish you every success with your research.

Yours sincerely,

Hilary Carpenter
Secretary,
Research Ethics Committee
Faculty of Business, Law and Politics

Faculty of Business, Law and Politics
University of Hull
Hull, HU6 7RX
United Kingdom

www.hull/ac/uk/hubs

Appendix 2: Ethical Clearance, KBTH

In case of reply the number
And the date of this
Letter should be quoted

My Ref. No.....
Your Ref. No.....

KORLE BU TEACHING HOSPI
P. O. BOX KB 77,
KORLE BU, ACCRA.

Tel: +233 302 667759/673034-6
Fax: +233 302 667759
Email: Info@kbth.gov.gh
pr@kbth.gov.gh
Website: www.kbth.gov.gh

5th January, 2018

EMMANUEL MAWUENA
UNIVERSITY OF HULL BUSINESS SCHOOL
UNITED KINGDOM

INSTITUTIONAL APPROVAL: KORLE BU TEACHING HOSPITAL-SCIENTIFIC AND TECHNICAL COMMITTEE/INSTITUTIONAL REVIEW BOARD (KBTH-STC/IRB/00079/2017

Following approval of your study entitled "Voice and Silence Behaviour of Health Professionals on Patient Safety Concerns in Surgical Departments of Ghanaian Hospitals" by the Korle Bu Teaching Hospital-Scientific and Technical Committee/Institutional Review Board. I am pleased to inform you that institutional approval has been granted for the conduct of your study in Korle Bu Teaching Hospital.

Please contact the Heads of Departments to discuss the commencement date of the study.

Please note that, this institutional approval is rendered invalid if the terms of the Institutional Reviewed Board/Scientific and Technical Committee approval are violated.

Sincere regards,

Lamptey 5/01/18

Dr. Roberta Lamptey
Ag. Director of Medical Affairs
For: Chief Executive

Appendix 3: Ethical Clearance, 37 Military Hospital

Institutional Review Board
37 Military Hospital
Neghelli Barracks
ACCRA
Tel: 0302 769667
Email:irbmilhosp@gmail.com

02 November 2017

ETHICAL CLEARANCE

37MH-IRB IPN 152/2017

On 10th October 2017, the 37 Military Hospital (37MH) Institutional Review Board (IRB) at a Board Meeting reviewed and approved your protocol.

TITLE OF PROTOCOL: Voice and Silence Behaviour of Health Professionals on Patient Safety Concerns in Surgical Departments of Selected Hospitals in Ghana

PRINCIPAL INVESTIGATOR: Emmanuel Kwasi Mawuena

Please note that a final review report must be submitted to the Board at the completion of the study.

Please report all serious adverse events related to this study to 37MH-IRB within seven (7) days verbally and fourteen (14) days in writing.

This certificate is valid until October 2018.

DR EDWARD ASUMANU
(37MH-IRB, Vice Chairperson)

37 MILITARY HOSPITAL
INSTITUTIONAL REVIEW BOARD
DATE 02/11/17

Cc: Brig Gen EC Saka Jnr