

**Exploring the Efficacy of Cultural Competence on Service Quality of
Outpatient Care in Australia**

By

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This thesis is presented for the degree of Doctor of Philosophy

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Sydney, Australia

January, 2015

ABSTRACT

Globalisation and the growth in migration has shaped many multicultural societies where intercultural service encounters in the health care context have become commonplace.

Today's health professionals encounter patients from different cultural backgrounds who need care from providers who are both knowledgeable in their work and aware of the role that culture plays in patient treatment. However, insufficient cultural competence among the health workforce has been widely stated as one of the factors contributing to the health disparities and misunderstandings that lead to medical errors among ethnically diverse patients.

Unfortunately, cultural competence preparation and training have not received enough attention in medical and education sectors. The scarcity of empirical evidence on the efficacy of cultural competence has hindered the promotion of this phenomenon in service sectors such as the health sector. Particularly, in Australia yet there has been no systematic evaluation of the potential health benefits of culturally competent services.

To investigate the impact of cultural competence on health care quality, various aspects of service quality in the health care context should first be identified. However, in Australia factors that patients may consider important in assessing the quality of care remain somewhat unexplored.

This study contributes to the research of service quality within an intercultural health care framework and explores whether providers' cultural competence impacts patients' ratings of the quality of health services. Using a mixed methodology this research a) examines the primary dimensions of service quality in the health care context; and b) explores the impact of patient-provider cultural distance and providers' cultural competence on the quality of health care.

In the qualitative phase, 40 patients were interviewed to identify how they evaluate the quality of health care and assess providers' cultural competence. Then research models were developed based on the qualitative results. In the quantitative phase, data were collected through surveying 447 patients to test the proposed models.

Contrary to many previous studies where the technical aspect of service in measuring patients' perceptions of care was excluded, the research findings suggest that both functional and technical aspects of service quality are significant in assessing the quality of outpatient care in the Australian health care sector. Moreover, empirical findings supported the significant impact of patient-provider cultural distance and providers' cultural competence on the quality of health services.

This research illustrates an inclusive instrument of patient-perceived health care quality and delineates its relationship with cultural competence. The instrument would enable outpatient clinics to comprehend patients' feedback regarding the quality of health care received by them. This feedback could be used to examine clinics' performance, measure patient satisfaction and benchmark the performance against competitive medical settings.

STATEMENT OF CANDIDATE

This thesis by publication is submitted in fulfilment of the requirements of the degree of PhD, in the Faculty of Business and Economics, Macquarie University. This represents the original work and contribution of the author, except as acknowledged by general and specific references.

I hereby certify that this has not been submitted for a higher degree to any other university or institution.

The research presented in this thesis was approved by Macquarie University Ethics Review Committee, reference number 5201200550(D) on 4 September 2012.

Somayeh Alizadeh

January 2015

ACKNOWLEDGEMENTS

First and foremost, I would like to express my sincere gratitude to my supervisor Dr.

Meena Chavan for the continuous support of my PhD study and research, for her patience, motivation, enthusiasm, and immense knowledge. Her guidance helped me in all the time of research and writing of this thesis.

I would also like to thank Dr. Hamin Hamin for his support and constructive suggestions, which were determinant for the accomplishment of the work presented in this thesis.

I would like to express my appreciation to Professor Lucy Taksa for the helpful advice and encouragement she gave me.

I greatly appreciate my family and friends for all their love and support. Most of all for my loving, caring, and encouraging husband Ali whose faithful support during the stages of this PhD is much appreciated.

The research would also not have been possible without the financial support and initiative of Macquarie University and I am proud to be associated with such a high-quality institution.

**ACKNOWLEDGEMENT OF CONTRIBUTION TO THE RESEARCH WORK
AND/OR AUTHORSHIP**

This thesis by publication includes four original papers either published or under review. The ideas, development and writing up of all the papers in the thesis were the principal responsibility of the candidate, working within the Macquarie University-Faculty of Business and Economics under the supervision of Dr. Meena Chavan.

Articles:

Paper 1

Title: Quality of care and patient satisfaction amongst Caucasian and non-Caucasian patients: A mixed-method study in Australia.

Chapter in thesis: Chapter 3.

Journal title: International Journal of Quality and Reliability Management (accepted for publication).

Paper 2

Title: Cultural competence dimensions and outcomes: A systematic review of literature.

Chapter in thesis: Chapter 4.

Journal title: Health and Social Care in the Community (under review).

Paper 3

Title: The efficacy of cultural competence in the health care context: A qualitative inquiry.

Chapter in thesis: Chapter 5.

Book chapter: Alizadeh S., Chavan M. (2015). Communication competence in health care: The case of the cross cultural caregivers. In Christopher E. (ed), *International management and intercultural communication: A collection of case studies*. UK: Palgrave Macmillan.

Paper 4

Title: The impacts of ethnic distance, cultural distance and cultural competence on the quality of outpatient care – A comparative study in Australia.

Chapter in thesis: Chapter 6.

Journal title: International Journal of Intercultural Relations (under review).

Conferences:

Australia and New Zealand International Business Academy (ANZIBA) 2013 – Australia.

Title: The impact of cultural competence and cultural distance on health care quality and patient satisfaction.

Advances in Business-Related Scientific Research Conference (ABSRC) 2014 – Italy

Title: Dimensions of service quality in Australian outpatient settings – A comparative study between Caucasian and non-Caucasian patients.

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CHAPTER 1 INTRODUCTION

1.1 Introduction

This research is a comparative study which investigates the perceptions of patients from different ethnic backgrounds and local Australians on the quality of health services in Australia. This study is unique as it encompasses two important variables in the equation and examines the role of patient-provider cultural distance and provider cultural competence in the delivery of health care services.

A combination of quantitative and qualitative approaches was used as the basis for collecting data. The purpose of the qualitative analysis was to understand the main aspects of outpatient service quality as determined by patients to identify the issues arising in intercultural medical encounters. Quantitative analysis was used to test the impact of each dimension of service quality on the overall ratings of outpatient care and to empirically examine the impact of cultural distance and cultural competence on the quality of outpatient care.

The purpose of this chapter is to summarise the thesis and provide the rationale for the research. First, it reviews the significance of the health care industry and the challenges of providing optimal care in multi-ethnic societies with growing cultural diversity. Next, gaps in service quality literature and the scarcity of empirical studies on the role of culture in the delivery of health services are explicated and specific research questions are discussed. This is followed by an outline of the thesis and the link between the included papers.

1.2 Importance of the health industry in the service sector

The service sector is a significant part of most economies and makes an important contribution to the gross domestic products (GDP) in many countries (Cali et al., 2008). The importance of the service sector to the growth in world economies requires a strong

commitment to quality evaluation and improvement in this area (Malhotra et al., 2005; Ueltschy et al., 2004). Since 1990, increasing competition among service providers has required stronger attempts to convince customers that their quality is superior to that of their rivals. This issue has persuaded service companies to enhance their performance and effectiveness to differentiate themselves in the market and attract more customers (Chen et al., 2012; Kesuma et al., 2013). The health care industry is one of the world's largest and fastest-growing service industries. Accounting for over 10 per cent of the GDP of most developed countries, health care forms a massive part of a nation's economy. For example, in 2011, it consumed 9.5% of the GDP of Australia (Australian Institute of Health and Welfare, 2013) and 17.7% of the GDP of the United States (Wang, 2013). Continuous measuring and reporting on the quality of service in the health care system has been receiving growing attention among academics and practitioners. The unique conditions of the health care industry differentiate it from other service settings. These conditions result in a higher sensitivity to the quality of service and more complications in the assessment process of this sector compared to other industries. For instance, this environment is more complex, with a greater number of interactions occurring within professional teams and between providers and clients under stressful and critical circumstances. Moreover, offering sub-optimal service in this industry can lead to irreparable large-scale consequences for society. If the health care settings cannot be trusted to provide a reasonable level of service quality, they will be underutilised or used by patients only as a last option when it might be too late to offer preventive care or treatment instructions (Andaleeb, 2001). The contributions of medical services to quality of life and life extension as well as the serious costs of not providing effective health care (death or impairment) to society and governments necessitates a greater effort to identify shortcomings and deliver zero-defect services.

1.3 Multiculturalism and health disparities

One of the major challenges for today's health care system in many countries is the growing racial/ethnic diversity in their populations. For instance, Australia is the fourth largest country after the US, Canada and Brazil for immigrant settlement. According to an analysis of new immigration figures released by the Australian government, up to 25% of the population is of non-European (non-Caucasian) origin, and nearly six million of Australia's total population of 22.5 million were born in another country (Australian Bureau of Statistics, 2006). Among Australia's states, the population of New South Wales (NSW) is the most diverse and consists of immigrants from a greater variety of countries than any other state, with 223 different nations represented. Countries such as China, Vietnam, India, Indonesia, Malaysia, Lebanon, Iran, Iraq and Fiji are among the top 20 countries of birth of settlers in NSW (Glenn, 2011).

The provision of high-quality and equal medical care is an even more critical issue in multicultural countries with a great deal of ethnic and socioeconomic variety in their populations (Kale & Kumar, 2012). With a variety of cultures, a big challenge for service firms is understanding the meaning of service quality in other cultures to ensure service quality (Galperin & Lituchy, 2014).

Several reports have indicated that multi-ethnic countries such as the United States may suffer from inequalities in terms of health status as well as accessing and utilising health care services (Betancourt et al., 2014; Huang et al., 2012; Smedley et al., 2003). In Western countries with a majority Caucasian population, minority patients (non-Caucasian people) are more likely to receive lower-quality care than majority patients (Caucasian people).

Moreover, members of racial minority groups may have less trust in their providers, are less satisfied the quality of health care and have poorer health outcomes (Agency for Healthcare Research and Quality, 2011; American College of Physicians, 2010; Levine & Ambady,

2013). For example, as is the case in the UK and the US, in Australia disparities have been reported in the burden of disease and death experienced by ethnic minorities and Indigenous Australians compared with Australian Caucasians (NSW Department of Health, 2010; Thow & Waters, 2005). The causes of health disparity are not clear, although factors such as genetic, social and economic conditions, insurance coverage, providers' knowledge and access issues might be some of its determinants (Smedley et al., 2003). In addition, many scholars believe that cultural and linguistic differences between patients and health professionals are other significant contributors (Betancourt et al., 2014; Flaskerud, 2007; Imel et al., 2011; Saha et al., 2013). Hence, overcoming cultural and linguistic barriers is critical to offering high-quality care, and health care workers should be trained to achieve a better understanding of all health care consumers' cultures, particular needs and life experiences. To mitigate the risk of supplying sub-optimal care, especially for ethnic minorities, health care providers should develop processes for evaluating the quality of health services and identifying potential areas of inequalities in this context. They should track their progress in implementing quality improvement initiatives and reducing disparities by measuring diverse clients' perceptions of health services on a continuous basis.

1.4 Statement of the problem

1.4.1 Measuring service quality

In recent decades, service providers have progressively sought customer perspectives on the quality of service to adapt the service design to consumers' needs, position themselves more strategically in the marketplace and thereby increase their financial return (Cronin & Taylor, 1992; Heskett & Sasser, 2010; Jain & Gupta, 2004; Sureshchandar et al., 2001; Torres 2014). In the health care context, for years, objective indicators such as the rate of morbidity and mortality and health professional decree were obtained almost exclusively to assess whether

patients received high-quality care (Dagger et al., 2007). This trend has changed in recent decades, and the role of consumers in assessing the quality of service has been receiving greater attention in this environment. Nonetheless, the definition, dimensionality and measurement of service quality in this context are still debated by academics. A generic metric called SERVQUAL has been designed to fit a variety of service sectors (Parasuraman et al., 1988) and this scale has been employed by many researchers to measure the quality of health care services in different countries (Chakraborty & Majumdar, 2011; Ladhari, 2009; Mete & Donmez, 2013). Despite being widely employed, the dimensions of quality proposed in this instrument remain controversial. Some scholars believe an adequate evaluation of a service cannot be achieved by merely using the dimensions included in SERVQUAL, and the dimensions and measuring items should be carefully modified to fulfil industry-specific requirements (Alrubaiee & Alkaa'ida, 2011; Dagger et al., 2007; Lin et al., 2009; Zineldin, 2006). Some academics believe that the SERVQUAL scale should be tailored to both the sector's specific needs and the culture or nation of interest (Ramsaran-Fowdar, 2008). As a result, attempts have been made to include certain health care service elements that are not incorporated in the original SERVQUAL scale (Dagger et al., 2007; Gasquet et al., 2004; Qin, 2009; Sanchez-Hernandez et al., 2009; Suki et al, 2011; Zineldin, 2006). However, there is no consensus among researchers on the dimensions of service quality in the health environment. Additionally, most measuring tools have been developed based on the literature and experiences of the authors or health professionals, and very few researchers have captured health customers' opinions to identify critical aspects of quality and design measuring items. This issue can limit the effectiveness of the evaluation tools and the validity of the results.

1.4.2 Empirical evidence on the efficacy of cultural competence

As noted earlier, academics and health practitioners are concerned about discrimination in the delivery of high-quality care to different groups of people, especially in multi-ethnic communities (Betancourt et al., 2014; Campinha-Bacote, 2002; Levine & Ambady, 2013). Incidences of health disparities have been widely investigated and reported in the US. There is also some evidence that ethnic minorities in Australia experience inferior health than the majority population (NSW Department of Health, 2010; Thow & Waters, 2005). Some experts view that cultural and linguistic barriers contribute to health disparities. Thus, the growing diversity in Australia's population mandates the enhancement of the health system's responsiveness to the specific needs of its culturally diverse population to ensure equity in the delivery of care and the promotion and maintenance of the overall health of society (Federation of Ethnic Communities' Councils of Australia, 2010; Johnston & Kanitsaki, 2005; Johnstone & Kanitsaki, 2007; NHMRC, 2005; NSW Department of Health, 2010; Stewart, 2006). The escalating diversity among both patients and health practitioners amplifies the risk of medication errors caused by misunderstandings and a lack of knowledge about patients' cultural and physiological differences. The results of some studies have shown that the rate of medication error is higher for Australia's non-English-speaking patients compared with native English speakers (Ajdukovic et al., 2007; Fejzic & Tett, 2004). Although providers' limited cultural and communicational capabilities mostly affect ethnic minorities, the risk of ineffective communication also exists in interactions between local patients and overseas born/trained health care providers. In Australia, due to its policy on the entry of skilled workers, one-third of the health workforce is from overseas (Australian Institute of Health and Welfare, 2009). Compared with other Organisation for Economic Co-operation and Development (OECD) countries, there is a remarkable reliance in Australia on international medical graduates (IMGs) to address a shortage in the medical workforce. By

2006, 45% of medically qualified residents were overseas-born, including an estimated 25% who were overseas-trained (Australian Doctors Trained Overseas Association, 2011; Hawthorne, 2012). In 2001-2006, 7596 doctors migrated to Australia across all immigration categories - double the number recruited from 1996 to 2000. India, the United Kingdom/Ireland, Sri Lanka/Bangladesh, China, southern and central Asian countries, and North Africa/the Middle East were the primary source countries during this time (Hawthorne, 2012). Australia has also become increasingly dependent on foreign-trained specialists to serve in regional areas. By 2010, 46% of doctors in rural and remote area in Queensland were overseas-qualified. 36% of the 1209 GPs working in rural and remote Victoria had acquired their medical degrees outside Australia, primarily in South Asia (11%), the UK or Ireland (7%), Africa (5%), Eastern Europe (4%) and the Middle East (3%). IMGs constituted 53% of rural and remote GPs in Western Australia, and were recruited from 33 countries of training - double the level of reliance in 2002 (Hawthorne, 2012). Thus, cultural and linguistic issues can arise not only between Caucasian Australian caregivers and ethnic patients but also between local Caucasians and overseas-born/trained health professionals (Australian English Institute, 2010; Han & Humphreys, 2005). Therefore, providers' lack of cultural competence can lead to undesirable outcomes among both ethnic minorities and the ethnic majority.

While many scholars advocate the importance of increasing providers' cultural competence when addressing health disparities or seeking to reduce medication errors, inadequate empirical evidence hinders the implementation of cultural competence approaches in health care organisations (Hayes-Bautista, 2003; Saha et al., 2013). In most studies, the benefits of cultural competence have been described anecdotally without being supported by statistical results. Without empirical evidence indicating the outcomes of cultural competence, it is difficult to convince managers to invest time and money to promote cultural competence

training, techniques and practices in their organisations (Sizoo et al., 2005). This issue is even more serious in Australia than in other multicultural countries, such as the UK and US, which have carried out further investigations in this field (Johnstone & Kanitsaki, 2007; Stewart, 2006). Therefore, further empirical studies are required in the Australian context to increase health care managers' and providers' understanding of the advantages of cultural competence and to facilitate the infusion of this concept into the health care system. (Johnstone & Kanitsaki, 2007; Kiropoulos et al., 2004; Murray & Skull, 2005; Stewart, 2006; Truong et al., 2014).

A number of frameworks and assessment tools have been developed to measure individuals' cultural competence in different service sectors, such as the military, education and health care. However, there is no a definite agreement on the elements of cultural competence among the researchers. Moreover, few studies examine patients' perspectives to assess medical providers' cultural competence. Cultural competence has tended to be measured using the self-rating method, i.e., by asking providers to assess themselves, but there is likely to be a difference in the degree to which patients and providers perceive providers as "culturally competent". Moleiro et al. (2011) showed that providers tend to overestimate their level of intercultural competence, which can mislead health care managers about their employees' actual ability to work with culturally diverse clients. Moreover, Thom and Tirado (2006) found that patient-reported cultural competence might be more strongly associated with the outcomes of care than providers' self-reported results. Thus, more studies are needed to assess the level of health care providers' cultural competence based on patient perspectives.

1.4.3 Low participation of ethnic minorities in medical surveys

A review of relevant studies indicates that ethnic minorities' participation in clinical investigations is not satisfactory and that members of these groups are usually either ineligible

or not asked to participate in these studies (Cook et al., 2005; Wendler et al., 2005). In Australia, members of ethnic minority groups are often excluded in health care inquiries due to language barriers and the investment required to ensure their participation (NHMRC, 2005). As a result, there is inadequate information about these people's perceptions of providers' attitudes, service preferences and satisfaction with care. Therefore, research is needed to identify these people's views about their experiences with health care providers and services in a multicultural environment. Obtaining ethnic patients' opinions along with Australian Caucasians' viewpoints can enable us to compare these groups' perspectives on health care to detect the presence of discrimination in the delivery of health care services. We also can determine the extent to which factors such as provider cultural competence and patient-provider cultural differences influence patients' judgement of health care service quality.

1.5 Research questions

The thesis consists of seven sections including four separate papers that are coherently integrated publications focusing on the quality of health care services and the role of patient-provider cultural differences and provider cultural competence in the delivery of services in the context of health care. These papers address the following questions which are raised based on the arguments stated in the previous sections:

- 1- What are the main aspects of service quality in the outpatient context?
- 2- Are there any differences between the views of ethnic minorities (non-Caucasians) and the ethnic majority (Caucasians) regarding critical elements of service quality in the outpatient context?
- 3- Do ethnic minorities receive inferior quality of care than the ethnic majority?
- 4- What are the main elements of cultural competence?

- 5- How do cultural differences between the patient and provider impact the quality of health care services?
- 6- How does the providers' cultural competence assist the delivery of optimal health care services?

To help understand the structure for this thesis, the matrix illustrated in Table 1 uses ticks of different sizes to show which paper was used to address which question.

Table 1 Thesis chapters

Research questions	Thesis chapters				
	Ch. 2	Ch. 3 (Paper 1)	Ch. 4 (Paper 2)	Ch.5 (Paper 3)	Ch. 6 (Paper 4)
What are the main aspects of service quality in the outpatient context?	√	√	-	√	√
Are there any differences between the views of ethnic minorities (non-Caucasians) and the ethnic majority (Caucasians) regarding critical elements of service quality in the outpatient context?	-	√	-	-	-
Do ethnic minorities receive inferior quality of care than the ethnic majority?	-	√	-	√	√
What are the main elements of cultural competence?	-	-	√	√	√
How do cultural differences between patient and provider impact the quality of health care service?	-	-	√	√	√
How does provider cultural competence assist the delivery of optimal health care services?	-	-	√	√	√

1.6 Outline of the thesis

Chapter 1 provides a summary of the background to the research and highlights the main research questions. Chapter 2 reviews the literature relevant to service quality, including definitions, major elements and assessment tools of service quality. Chapter 3 presents both qualitative and quantitative findings on the dimensions of service quality in the context of health care (outpatient settings), the impact of each dimension

on the overall rating of health care quality and the relationship between service quality and patient satisfaction. Additionally, this chapter compares the perspectives of two groups of patients who live in Australia: non-Caucasian (ethnic minorities) and Caucasian (ethnic majority). This chapter has been structured as a paper titled “Quality of care and patient satisfaction amongst Caucasian and non-Caucasian patients: A mixed-method study in Australia”. Chapter 4 analyses the frameworks, definitions, main dimensions and measuring methods and instruments of cultural competence. Additionally, it reviews the empirical studies that investigate the impact of provider cultural competence on patient outcomes. This chapter has been arranged as a paper titled “Cultural competence dimensions and outcomes: A systematic review of literature”. Chapter 5 presents the qualitative findings that explain how patient-provider cultural distance can impede providing high-quality care and how cultural competence can help providers bridge the distance and overcome cultural barriers to supply optimal health care service. Chapter 5 also investigates whether the cultural competence dimensions that have been extracted from the literature are used by patients to assess providers. This chapter has been formatted as a paper titled “The efficacy of cultural competence in the health care context: A qualitative inquiry”. Chapter 6 disseminates the quantitative findings regarding the impact of patient-provider cultural distance and provider cultural competence on the provider-related aspect of services (the dimensions of service quality that are related to providers rather than the physical aspects of the health service or outcome of care). Similar to Chapter 3, this chapter includes a multi-group study that compares the findings obtained from two groups of patients, Caucasians and non-Caucasians. This chapter has been organised as a paper titled “The impacts of ethnic distance, cultural distance and cultural competence on the quality of outpatient care - A comparative study in

Australia”. Chapter 7 presents managerial implications that were drawn from previous chapters and ends with directions for future research.

1.7 Summary

In summary, this research seeks to identify the major aspects of health care service quality specifically in the outpatient context and aims to address the scarcity of empirical studies on the negative consequences of patient-provider cultural distance along with the efficacy of provider cultural competence in the health care environment. This study contributes to the research of service quality within an intercultural health care framework and explores whether providers’ cultural competence impacts patients’ ratings of the quality of health care services.

CHAPTER 2 LITERATURE ON SERVICE QUALITY

2.1 Introduction

Operationalisation and the assessment of service quality along with measuring customer satisfaction with service quality have been some of the most stimulating topics in management and marketing literature throughout recent decades. There is an abundance of research on these issues that mainly seek two aims: (1) to develop valid instruments for the systematic assessment of customer perceptions of service sectors' performance; and (2) to examine the relationships between service quality and other vital organisational outcomes (Martí'nez & Martí'nez, 2010). In addition, many of these studies sought to understand the relationship between perceived service quality and customer satisfaction in various service sectors.

Several service quality conceptual models and measuring instruments have been developed in recent years to evaluate the performance of various service industries. This chapter reviews the related constructs, service quality and customer satisfaction in the literature of marketing and health care.

2.2 Definition of service quality

In spite of the frequent use of the term "perceived service quality" in the literature, there is no definite consensus on the definition of this concept. Bitner and Hubbert (1994) defined service quality as "the customer's overall impression of the relative inferiority and superiority of the organisation and its services". Grönroos (1984) posited that service quality should be measured based on a comparison of the expected and received service. Likewise, Parasuraman et al. (1985) defined service quality as the deviation between customers' expectations and their perceptions of the performance. Expectation refers to what the customer wants while perception denotes the consumers' evaluation of the service. However,

this definition has been objected to by a number of scholars. For instance, Cronin and Taylor (1992) argued that an individual's perception of quality was merely a function of performance, reasoning that customers may not have any previous experience with or expectations from the service in question. Thus, measuring service quality based on the expectancy-performance approach is problematic. Both of these expectancy-disconfirmation and performance stances remain as the basis of defining and measuring service quality by academics and practitioners.

2.3 Measurement of service quality

Many attempts have been devoted to identifying dimensions of service quality and developing assessment instruments. One of the most commonly acknowledged measuring scales is called SERVQUAL which was produced by Parasuraman et al. (1988). The authors proposed 10 components of service quality as tangibles, reliability, responsiveness, understanding the customers, access, communication, credibility, security, competence and courtesy. Later, they reduced these 10 dimensions to five namely tangibles, reliability, responsiveness, assurance, and empathy which resulted in 22 measuring items in the survey (Parasuraman et al., 1988).

The SERVQUAL instrument was designed to evaluate the difference between quality expectations and perceived service along the stated quality dimensions. The tangibles dimension describes the physical aspect of the service such as equipment or the appearance of providers. Reliability means dependability, accuracy and consistency of performance.

Responsiveness implies the readiness, willingness and promptness to provide the service.

Assurance refers to the knowledge, courtesy and ability of service providers to generate confidence and trust in customers and empathy refers to caring and personalised attention to customers. As noted earlier, Cronin and Taylor (1992) argued that an individual's perception of quality was only a function of performance. They accordingly propounded a performance-

only measure of service quality titled SERVPERF in which the same dimensions as SERVQUAL were used. In this scale, service quality is measured based on customers' perception of performance instead of the gap between the performance perception and performance expectation (Cronin & Taylor, 1992). A large number of studies have applied these scales or variations of them across various industries such as hotel, banking, retail, and health care in different countries (Alrubaiee & Alkaa'ida, 2011; Dosen et al., 2010; Furrer, 2000; Jain & Gupta, 2004; Landrum et al., 2009; Lau et al. 2013; Lee & Yom, 2007; Papanikolaou & Zygiaris, 2014; Ramsaran-Fowdar, 2007; Yunus et al., 2009). Nevertheless, some researchers still have problems with applying these scales for different service contexts. These scales, especially SERVQUAL have received a number of operational and theoretical criticisms as follows:

- 1) There is little evidence that customers assess service quality in terms of perception-expectation gaps (Buttle, 1996).
- 2) The two administrations of the instrument (SERVQUAL) can be confusing and tiresome to respondents (Buttle, 1996).
- 3) In both of these scales, only the process of service delivery is assessed and the outcomes of the service encounter are overlooked (Dagger et al., 2007; Saravanan & Rao, 2007).
- 4) The five dimensions of SERVQUAL are not universal and items do not always load on to the factors that one would a priori expect (Buttle, 1996; Saravanan & Rao, 2007).
- 5) The dimensions of service quality may not be applied in different types of services (Sánchez-Hernández et al., 2009; Suki et al., 2011; Zineldin, 2006)

Due to the drawbacks mentioned above, many researchers emphasised designing tailored measuring instruments for each specific types of service (Andaleeb, 2001; Hiidenhovi et al.,

2001; Kui-Son et al., 2005; Qin, 2009; Sánchez-Hernández et al., 2009; Wu et al., 2008; Zineldin, 2006).

2.4 Service quality in the health care industry

2.4.1 Dimensions of service quality

SERVQUAL and SERVPERF have been extensively employed to measure perceived service quality in the health care industry. However, owing to the shortcomings of these scales, a number of researchers have refined these scales or have proposed new frameworks and measuring tools for measuring health service quality.

Some health care studies have adopted technical-functional approach for measuring the quality of service. Two dimensions to measure service quality namely, technical quality and functional quality, was proposed by Grönroos (1984). Technical quality refers to the outcome of service performance and functional quality is related to customer perceptions of the way the service is delivered. In health care settings technical quality mainly denotes the accuracy of diagnostic and treatment processes; while functional quality refers to the manner of the health professionals during the service delivery process (Choi et al., 2004; Qin, 2009; Rashid & Jusoff, 2009). Most of the service quality measures only focus on functional aspect of care, and the technical dimension is excluded from these scales. One reason for the ignorance of technical quality is the belief that patients lack the required knowledge to evaluate the technical performance of the medical care (Vinagre & Neves, 2008). Another reason is the time gap between the provision of the health care services and the recognition of technical outcomes (Choi et al., 2004). However, a few researchers believe that both dimensions are an integral part of the health service quality and the technical aspect of care can remarkably impact clients' overall ratings of service quality. Hence, excluding this aspect from measuring instruments may hinder obtaining a reliable estimation of health care service quality (Dagger

et al., 2007; Zineldin, 2006). Including the technical aspect of care has also been stressed by Donabedian who proposed a well-acknowledged framework for measuring performance in the context of health care. According to Donabedian's model, three indicators, i.e. structure (or the environment of care), process (or the content of care) and outcome (or the results of care) should be considered for assessing the quality of care (Donabedian, 1988, 1992). In this framework, the author distinguished two major aspects of health care quality, namely technical and interpersonal processes. According to this framework, technical care represents how well medical knowledge and skills are applied to diagnose and treat problems, while interpersonal care reflects the dyadic interaction that occurs between the practitioner and the client.

To address the limitations of SERVQUAL, some additional quality dimensions have been proposed by researchers in various fields of service. However, opposing views on the elements of service quality, especially with regard to the technical aspect of care, prevent reaching a consensus on the key dimensions of health service quality. Moreover, although quality aspects such as effective communication and receiving thorough information from medical providers are very important to health care consumers, this element has not received enough attention in service quality measures (Gasquet et al., 2004). Hence, researchers have tried to refine the service quality scales and make them more applicable to health organisations. For instance, Zineldin (2006) proposed a framework of five quality dimensions (5Qs) by expanding technical-functional and SERVQUAL quality models. In this model health service quality is conceptualised by five quality dimensions namely quality of object (technical quality), quality of processes (functional quality), quality of infrastructure, quality of interaction, and quality of atmosphere (Zineldin, 2006). Quality of object involves technical quality and measures treatment itself. Quality of process refers to the functional

aspect of care and the medical delivery process. This dimension assesses how well health care activities are implemented. Examples include waiting times and the speed of performing medical activities. Quality of infrastructure appraises the resources which are needed to perform health care services. Quality of interactions is about the communication and interaction between patients and health workers. Quality of atmosphere measures the environment of the service delivery system. Similarly, Choi et al. (2005) suggested a four-factor structure, including physician concern, staff concern, convenience of care process, and tangibles, which reflect aspects of technical, functional, environment, and administrative quality. In order to measure health service quality in depth, Dagger et al. (2007) developed a multidimensional and hierarchal model to measure quality of service in the health care industry. This model consists of four primary dimensions (interpersonal quality, technical quality, environment quality and administrative quality) and nine sub-dimensions. Each primary dimension is composed of at least two sub-dimensions. Interpersonal quality reflects the quality of the dyadic relationship between the service provider and client and includes two sub-dimensions, namely interaction and relationship. Technical quality describes the expertise and professionalism of the service provider in the delivery of health services and contains two sub-dimensions, namely outcome (of treatment) and expertise. Environment quality reflects the characteristics of the service environment and consists of atmosphere and tangibles. Finally, administrative quality refers to the elements that facilitate the delivery of core services and includes three elements, namely timeliness, operation, and support. This model is one of the few service quality models that have been developed based on the themes extracted from a qualitative study (interviews with patients). The authors also provided supporting literature for their qualitative findings to confirm the sub-dimensions identified from interviews.

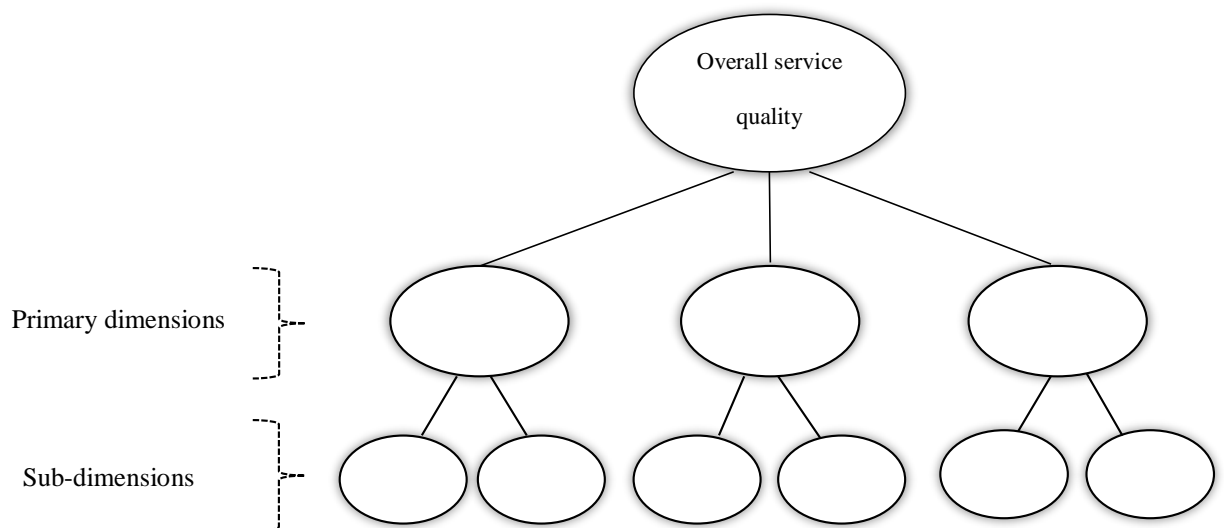
Our review of service quality studies, especially health care related investigations, show the lack of consensus on service quality dimensions particularly in the health care context.

Although modification of SERVQUAL is advisable to make service quality measures more compatible with the characteristics of a particular service, this leads to a huge variety in the dimensions of quality in different measuring scales even for the same service sector such as health care.

2.4.2 Hierarchical approach

Some researchers have applied a hierarchical approach in developing service quality models. They believe that to perform an effective assessment of service performance, service quality dimensions should be divided into numerous primary dimensions and then the primary dimensions should be further divided into various sub-dimensions using hierarchical models (Figure 1). They speculate that the multi-dimensional approach can offer an improved explanation of the complexity of human perceptions.

Figure 1 The multi-level model of retail service quality



This approach has been used in different industries such as education, health care, tourism, transport, telecommunication, retailing and recreational sports sectors (Brady & Cronin, 2001; Caro & García, 2008; Clemes et al., 2007; Collins, 2005; Dagger et al., 2007; Fassnacht &

Koese, 2006; Jones, 2005; Kang & James, 2004; Kim, 2003; Ko & Pastore, 2005; Pollack, 2009; Shonk, 2006).

For instance, Brady and Cronin (2001) proposed a third-order factor model for the service quality construct through qualitative and empirical studies. This model comprises three primary dimensions: interaction quality, environmental quality, and outcome quality.

Subsequently, each of these three dimensions consists of three sub-dimensions: (i) interaction quality, including attitude, behaviour, and expertise; (ii) physical environment quality, including ambient conditions, design, and social factors; and (iii) outcome quality, including waiting time, tangibles, and valence. The authors tested their models across various industries such as fast-food, amusement parks, and dry-cleaning.

In another study, Caro and Roemer (2006) conceptualised service quality as a third-order factor for the travel and tourism industry. Through an extensive literature review and qualitative research, the authors developed a hierarchical model of service quality that reflected three primary dimensions: personal interaction, physical environment and outcome. Personal interaction was divided into three sub-dimensions, including conduct, expertise, and problem solving. Physical environment incorporated equipment and ambient condition and finally outcome was divided into value and waiting time.

In the health care context, Dagger et al. (2007) generated a hierarchical model that contains four primary dimensions: interpersonal quality, technical quality, environment quality and administrative quality. The first primary dimension, interpersonal quality, was composed of two sub-dimensions: interaction and relationship. Technical quality, as the second primary dimension, was made up of two sub-dimensions: outcome and expertise. The third primary dimension, environment quality, also comprised two sub-dimensions: atmosphere and

tangibles. Finally, the fourth primary dimension, administrative quality, included three sub dimensions: timeliness, operation, and support.

Although there are similarities among the proposed hierarchical models, there is no unanimity on primary dimensions and sub-dimensions even for the same type of service. Moreover, these researchers could not reach an agreement on whether service quality is a second-order construct or is a higher-order construct (e.g., a third, fourth or fifth-order factor).

Additionally, regarding the direction of causality from the sub-dimensions to the construct, there is no consensus among these scholars on whether service quality should be conceptualised as a formative construct or a reflective construct (Figure 2 and Figure 3).

Figure 2 Formative service quality model

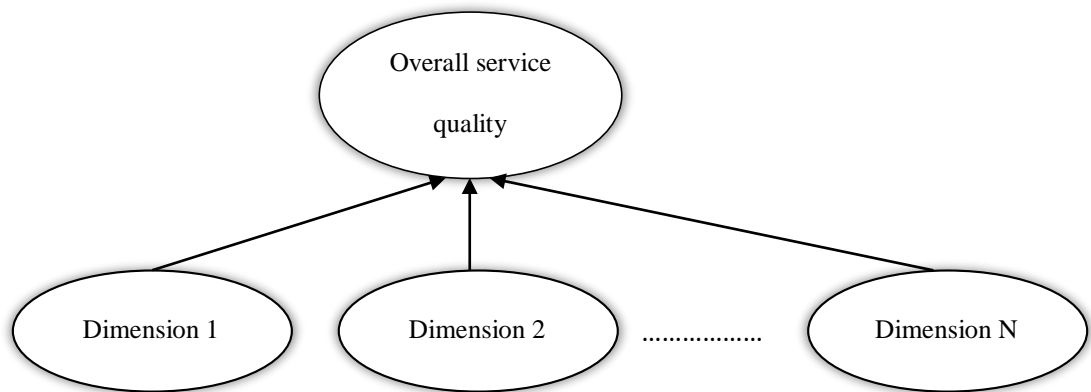
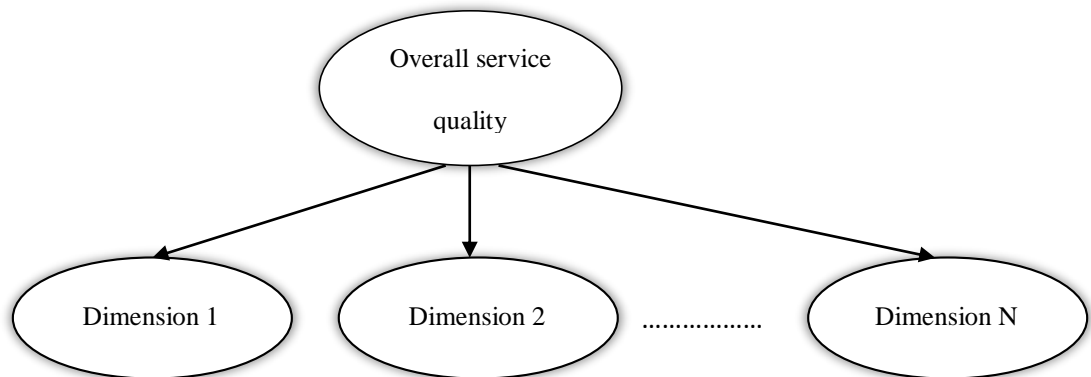


Figure 3 Reflective service quality model



According to the formative approach, the dimensions of service quality drive or cause the overall construct (Dabholkar et al., 2000; Parasuraman et al., 2005; Rossiter, 2002), whereas in the reflective method, the dimensions are seen as reflective indicators of their higher order construct (Jarvis et al., 2003; Qin, 2009). Although the majority of researchers in the field of management and marketing have adopted reflective models, some scholars argue that there are instances in which it may be hard to justify the reflective assumption from either theory or practice (Coltman et al., 2008). For instance, Dagger et al. (2007) indicated that changes in the sub-dimensions cause variation in primary dimensions of service quality rather than the other way round. Therefore, the dimensions form or determine the service quality construct. The authors argue that it does not make sense to suggest that high levels of technical service quality are the result of high overall service quality perceptions, but rather that as technical service quality rises, overall service quality perceptions improve. Moreover, Diamantopoulos (2006) asserted that modeling the service quality as a formative construct results in a better specification for the construct. Hierarchical reflective models for measuring service quality have been a subject to several criticisms. This approach assumes service quality as a multidimensional construct which does not exist separately from its dimensions (Edwards, 2001; Martínez & Martínez, 2010). However, it can be argued that dimensions of quality are separate from overall service quality by differentiating the attribute-level performance from global judgements about service as different entities (Martínez & Martínez, 2010). Furthermore, consumers may assess two dimensions of service differently. For example, they may be highly satisfied with one aspect (e.g., cleanliness of the clinic) but highly dissatisfied with another aspect (e.g., expertise of the doctor). The findings of a study about the public sport service indicated a non-significant correlation among customer perception of personal interaction and two tangible aspects of the service (changing rooms and physical environment

hygiene) (Martínez & Martínez, 2008). Hence, if two dimensions of quality are poorly correlated, using the reflective method is problematic.

Although the hierarchical approach has been acknowledged by many researchers, this approach is not a panacea and the use of multidimensional higher-order constructs has been widely debated. One problem is to decide the number of tiers in dividing a higher-order construct. Martínez and Martínez (2008) criticised this approach stating that any factors in the lower-order level may be analysed in a more detailed form. For instance, the ‘tangibles’ sub-dimension in the study can be divided into different elements such as ‘ambient conditions’ and ‘equipment’, and subsequently these new factors can be considered the lower-order construct and be divided into more dimensions. Accordingly, service quality would be a fourth-order construct manifested by third-order level dimension, second-order level sub-dimensions, first-order level sub-sub-dimensions and observable indicators. This procedure can be repeated to form an even higher-order service quality construct. This approach remarkably increases the complexity of both the conceptualisation and the statistical procedure for empirically testing the model (Martínez & Martínez, 2010). Additionally, the length of the questionnaire increases to ensure more detailed factors. This issue may cause boredom for participants and may discourage practitioners who normally prefer to use short surveys to collect data and simple statistical techniques to analyse data.

2.4.3 Overlap and ambiguity in service quality scales

As discussed earlier, there is no consensus among academics on the dimensions of service quality and the best approach to conceptualise this concept (e.g., either formative or reflective structure). During the review of several measurement scales we found many overlaps among the assessment tools. However, a number of terms and concepts have been measured by using different indicators in different studies and this issue brings about confusion regarding the

definition and operationalisation of these constructs. For instance, the phrase “listen carefully to what I say” has been used to measure reliability, empathy or interaction in different papers (Alrubaiee & Alkaa'ida, 2011; Qin, 2009); the item “the doctor is courteous and friendly” was included under different factors such as responsiveness, assurance or empathy (Alrubaiee & Alkaa'ida, 2011; Landrum et al., 2009); and the item “the registration (appointment) process was simple” was placed under reliability or responsiveness (Alrubaiee & Alkaa'ida, 2011; Wu et al., 2008). Moreover, a few scholars combined various SERVQUAL dimensions, e.g., empathy and responsiveness and use them as a single factor (Zhou, 2004).

Another issue in the existing health service quality instruments is the inconsistency regarding addressing particular providers. Some of the measurement items seemed indistinct and confusing for patients. For instance, in several questionnaires, patients were asked generally about “staff” or “employees” and it is not clear if these terms refer to the doctor or the staff such as receptionists and nurses (Alrubaiee & Alkaa'ida, 2011; Dagger et al., 2007; Suki et al. 2011). Some other researchers clarified the terms in their scales that patients may find the doctor incompetent or impolite but not have any complaint about the receptionists, or vice versa. Therefore, in some studies, the authors differentiated staff and doctors by using more specific terms like “doctor/physician/GP” and “nurses/receptionists”. Nevertheless, in these studies, the authors have not differentiated staff-related and doctor-related quality factors. For example, to measure the “reliability” of the service, patients were asked about both doctor’s and the other staff (Priporas et al., 2008; Yang-Kyun et al., 2008). In very few studies, the authors proposed separate constructs for the doctor’s attributes and the other staff traits (Cho et al., 2004; Rao et al., 2006; Vinagre & Neves, 2008).

Table 2 illustrates a number of recent studies that have measured perceived service quality in health settings. As can be seen, different dimensions have been used to assess quality of care

in these studies. In addition, while some factors have been replicated in several studies, they have not been measured by using the same questions or measuring items.

Table 2 Relevant studies of health care quality

Authors	Service quality dimensions
Ariffin & Aziz (2008)	tangibles, empathy, reliability, responsiveness
Akter et al. (2008)	responsiveness, assurance, communication, discipline, baksheesh
Alrubaiee & Alkaa'ida (2011)	tangibles, reliability, responsive, assurance, empathy
Andaleeb (2001)	responsiveness, assurance, communication, discipline, baksheesh
Arasli et al. (2008)	empathy, giving priority to inpatient's needs, relationships, professionalism of staff, food, physical environment
Badri et al. (2005)	transition to home, communication, involvement, courtesy and empathy, fairness and trust, competency and confidence, information, tangibles and physical attributes, other facilities and services, payment matters, management rules and regulations, timely matters, waiting times and delays, responsiveness and psychological aspects, availability and accessibility
Badri et al. (2008)	tangibles and facilities, empathy and personal attention, professionalism and courtesy, competency/knowledge/reliability and trust, rules/regulations/administrative matters, availability and accessibility of resources, communication, involvement and information sharing, transition to home
Baldwin & Sohal (2003)	responsiveness, assurance/empathy, reliability, tangibles
Bos et al. (2013)	waiting time, doctors and nurses care and treatment, hygiene, information before discharge
Carlucci et al. (2013)	booking service, waiting time, admission services, promptness, accessibility/ comfort/cleanliness, attention from medical staff, clarity/completeness of information, attention received from nurses, respect of privacy
Chahal (2008)	physician performance, nursing performance, operational quality
Chang et al. (2013)	response, reliability, assurance
Choi et al. (2004)	convenience of the care process, health care providers' concern, physician's concern, tangibles
Clemes et al. (2001)	outcome, reliability, assurance, discharge, responsiveness, empathy, admission, tangibles, access, food
Dagger et al. (2007)	interaction, relationship, outcome, expertise, atmosphere, tangibles, timeliness, operation, support

Authors	Service quality dimensions
De Man et al. (2002)	tangibles/assurance, reliability, responsiveness, empathy, convenience
Duggirala et al. (2008)	infrastructure, personnel quality, process of clinical care, administrative procedures, safety indicators, overall experience of medical care, social responsibility
Fotiadis & Vassiliadis (2013)	tangibles, reliability, responsiveness, assurance, empathy
Gasquet et al. (2004)	consultation with the doctor, appointment making, reception and facilities, waiting time
Grogan et al. (2000)	doctors, nurses, access, appointments, and facilities
Haddad et al. (2000)	interpersonal aspects of care, technical aspects of care, outcomes of care
Hasin et al. (2001)	cleanliness, quick response, courtesy, communication
Henoch et al. (2012)	medical–technical competence, physical-technical conditions, identity-oriented approach, socio-cultural approach, telephone accessibility
Hutchison et al. (2003)	patient-centred communication, physician’s attitude, delay in the waiting room
John et al. (2011)	tangibles, reliability, responsiveness, assurance, empathy, outcome
Khanchitpol & William (2013)	tangibles, reliability, responsiveness, assurance, empathy
Kilbourne et al. (2004)	tangibles, reliability, responsiveness, empathy
Kobayashi et al. (2010)	accessibility to nurses, room odour, disturbance sincerity, expertise and skills, function improvement support, emotional support, courtesy, patient decision-making, pain management, essential care, information support, post-discharge support
Lee & Yom (2007)	tangibility, reliability, responsiveness, assurance, empathy
Lin et al. (2004)	tangibles, reliability, responsiveness, assurance, empathy
Lin et al. (2009)	tangibles, reliability, responsiveness, assurance, empathy
Macinnes et al. (2010)	staff interaction, rehabilitation, communication, milieu, finance, safety
Margaritis et al. (2012)	tangibles, reliability, responsiveness, assurance, empathy
Mehta (2011)	promptness, medical aids, patient interest
Miyashita et al. (2014)	physical care by physician, physical care by nurse, psychoexistential care, help with decision making by physician, environment, cost, availability, coordination and consistency
Muntlin et al. (2006)	medical-technical competence, physical-technical conditions, identity-oriented approach, socio-cultural atmosphere
Otani & Kurz (2004)	admission process, physician care, nursing care, compassion to family/friends, pleasantness of surroundings, discharge process

Authors	Service quality dimensions
Padma et al. (2010)	infrastructure, personnel quality, process of clinical care, administrative procedures, safety indicators, hospital image, social responsibility, trustworthiness of the hospital
Pakdil & Harwood (2005)	wait for appointment, wait during visit, adequate information, friendly and courteous, comfortable clinic
Priporas et al. (2008)	tangibles, reliability/assurance, interpersonal communication, responsiveness
Qin (2009)	technical quality, tangibles, assurance, professionalism, recoverability, efficiency, waiting time, interaction
Ramsaran-Fowdar (2008)	core medical services/professionalism/skill/competence, information dissemination, responsiveness, tangibility, reliability, assurance/empathy
Rao et al. (2006)	medicine availability, medical information, staff behaviour, doctor behaviour, clinic infrastructure
Rohini & Mahadevappa (2006)	tangibles, reliability, responsiveness, assurance, empathy
Schroder et al. (2007)	dignity, security, security, recovery, environment
Sohail (2003)	tangibility, reliability, responsiveness, assurance, empathy
Sower et al. (2001)	respect/caring, effectiveness/continuity, appropriateness, information, efficiency, meals, first impression, staff diversity
Suki et al. (2011)	reliability, tangibility, responsiveness, responsiveness, empathy, courtesy, communication, understanding the customer
Tam (2007)	support staffs' performance, doctors' consultation, nurses' performance, physical environment, dispensers' performance, length of wait for consultation, doctors' proactive attitudes
Tucker & Adams (2001)	caring, empathy, reliability, responsiveness, access, communication, outcome
Vinagre & Neves (2008)	reliability, physician's assurance, employee's assurance, tangibles
Wicks & Chin (2008)	assurance, empathy, communication, competence, confidentiality, convenience, courtesy, reliability, responsiveness, security, tangibles
Wong (2002)	tangibles, reliability, responsiveness, assurance, empathy
Wu et al. (2008)	tangibles, responsiveness, assurance, interaction
Yang-Kyun et al. (2008)	procedure of care, medical doctor, hospital facility, reliability
Yesilada & Direktor (2010)	reliability/confidence, empathy, tangibles
Zarei et al. (2012)	reliability/responsiveness, empathy, tangibles
Zineldin (2006)	quality of object , quality of processes, quality of infrastructure, quality of interaction, quality of atmosphere

In summary, opposing viewpoints on the definition and especially on the conceptualisation of the service quality have resulted in generating differing assessment tools to evaluate the quality of service in the health care context. In this study, we aim to address the issues identified based on the review of the existing literature. Thus, through a qualitative study, major elements of health service quality are identified, and based on patient perspectives measuring indicators are chosen from a pool of items extracted from various surveys. Additionally, the multi-dimensional approach for modelling service quality is not preferable in this study to produce an efficient but simple model and survey that can be used simply by practitioners.

2.5 Service quality and customer satisfaction

Vahey (2000) defined patient satisfaction as the process by which patients experience gratification and contentment and this satisfaction often leads to compliance with treatment and desirable health outcomes (Vahey, 2000). Patient satisfaction is considered as the centre of business strategy for health care organisations. In addition to attaining acceptable health outcomes, patient satisfaction is important for health sectors in terms of patient retention and financial outcomes (Boudreaux & O'Hea, 2004). Several studies show that patients with higher satisfaction levels are more likely to adhere to medical instructions and recommend the health care providers to others (Boudreaux & O'Hea, 2004; Lin & Guan, 2002; Qin, 2009). Therefore, health organisations should attempt to raise the satisfaction levels of their patients to achieve better medical and financial results.

The exact association between perceived service quality and customer satisfaction is a frequently debated topic in terms of the distinction between the two constructs and the causal direction of their relationship (Brady et al., 2002; Wu et al., 2008). Parasuraman et al. (1988), for instance, propounded that consumers use the same service quality dimensions to gauge

both service quality and satisfaction. Hence, they do not seem to make a clear distinction between the two concepts. Advocating this standpoint, Grönroos (2007) stated that the debate on the difference between these constructs is not necessary based on the logic that “perception of service quality comes first, followed by a perception of satisfaction with this quality” (Grönroos, 2007, pp. 54). However, a number of researchers are opposed to this viewpoint and argue that sometimes customers may perceive the service quality to be good but still be unsatisfied with the service (Williams & Buswell, 2003). Some academics have posited that satisfaction is a broader construct than perceived service quality (Brady & Cronin, 2001; Dedek, 2003). For example, Qin (2009) considered customer satisfaction as a broad concept and proposed a model in which several factors, such as perceived service quality, emotions, perceived value, image, and satisfaction expectations, are considered as antecedents of patient overall satisfaction (Qin, 2009). Some of the advocates of distinguishing perceived service quality and satisfaction speculate that service quality is a cognitive construct while satisfaction is a more complex concept including both cognitive and affective elements (Alrubaiee & Alkaa'ida, 2011; Zineldin, 2006). Furthermore, a few researchers believe that sometimes customers with similar perceptions of service quality might not express the same level of satisfaction. This situation is especially common when the customers are from diverse cultural backgrounds holding different characteristics and different viewpoints towards service experience (Reimann et al., 2008). Therefore, assessing customer satisfaction through perceived service quality might be problematic particularly when the customers are culturally different (Räsänen, 2011).

There are two major viewpoints regarding the casual relationship between perceived service quality and customer satisfaction. Rust and Oliver (1994) viewed that the satisfaction concept reflects the degree to which a customer believes that the use of a service evokes positive

feelings. Thus, one perspective posits that perceived quality is a cognitive antecedent to the affective construct of satisfaction (Dagger et al., 2007; Oliver, 1997; Wu et al., 2008; Zineldin, 2006). However, the second perspective considers satisfaction as an antecedent to a global evaluation of service quality, reasoning that an accumulation of transaction-specific satisfaction judgments will result in a broader, global assessment of service quality (Brady & Robertson, 2001; Oliver, 1980).

In numerous health care-related studies, service quality and patient satisfaction have been assumed as distinct constructs and customer satisfaction has been presumed to be influenced by perceived service quality, i.e. higher levels of perceived service quality contributed to increased levels of customer satisfaction (Alrubaiee & Alkaa'ida, 2011; Dagger et al., 2007; Wu et al., 2008; Zineldin, 2006). Additionally, there is empirical evidence that patient satisfaction mediated the impact of service quality on behavioural intentions, which includes adherence to treatment and following medical instructions (Gill & White, 2009; Dagger et al., 2007).

Although there is no consensus on the exact nature of these two concepts and their casual relationships, the majority of marketing academics view service quality as a major predictor of customer satisfaction. Thus, in this study service quality is considered as an antecedent of patient satisfaction and the discriminant validity is examined to find empirical supports for this proposition.

2.6 Summary

In summary, this chapter reviewed two related constructs, perceived service quality and customer satisfaction in the literature of marketing and health care management. This chapter provided a thorough description of the theoretical and empirical development of these constructs and elaborated a number of issues related to main theories of service quality such

as SERVQUAL and SERVPERF. This review helped in the identification of a gap in knowledge which this study attempts to fill.

CHAPTER 3 QUALITY OF CARE AND PATIENT SATISFACTION AMONGST CAUCASIAN AND NON- CAUCASIAN PATIENTS: A MIXED-METHOD STUDY IN AUSTRALIA

Abstract

Purpose: The primary purpose of this study was to explore the key aspects of service quality perceived by patients within the outpatient context. The secondary aim was to compare views on the quality of health service by Caucasian and non-Caucasian patients in Australia.

Methodology: A mixed-method approach was adopted for this study. Qualitative data were collected from 40 patients to develop a scale for measuring health service quality.

Quantitative data were collected using self-administered questionnaires available in English, Arabic, Persian, Chinese, and Vietnamese. A total of 447 patients in six outpatient clinics completed the survey and data were analysed using the structural equation modelling (SEM) technique.

Findings: The qualitative findings determined eight dimensions of quality for outpatient care as follows: i) doctor professionalism, ii) doctor empathy, iii) doctor expertise, iv) treatment outcome, v) staff concern, vi) timeliness, vii) tangibles, and viii) operation. The quantitative findings indicated that factors related to technical aspect of care, including doctor expertise and treatment outcome were assumed to be the strongest predictors of overall health care quality in both Caucasian and non-Caucasian groups. Furthermore, no significant discrepancy was found between these two groups' ratings of overall service quality and satisfaction with care.

Originality: The study captured ethnically diverse patients' perspectives on health service quality and highlighted the significance of technical quality, which is generally neglected in service quality measures.

Keywords: service quality, patient satisfaction, outpatient care, patient perception, Australia

3.1 Introduction

An abundance of literature on service quality and customer satisfaction indicates the significance of quality enhancement in the service sectors. Research has shown that high-quality service leads to customer retention and the attraction of new customers, fewer complaints and lower costs, and greater loyalty and positive word-of-mouth recommendations, and, ultimately, further profitability (Ferguson et al., 2006; Kang & James, 2004). Among the various service industries, the health sector has received increasing worldwide attention due to the importance of health as a major goal of national development. Compared to many other industries, the health care industry is unique owing to its role as an important part of a country's economy. In 2011, the health industry consumed an average of 9.3% of the GDP or US\$3,322 per capita across the 34 members of the OECD (Health at a Glance, 2013). Health care is regarded as a crucial factor in improving the general well-being of people throughout the world and governments' focus on health care systems tends to address issues of how to deliver high-quality and accessible care at a reasonable cost. The complexity of defining and measuring the "quality" of a service and the differing views among scholars have resulted in the adoption of different methods to assess service quality. In the health context, quality of care has conventionally been measured using objective indicators such as mortality and morbidity, and less attention has been devoted to patients' perceptions of health service quality (Dagger et al., 2007). However, in recent decades, the role that patients play in defining the meaning of service quality has become a critical competitive consideration (Dagger et al., 2007; Lis et al., 2011; Zineldin, 2006). Patients' quality perceptions have been shown to account for 17 to 27 per cent of the variation in a hospital's financial indices such as earnings, net revenue and asset returns (Alrubaiee & Alkaa'ida, 2011; Naidu, 2009). In addition, patients' perceptions of health care quality affect their preferences in seeking medical services. If health care sectors cannot be trusted to

provide optimum quality in service delivery, they will be underutilised or used by patients only as a last resort when it might be too late to offer preventive care or treatment instructions (Andaleeb, 2001). Thus, to provide zero defect services, medical providers need to adopt reliable patient-rating measures that yield dependable responses and an accurate assessment of service quality. However, due to the paucity of reliable and valid instruments that are compatible with health care peculiarities, the health sector may fail to adequately capture clients' insights about the service (Akter et al., 2008). This situation may prevent medical providers from receiving a comprehensive assessment of quality, and the issues may hinder the improvement of service quality.

The provision of high-quality and equal medical care is an even more critical issue in multicultural countries with a great deal of ethnic and socioeconomic variety in their populations (Kale & Kumar, 2012). Several reports have studied and demonstrated disparities in the quality of care in multi-ethnic countries such as the United States where in the majority of the population is Caucasian. Some scholars have emphasised the importance of comparing majority and minority groups' opinions about the quality of care and conducted studies to examine perceptions of these two major groups about the quality of health care they received (Saha et al., 2011). It has been reported that minority patients (non-Caucasians) are more likely to receive inferior quality care than majority patients (Caucasians) and members of racial minority groups have less trust in their providers, are less satisfied with the quality of health care and have poorer health outcomes (Agency for Healthcare Research and Quality, 2011; American College of Physicians, 2010; Levine & Ambady, 2013). Thus, the health sector should be committed to the continual assessment of service quality not only to detect which aspects of service need to be changed, but also to become cognisant of potential discrimination in the delivery of health care to the diverse population. Accordingly, they can reduce prospective inequalities and provide the most valuable care for all groups of people

regardless of their socio-economic or cultural/ethnic status. Hence, medical providers need to attempt to obtain the opinions of all cohorts of patients, including immigrants and ethnic minorities and not merely the mainstream to identify potential discrimination and realise whether there is a lower perceived quality among non-Whites compared to Whites (Saha et al., 2011). Unfortunately, in multicultural countries, ethnic people are often excluded in health care inquiries owing to the challenges and investment required to ensure their participation (NHMRC, 2005). Compared to the United States, very few studies have targeted minority groups in health care quality studies conducted in Australia. Consequently, there is inadequate information about these people's perceptions of providers' attitudes, service preferences, satisfaction with care and possible inequalities in the quality of care. While one of the health care sector's objectives in the fight against poverty and social exclusion is providing equal access to high-quality services to all patients, this issue impedes realising such a goal.

The purpose of this study is, firstly, to identify the key drivers of health service quality and to develop an inclusive scale to measure perceived quality of service delivered to outpatients in Australia. Secondly, this study aims to compare the significant factors in evaluating service quality, as well as the influence of perceived quality on patient satisfaction between Caucasian and non-Caucasian groups. This comparison allows us to investigate whether a disparity exists in the quality of outpatient care offered to ethnic minority and majority patients. Moreover, it can be explored whether quality dimensions are consistently important across both groups. Since there are differing views over the dimensions of health service quality and concerning the scarcity of instruments developed in the Australian context, a mixed-method sequential approach with a qualitative priority was used in this study. A qualitative study was initially conducted to identify and describe the measurement elements of service quality in the health sector. These data were then compared with the existing service quality scales to extract the most important service quality dimensions and measuring items.

Afterwards, the developed instrument was employed to obtain patients' perceptions of health service quality.

3.2 Theoretical background

3.2.1 Service quality and the health care industry

Conceptualising and measuring perceived service quality continues to be a controversial subject in service marketing literature. Parasuraman et al. (1985) defined service quality as the difference between customers' expectations of service and their perceptions of service performance. The authors generated a generic instrument called SERVQUAL to measure the quality of service in different industries (Parasuraman et al., 1988). This scale measures the deviation between a customer's perceived performance and his/her expectation of service over five dimensions of service quality, namely, tangibles, reliability, responsiveness, assurance and empathy. In spite of being ubiquitously used and cited in service quality studies, SERVQUAL has been the subject of considerable debate. Some inquirers have criticised the approach of measuring the deviation between expectation and performance, or objected to the validity of the dimensions and noted that empirical supports of the proposed components were not always robust (Cronin & Taylor, 1992; Teas, 1993). They noted that some customers might not have any previous experience with or expectations of the service in question (Brady et al., 2002; Jain & Gupta, 2004). To address these drawbacks, Cronin & Taylor (1992) argued that an individual's perception of quality is merely a function of performance and propose a performance-only measure of service quality called SERVPERF. Nevertheless, some researchers still have problems with applying these scales within diverse service contexts. They believe that the proposed dimensions in SERVQUAL and SERVPERF may vary depending upon the nature of services and that a tailored instrument for each specific

sector or industry should be developed (Andaleeb, 2001; Murti et al., 2013; Ramsaran-Fowdar, 2008).

In the health care industry, performance measurement has received increasing attention in recent decades. Many projects have been conducted at the national and international level to assess the quality and performance of health care services. However, these projects usually had different purposes and therefore adopted different strategies and performance indicators. The diversified sets of performance indicators hindered achieving unanimous agreement among practitioners and academics on the essential service quality factors and performance measurement frameworks or tools (Liu, 2013). Different frameworks tried to evaluate performance based on the viewpoints of various stakeholders such as patients, employees, managers, and policy makers.

In health care literature, a number of frameworks have been broadly applied for performance measurement. One of them is the Donabedian's model in which three indicators, namely structure (or the environment of care), process (or the content of care) and outcome (or the results of care) were considered in appraising the quality of care (Donabedian, 1988, 1992). In this framework, the author differentiated between two key elements of health care quality, namely, technical and interpersonal processes. According to this framework, technical care represents how well medical knowledge and skills are applied to diagnose and treat problems, while interpersonal care reflects the dyadic interaction that occurs between the practitioner and the client. The amenities element in this framework describes the intimate features of the environment wherein care is provided. Moreover, the Balanced Scorecard (BSC) model developed by Kaplan and Norton (1993) is ubiquitous in the organisational performance assessment in the health sector. This model encompasses four critical perspectives: financial, customer, internal business process, and learning and growth (Kaplan & Norton, 1993). Customer perspective is considered a key driver of performance in this framework and the

authors emphasised that poor performance from this perspective can be a leading indicator of future decline, even though the current financial picture may seem satisfactory. However, there is not a unique approach or an instrument to measure BSC's customer perspective and various indicators and tools have been employed for this purpose. For example, in one study, indicators such as cleanness, convenience, equipment, knowledge of providers, explanations, waiting time, and outcome of treatment were used to assess consumers' views of the service (Huang et al., 2004) and in another study patient ratings of factors such as registration, physician behaviour, discharge process, and test and treatments were used to measure BSC's customer perspective (Lorden et al., 2008).

Among a large number of scales for measuring perceived service quality, SERVQUAL and SERVPERF are the commonly applied scales in health care settings. Nevertheless, there has been a significant critique of these scales for overlooking some critical aspects of health service or due to the insufficient emphasis on some key quality dimensions. For instance, several authors believe that both of these scales accentuate the functional aspects of a service encounter with less attention to relational aspects such as understanding and empathy (Sanchez-Hernandez et al., 2009). While in the health care industry, relational factors can highly influence the patient's judgment of service quality, the dimensions of SERVQUAL are unable to thoroughly measure health service quality (Gill & White, 2009). Moreover, the majority of the researchers excluded the technical aspect of service in assessing measures and merely focused on the functional aspect of service, while particularly in the medical setting the technical aspect of care may remarkably impact clients' overall judgment (Dagger et al., 2007). Technical quality can be defined as technical proficiency and clinical competence while functional quality includes functional aspects such as facilities, cleanliness, and hospital personnel attitude, meaning the manner in which the service is delivered (Donabedian, 1992; Rashid & Jusoff, 2009; Seth et al., 2005). Some scholars failed to include the technical aspect

of care in the measuring scale reasoning that patients lack the knowledge to assess the technical performance of providers (Vinagre & Neves, 2008). Another reason for not including the technical dimension is the time lag between the delivery of the medical service and recognition of the results (Choi et al., 2004).

To address the limitations of SERVQUAL, a few scholars have refined the measure by suggesting additional dimensions. However, contradictory views on the components of service quality, especially with regard to the technical aspect of care, prevent reaching a consensus on the key elements of health service quality. In one of these attempts, Sanchez-Hernandez et al. (2009) proposed a hierarchical and integrated service quality model encompassing the functional quality (describing the efficiency with which the service core is provided), tangibles (the quality of the physical service environment) and relational quality (the relational or emotional benefits the customer receives). Zineldin (2006) conceptualised health service quality by five quality dimensions containing the quality of object (technical quality), quality of processes (functional quality), quality of infrastructure, quality of interaction, and quality of atmosphere. More extensively, Dagger et al. (2007) developed a multidimensional and hierarchical model for measuring health service quality with nine sub-dimensions, namely, interaction, relationship, outcome, expertise, atmosphere, tangibles, timeliness, operation, and support as well as four primary dimensions, namely interpersonal quality, technical quality, environment quality, and administrative quality that in turn drive overall perceived service quality.

A review of service literature shows a remarkable overlap between existing service quality models in which the functional and technical aspects of the service have been considered as the main dimensions of service quality. Additionally, it shows that using a generic scale such as SERVQUAL for measuring service quality in different industries is problematic. Since factors driving service quality vary depending upon the type of industry and also the type of

service within a certain industry (e.g., outpatient versus inpatient service in the health care industry), modifications need to be made in service quality instruments according to the special requirements of a particular service.

3.2.2 Patient satisfaction

Patient satisfaction has been considered a significant contributor to patient compliance with treatment and desired health outcomes (Dang et al., 2013). In addition to attaining favourable health outcomes, patient satisfaction has significant impact on patient retention and the health sector's financial ability (Andaleeb, 2001). In defining and measuring customer satisfaction with services in various industries, debates exist on the difference between perceived service quality and customer satisfaction. Some researchers referred to satisfaction as a proxy for perceived service quality stating that these two concepts are not necessarily distinct (Kleinsorge & Koenig, 1991; Parasuraman et al., 1988). In contrast, other scholars stress the distinction between these two concepts and argue that satisfaction is an emotional response (Torres, 2014). Some scholars posit that service quality is a cognitive construct focusing merely on service dimensions while satisfaction is a broader concept, including both cognitive and affective elements (Alrubaiee & Alkaa'ida, 2011; Gill & White, 2009). Furthermore, several researchers believe that customers with similar perceptions of service quality may not always express the same level of satisfaction. This situation is especially common when customers are from different cultural backgrounds and hold different viewpoints towards service experience (Räsänen, 2011; Reimann et al., 2008). Therefore, viewing these two constructs as a single concept might be particularly problematic when customers are culturally diverse. Although there is no consensus on the exact nature of these two concepts, the majority of marketing scholars view these two constructs as distinctive constructs and consider service quality as the main predictor of patient satisfaction.

3.3 Scale development

One of the aims of this study is to develop a scale for measuring health service quality. Therefore, following a thorough review of the literature, we extracted dimensions of service quality within the health care context. As mentioned previously, the majority of the studies have used the original or modified version of SERVQUAL/SERVPERF; however, contradicting views and lack of clarity in the existing measures hinder the selection of the most important aspects of health care service. In addition, the service quality elements may be different for inpatient and outpatient care, and the measures should be customised for different types of medical care (e.g., the quality of food is a concern for inpatients but cannot be evaluated by outpatients); therefore, we decided to focus on outpatient care. During the review of existing health care quality models and instruments, we found ambiguity in the definition of some current service quality dimensions and measurement items. Hence, we conducted a qualitative study to determine the service quality attributes susceptible to being appraised by clients and to select the most relevant measuring items. Some of the issues we found in the current instruments are as follows:

Overlap among service dimensions and measuring items: The vast majority of studies used all or some of the SERVQUAL dimensions such as reliability, assurance, empathy, responsiveness and tangibles to measure the quality of health care; however, the measuring items related to these factors were not similar in different studies, i.e. one item was used to measure a factor in one study, but the same item was used to measure another factor of SERVQUAL in another study. For instance, the phrase “listen carefully to what I say” was used to measure reliability, empathy or interaction (Alrubaiee & Alkaa'ida, 2011; Qin, 2009); the item “the doctor is courteous and friendly” was included under different factors such as responsiveness, assurance or empathy (Alrubaiee & Alkaa'ida, 2011; Landrum et al., 2009; Suki et al., 2011); the item “the registration (appointment) process was simple” was placed

under reliability or responsiveness (Alrubaiee & Alkaa'ida, 2011; Wu et al., 2008); likewise, “convenient hours of operation” was included under tangibles, operation or responsiveness (Dagger et al., 2007; Landrum et al., 2009; Qin, 2009). A few scholars combined various SERVQUAL dimensions, e.g., empathy and responsiveness (Zhou, 2004). A number of researchers proposed new service quality dimensions such as personalisation and interpersonal manner while some of these factors had remarkable overlap with the SERVQUAL dimensions.

Exclusion of technical quality: Most of the studies overlooked the technical aspect of care reasoning that patients are not qualified to measure this aspect. However, some authors believe that patients appraise technical expertise and experience of providers based on various criteria such as: making a precise diagnosis, i.e., the doctor is able to find out the problem and make a specific diagnosis; the doctor’s diagnostic skills, for instance, the doctor is able to discover the cause of infirmity without or before sending the patient to take a medical test or x-ray; the amount of pain that the patient experiences during the physical examination and treatment; the extent to which the diagnosis and instructions are consistent with the information that the patient has gathered (or will obtain after the consultation) through his/her social circle or internet forums; and also the patient’s knowledge about the doctor’s qualifications or awards which are presented in the clinic or are located on the internet (Dagger et al., 2007; Donabedian 1988; Pfeiffer et al., 2011; Sullivan et al., 2000). In this case, the qualitative study helped us realise whether patients consider this feature of quality in their assessment

Ambiguity in the wording: Some of the measurement items seemed indistinct and confusing for patients. For instance, in several questionnaires, patients were asked generally about “staff” or “employees” and it is not clear if these terms refer to the doctor or the staff such as receptionists and nurses (Dagger et al., 2007; Murti et al., 2013). Patients may find the doctor

incompetent or impolite but do not have any complaint about the receptionist, or vice versa. In some studies, the authors differentiated staff and doctors by using more specific terms like “doctor/physician/GP” and “nurses/receptionists”. Nevertheless, in many of these studies, the authors did not adopt distinctive constructs for the doctors’ and the staff’s qualities. For example, to measure “reliability” of the service, patients were asked about both the doctor and other staff (Chang et al., 2013; Priporas et al., 2008; Yang-Kyun et al., 2008). In very few studies, the authors proposed separate constructs for the doctor’s attributes and the other staff traits (Choi et al., 2004). We argue that particularly in the outpatient setting, the doctor plays a more important role in the delivery of care; patients most likely assess the doctor and the other staff separately, and characteristics of these two groups of people cannot be analysed under the same factor. Therefore, this matter also had to be clarified by evaluating patients’ opinions.

To clarify the meaning of the quality of health service and its most relevant attributes regarding outpatient care, we used a mixed-method sequential research design. This approach, which integrates both qualitative and quantitative methods, has been recommended to yield more valid results (Creswell, 2003). First, qualitative data were collected from semi-structured interviews to recognise how patients perceive the quality of outpatient service. The information gathered in this phase was used to discover the features of health service quality and to develop an instrument tailored to the outpatient service in the context of multicultural Australia. Second, a quantitative study was undertaken to identify the most influential service quality dimensions and to examine the relationship between perceived service quality and satisfaction with care.

3.4 The qualitative study

A purposive sample of 40 patients from diverse ethnic origins who live in Australia participated in our semi-structured interviews. One-on-one interviews were conducted to give all participants with different English skill levels enough time to express their opinions and to create a comfortable environment to share private stories about their health issues and their experiences with the health sector. Eligible participants were selected based on these criteria: aged between 18 and 80, being able to speak English and having at least four experiences with hospitals or medical centres in Australia over the previous two years. We tried to select patients of various ethnicities and socio-economic backgrounds. The participants' characteristics are summarised in Table 3. The consent form and interview questions were prepared in English and translated into Chinese, Vietnamese, Arabic and Persian to ensure informants completely understood the research purpose and interview questions. One of the researchers conducted the interviews in English and patients with lower English proficiency were accompanied by their family members to answer questions and share their experiences with the researcher. Before the interviews began, each participant was asked to sign a consent form and their permission was obtained to audio tape-record the discussion. They all received financial compensation for their participation. The interviews were carried out in August 2012 to September 2012. The informants were asked to define the quality of health care services and to detail specifically poor-quality and high-quality services that they had received during their medical visits in Australia. Patients were also asked to discuss if they assessed the doctors and the other staff separately. The audio records were transcribed and entered into NVivo and coded using the Weber (1990) coding protocol. We used thematic code analysis to choose the most frequently occurring codes (see Appendix 1). One code as the power quote and at least one extra quote as the supportive quote were reported to justify the qualitative grounding of the item (Yin, 2002).

Table 3 Demographic characteristics– qualitative sample

Characteristics	N (%)
Age	
18-25	1 (2.5%)
26-35	7 (17.5%)
36-45	7 (17.5%)
46-55	15 (37.5%)
56-65	3 (7.5%)
Gender	
Male	14 (35%)
Female	26 (65%)
Education	
Illiterate	1 (2.5%)
High school graduate	11 (27.5%)
Tafe	1 (2.5%)
Bachelor's degree	15 (37.5%)
Master's degree	11 (27.5%)
PhD	1 (2.5%)
Years living in Australia	
1-3	5 (12.5%)
4-6	14 (35%)
7-9	4 (10%)
10-12	3 (7.5%)
13-15	1 (2.5%)
>15	13 (32.5%)
Ethnicity (Background)	
Afghan	1(2.5%)
Anglo Saxon (Caucasian)	9 (22.5%)
Arab	5 (12.5%)
Chinese	5 (12.5%)
Indian	3 (7.5%)
Indonesian	2 (5%)
Iranian	6 (15%)
Islander	2 (5%)
Malaysian	2 (5%)
Serb	1 (2.5%)
Vietnamese	4 (10%)
Religion	
Christianity	15 (37.5%)
Islam	10 (25%)
Hinduism	3 (7.5%)
Baha'i	1 (2.5%)
No religion	11 (27.5%)

3.4.1 Qualitative findings

Although the participants were from different ethnicities and socio-economic backgrounds, they specified similar criteria to measure the quality of health care. In the following paragraphs, the key dimensions that we extracted from the interviews are explained and supporting references are provided:

Overall service quality vs. attribute-level performance: Patients mentioned that they evaluate “overall service quality” as well as some detailed attributes. We argue that the attribute-level performance and the global perceived service quality about service are distinct entities and the overall assessment of service quality may be different from evaluations of specific quality features (e.g., “Overall, the quality I received from Clinic X was good, the doctor was very competent, the waiting time however was a bit disappointing, etc.”). Including an overall evaluation of service quality in the service quality model and instrument has been recommended by a number of researchers (Dagger et al., 2007; Miller et al., 2014; Zineldin, 2006); therefore this approach was followed in the current paper.

Expertise: Medical competence was one of the service factors mentioned by all of the participants. Although patients are viewed as not being qualified to assess the technical expertise of the provider (Vinagre & Neves, 2008), our findings indicate that patients consider providers’ knowledge and expertise as a major service quality factor, as noted in the following quotes: “the doctor was incredibly knowledgeable, when I explained some of my symptoms, he could add more and say my other symptoms”; “The doctor was looking at a medical book in front of me to check my symptoms and said ok yes it is in the book, he was not knowledgeable”; “he didn’t have diagnostic skill because he couldn’t realise my problem from the symptoms”; and “he didn’t have to radiate me to find out the problem”. Therefore, as recommended by a few scholars (Dagger et al., 2007; Lin & Guan, 2002; Wongrukmit & Thawesaengskulthai, 2014), we included expertise in the measure of health service quality.

Treatment outcome: The outcome of the treatment is another significant dimension of health care quality. The informants described the outcome as both the outcomes experienced over a series of service encounters and the ultimate result of the treatment (e.g., cure). “The treatment fixed my problem”; “I feel much better and have less pain”; “I know it takes time and my condition may never get cured completely, but it’s much better now”; and “the medications prescribed by the doctor did not work for me, it was a useless visit”. The outcome of treatment has been suggested as a health service quality factor by a few researchers (Dagger et al., 2007; Qin, 2009).

Professionalism and empathy: Two other factors, doctor professionalism and doctor empathy, were mentioned frequently by the participants. Patients differentiated a doctor's professional behaviour from his/her ability to establish rapport with the patients and show empathy. Many participants referred to the terms “professionalism” or “professional manner” and defined them mainly as the way in which the doctor does his/her job to diagnose the disease and find the best solution and generally how the doctor undertakes his/her tasks. The following quotes explain professionalism: “the doctor did a thorough examination”; “the doctor gave me detailed information, explained the cause of my disease and how the medications work”; “the doctor listens to my symptoms carefully”; “the doctor asked about my treatment preference”; and “the doctor took time to ask many questions”. Additionally, patients referred to issues such as paying attention to their concerns and developing friendly conversation to reduce their stress. Several patients believed that some doctors merely tried to do their jobs and could not empathise or build an effective relationship with them. They viewed showing empathy and treating patients in a caring manner as a critical quality factor. These are some examples regarding these issues: “the doctor asked me about things other than my illness, such as my job and we had a very nice chat”; “the doctor was so friendly and caring; I was so stressed and she cared about my concerns”; “he was very respectful and

didn't treat me like just a number"; "he asked me about China, could speak a few words in Mandarin with a cute accent; it really cheered me up"; and "I loved that doctor, she sweetly talked to my baby girl and that put both of us at ease". In our study, we named the first factor as professionalism and the latter as empathy. Having a caring manner and empathising with patients have been incorporated in many service quality measures under the terms "empathy" (Aomatsu et al., 2014; Parasuraman et al., 1988), relationship (Dagger et al., 2007) or humaneness (Lin & Guan, 2002). In this research, the items measuring the "empathy" factor were phrased based on the quotes stated by the participants. Professionalism was also investigated in some studies under different names such as "interaction", "assurance", and "reliability" (Akter et al., 2008; Wu et al., 2008) and also "professionalism" (Lin & Guan, 2002). For the purpose of this study, we included the items that were frequently mentioned by the participants as evidence of the doctor's professionalism under a factor named "professionalism".

Timeliness: The participants repeatedly mentioned waiting time, and this is a particularly critical factor when patients are in pain or have to take time off from work. Some quotes from patients with regard to this issue are as follows: "the waiting time was reasonable"; "the pain was unbearable, but I had to wait about an hour"; and "they did not let anyone in without an appointment, so we could get in on-time". We found supports for this dimension in studies carried out by Dagger et al. (2007), Mehta (2011), and Bos et al. (2013).

Operation: The administrative and operation factor, mainly referring to the registration process and operation hours, made up another dimension mentioned by the participants (e.g., "The registration was simple; they just took my Medicare card and done" and "the working hours 24/7 were very convenient"). This dimension was also supported by a few studies (Dagger et al., 2007; Owusu-Frimpong et al., 2010).

Tangibles: Patients also referred to the physical place and the environment (e.g., “The clinic had a pleasant atmosphere, a soothing music was on”; “it was very clean, even the magazines on the table, no dust around”; “the doctor and staff were dressed neatly” and “comfortable and new furniture”. This dimension has also been included in many service quality studies (Dagger et al., 2007; Parasuraman et al., 1988; Zineldin, 2006). Although the quality of medical equipment has been included in several health care quality measuring instruments, in this study, none of the participants referred to the quality of medical equipment and devices in evaluating their experience with the outpatient service.

Doctor vs. staff: All participants declared that they evaluate doctors and other staff separately. Although the expertise and behaviour of the staff have an impact on patients’ perceptions of care, patients consider these aspects less important than the quality attributes related to the doctor. In outpatient clinics, patients place even more stress on the doctor. In these clinics, patients mainly referred to the receptionists as the “staff”, and their expertise and behaviour are supposedly considered as one factor while their main duty is handling administrative work and guiding patients. Examples of statements of patients include “staff was nice and friendly”; “they were quick at doing registration stuff”; and “they explained things well”. We named the factor related to staff as “staff concern”.

3.5 Conceptual model and hypotheses

On the basis of our literature review, combined with the qualitative findings, we proposed a conceptual service quality model for the health care context (outpatient service) and generated a questionnaire to measure the factors included in the conceptual model. In this model, we postulated that a patient’s perceptions of a doctor’s professionalism, doctor’s empathy, doctor’s expertise, treatment outcome, staff concern, timeliness, tangibles and operation are positively associated with the patient’s perception of the overall health care quality.

Additionally, we hypothesised that overall service quality is positively associated with patient satisfaction. There is general agreement among marketing academics that service quality and customer satisfaction are conceptually distinct and the majority of them believe that perceived service quality is the core antecedent of customer satisfaction, implying that the higher the quality of the service, the greater the satisfaction with the service experience (Agus et al., 2007; Dagger et al., 2007; Ramez, 2012).

Unlike the few previous studies that postulated service quality as a higher-order construct, we did not follow the hierarchical approach to operationalise service quality in this study as this issue has been subject to criticism. For instance, Dagger et al. (2007) proposed that overall service quality is a third-order factor with sub-dimensions, namely, technical quality, environment quality and administrative quality and, respectively, all these dimensions consist of certain primary dimensions. Some researchers have criticised adopting higher-order factors in the service quality models mentioning that any dimensions of service quality can be divided into sub-dimensions and those sub-factors can be divided into more disaggregated factors. For example, tangibles can be divided into “ambient conditions” and “equipment” and this procedure can be repeated generating a four-order or even higher-order service quality (Martinez & Martinez, 2010). Therefore, both conceptualisation and statistical procedures for empirically testing the model may become extremely complicated and the length of the questionnaire may also increase remarkably (Martinez & Martinez, 2010). These issues may hinder the use of the service quality scales by practitioners who generally prefer to employ simple short questionnaires and are reluctant to use complex statistical techniques to analyze the data. In addition to the aforementioned criticisms, many of the existing hierarchical models for measuring service quality are fallible due to specifying overall service quality as a reflective latent construct rather than as a formative construct (Martinez & Martinez, 2008; Qin, 2009). In the reflective approach, the dimensions of the construct are highly correlated

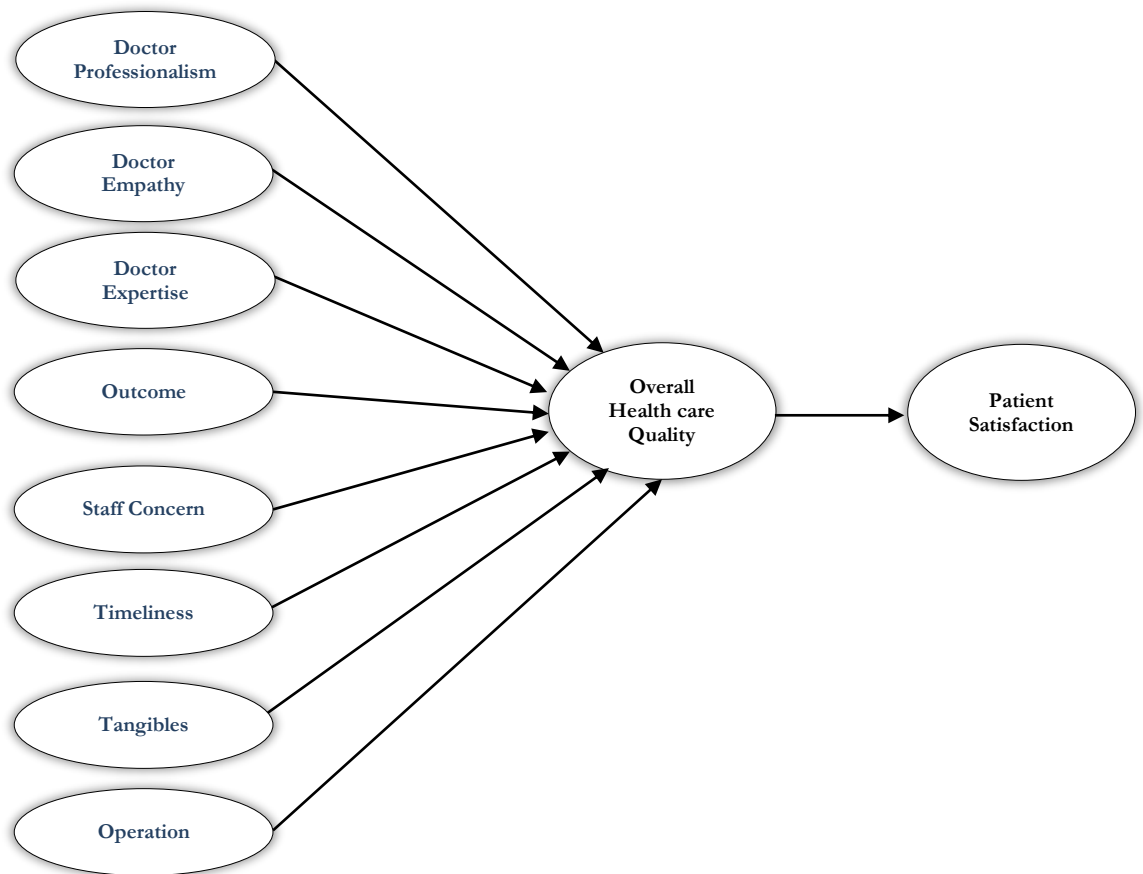
and are perceived as reflective indicators of their higher-order construct, while in the formative approach, the dimensions of the construct cause the overall latent construct (Dagger et al., 2007; Martinez & Martinez, 2008). In the reflective approach, low correlation between service quality dimensions can be problematic. Studies have revealed that a customer may evaluate two features of a service in a dissimilar way. For example, one study showed that there is no significant correlation between customer personal interaction and tangible aspects of the service (changing rooms and physical environment hygiene) (Martinez & Martinez, 2010). Thus, we argue that using a formative approach in modelling service quality and its dimensions is more sensible, and a simpler conceptualisation of overall service quality may lead to higher use of the measure by medical practitioners.

Among the studies reviewed for this research, we found remarkable similarities between the dimensions identified in this study, and the sub-dimensions proposed by Dagger et al. (2007) based on a study conducted in Australia. However, the current study differs in some respects from that investigation. In that study, the authors reflected the overall service quality factor as a third-order factor with primary dimensions and sub-dimensions, but due to the reasons explained earlier we did not follow that procedure. Additionally, our qualitative findings supported the view that the reflective hierarchical model of service quality can be flawed as the patients may assess various aspects of quality differently. For instance, one participant mentioned that the overall quality was acceptable, and that the doctor was knowledgeable and the outcome of the treatment was good, but that the staff were rude, or in another example, the patient indicated many aspects of poor quality, but had no complaint about cleanliness or the administrative procedure and working hours. Moreover, unlike Dagger et al. (2007), we distinguished between physician and staff quality factors, according to our qualitative findings. Furthermore, some of the measuring items that are employed in the present study were not incorporated in that study, e.g., performing a thorough examination, providing

adequate information about illness and treatment, involving patients in decision-making, etc.

The conceptual model appears in Figure 4 and the questionnaire is shown in Appendix 3.

Figure 4 Health care quality conceptual model



3.6 The quantitative study

Two experts in the field of marketing and two physicians reviewed the survey developed in the first stage of this study and they confirmed its clarity and relevance. We also undertook a pilot study with a convenience sample of 30 patients to refine the phrasing and identify the reliability of the measure. All constructs were measured through multiple-item scales and a seven-point Likert-type response format (strongly disagree to strongly agree).

3.6.1 Methodology

After finalising the questionnaire, we collected quantitative data from the patients of six outpatient medical centres in New South Wales (NSW)-Australia, located in different suburbs inhabited mostly by specific groups of ethnic people (generally Middle Eastern, Indian, and Asian: mostly, Vietnamese and Chinese) and Caucasians. Patients between 18 and 80 years of age who had visited a doctor in Australia within the previous two months prior to finishing our survey were qualified to participate in this study. They were asked to recall their last visit with a doctor in an outpatient clinic that occurred within the past two month and answer the questions based on that visit. Patients were not asked about their current visits because they could not judge the treatment outcome right after the visits. Posters inviting the patients to participate in the study were attached to the reception counters. Patients were requested to return the completed questionnaires to the receptionists and receive a \$15 gift card. A total of 470 questionnaires were placed on the reception counters with an attached information sheet, and all the questionnaires were returned to the receptionists. Since we planned to run a multi-group analysis between Caucasian and non-Caucasian patients using structural equation modelling (SEM), we needed a sample size of approximately 200 participants for each group (Hoelter, 1983). Therefore, certain numbers of questionnaires were placed in clinics in different stages to ensure that we received the desirable number of responses from each of these groups. All posters, the information sheet and questionnaires were translated into Chinese (Mandarin), Vietnamese, Arabic, and Persian and translated back to English. The questionnaires with a huge number of missing values were not used in the analysis. Four hundred and forty-seven questionnaires were usable in the analysis, of which 252 respondents were non-Caucasian and 195 respondents were Caucasian and these sample sizes were sufficient for adopting SEM. The data collection process lasted about three months, from

February 2013 to April 2013. The demographic characteristics of the respondents are shown in Table 4.

The possibility of response bias is a recognised issue in service quality and patient satisfaction research. One type of response bias is social desirability response bias which means that patients may report greater satisfaction than they actually feel because they believe positive comments are more acceptable (Heidegger et al., 2006). Additionally, the time between service experience and evaluation may lead to recall bias (Panvelkar et al., 2009). To minimise bias, a number of cautionary steps were undertaken including using a questionnaire approved by the Ethics Committee of Macquarie University, continuously monitoring the data collection process and cleaning nonsensical data. Moreover, all questionnaires were anonymous and patients were requested to evaluate a previous clinical visit not the current visit. This was designed to reduce the response bias that might result if a patient assessed the doctor that she/he was visiting on the day of completing the survey. Furthermore, we aimed for a parsimonious scale with maximum six items for each service quality dimension to minimise response bias caused by boredom and fatigue (Schmitt & Stults, 1985). To diminish the impact of recall bias, patients were required to assess a visit that occurred in the near past (within the previous two months prior to completing our survey).

Table 4 Demographic characteristics– quantitative sample

Characteristics	Total sample	Caucasian	Non-Caucasian
Age			
18-25	12%	9%	15%
26-35	32%	22%	40%
36-45	29%	30%	28%
46-55	15%	17%	13%
56-65	9%	15%	4%
≥ 66	4%	7%	1%
Gender			
Male	38%	35%	40%
Female	62%	65%	60%

Characteristics	Total sample	Caucasian	Non-Caucasian
Employment status			
Full-time	48%	53%	43%
Part-time	20%	21%	19%
Unemployed	32%	26%	37%
Education			
Some primary school	1.1%	0.0%	2.0%
Completed primary school	1.8%	0.0%	3.2%
Some high school	6.0%	8.7%	4.0%
Completed high school	24.8%	30.3%	20.6%
Tafe or trade certificate or Diploma	19.5%	21.0%	18.3%
Bachelor's degree	33.1%	32.3%	33.7%
Postgraduate (Master's/PhD)	13.6%	7.7%	18.3%
Annual household income			
≤ \$20,000	10%	9%	10%
\$20,001 – \$40,000	23%	19%	27%
\$40,001 – \$60,000	24%	24%	25%
\$60,001 – \$80,000	24%	27%	22%
\$80,001 – \$100,000	14%	15%	13%
≥ \$100,001	4%	6%	4%

Percentage breakdown may not equal exactly 100%

3.6.2 Measurement assessment

In this study, first, we implemented a confirmatory factor analysis to identify the factor loadings, reliability and validity of the measure. Second, we tested the conceptual model using the whole dataset to discover if the links proposed in the model are substantiated. We also compared the impacts of service quality factors on the overall service quality between two groups of respondents – Caucasian and non-Caucasian patients.

3.6.3 Reliability and validity

When structural equation modelling is adopted, analysis of the measurement models before testing the structural model is recommended (Anderson & Gerbing, 1988). Therefore, using AMOS 21 (Arbuckle, 2012), we conducted a confirmatory factor analysis (CFA) per research construct as well as for the whole model displayed in Figure 4. To assess the model fit we considered the following goodness-of-fit indices: X^2/df that is preferred to be lower than 2,

goodness-of-fit index (GFI) and the adjusted goodness-of-fit index (AGFI), which are desired to be higher than 0.9, and root mean square error of approximation (RMSEA) which should be less than 0.08 with PCLOSE greater than 0.05 (Hu & Bentler, 1999). The results of the confirmatory factor analysis for each construct in the model showed adequate fit. All values surpassed or were close to the generally accepted limits. Moreover, all constructs' factor loadings resulting from the overall confirmatory factor analysis were greater than 0.7, revealing that the items were properly loaded on the respective latent variables (Hair et al., 2006). To investigate the reliability of the measurement instrument, we assessed Cronbach's alpha and composite reliability of the latent variables. All the Cronbach's alphas and composite reliabilities (CRs) were greater than 0.7, so the variables reflected a high internal consistency level (Hair et al., 2006). For convergent validity, the average variance extracted (AVE) for each construct was calculated. All CRs were greater than the AVEs, and each AVE was bigger than 0.50 and this supports the convergent validity (Hair et al., 2006). For discriminant validity, the AVE extracted for each factor should be larger than the maximum shared squared variance (MSV) (Hair et al., 2006); this criterion was also met in this study and the constructs of the proposed model were distinct enough. All variables' factor loadings, Cronbach's alphas, composite reliabilities, AVEs and MSVs are shown in Table 5 and the construct inter-correlation matrix is presented in Table 6.

Table 5 Construct reliability and construct validity

Measurement model	Cronbach's α	CFA Loadings	CR	AVE	MSV
Overall health care quality	0.93	0.89 to 0.94	0.94	0.85	0.79
Patient satisfaction	0.95	0.93 to 0.94	0.95	0.88	0.78
Doctor professionalism	0.94	.80 to 0.91	0.94	0.73	0.71
Doctor empathy	0.92	0.90 to 0.91	0.93	0.78	0.70
Doctor expertise	0.93	0.90 to 0.91	0.93	0.83	0.74
Staff concern	0.91	0.73 to 0.86	0.92	0.66	0.59
Outcome	0.92	0.86 to 0.91	0.92	0.79	0.76
Timeliness	0.87	0.88 to 0.89	0.88	0.78	0.66
Tangibles	0.90	0.72 to 0.84	0.90	0.64	0.57
Operation	0.83	0.75 to 0.84	0.84	0.64	0.56

Table 6 Correlation matrix

	Mean (SD)	Staff concern	Overall health care quality	Doctor professionalism	Doctor empathy	Doctor expertise	Outcome	Tangibles	Operation	Timeliness	Patients satisfaction
Staff concern	5.96 (0.58)	1									
Overall health care quality	5.38 (0.99)	0.711***	1								
Doctor professionalism	5.55 (0.87)	0.683***	0.812***	1							
Doctor empathy	5.56 (0.86)	0.662***	0.787***	0.801***	1						
Doctor expertise	5.59 (0.99)	0.625***	0.821***	0.779***	0.753***	1					
Outcome	5.63 (1.03)	0.649***	0.832***	0.809***	0.784***	0.824***	1				
Tangibles	5.90 (0.71)	0.588***	0.704***	0.625***	0.685***	0.649***	0.679***	1			
Operation	6.11 (0.58)	0.696***	0.663***	0.611***	0.599***	0.606***	0.601***	0.553***	1		
Timeliness	5.47 (0.95)	0.618***	0.747***	0.707***	0.701***	0.721***	0.715***	0.667***	0.574***	1	
Patient satisfaction	5.18 (1.08)	0.688***	0.843***	0.771***	0.768***	0.800***	0.795***	0.683***	0.638***	0.743***	1

* (P<0.05), ** (P<0.01) and *** (P<0.001)

3.6.4 Results of maximum likelihood path analysis

Path analysis using the AMOS 21 package was performed to test the proposed conceptual model. As presented in Figure 4, we modeled overall service quality as a dependent construct with its driving service attributes. Respectively, overall service quality was considered as the predictor of patient satisfaction. The causality amongst the factors was examined using the total dataset. Further, the associations between constructs were compared between the ethnic majority and ethnic minority using the divided datasets. A similar set of fit indices was used to test the fitness of the overall model (using the total dataset) and we found that the model fit well ($\chi^2/df = 881.59/634 = 1.39$, GFI= 0.90, AGFI = 0.89, RMSEA= 0.03, and PCLOSE = 1.000). Additionally, the squared multiple correlation (R^2) was analysed to assess the explanatory power with respect to each dependent variable. This value states the percentage of variance in dependent variables that is explained by the independent constructs. In this study, R^2 values for overall health care quality and patient satisfaction were 0.69 and 0.77, respectively, showing relatively high explanatory power (Cohen et al., 2003). The results of path analysis indicate that doctor professionalism, doctor empathy, doctor expertise, treatment outcome, staff concern, timeliness, and tangibles each have a significant and positive impact on overall health care quality in the overall model. However, no significant relationship was found between the operation and overall health care service quality. As illustrated in Table 7, outcome and expertise hold the higher path coefficients; so it can be inferred that these factors are more critical drivers compared to the other attributes of service quality in the outpatient setting. We carried out a multi-group analysis to identify whether these findings are consistent among both non-Caucasian and Caucasian patients. An invariance test was performed to examine whether the factorial and metric structure of constructs remain the same across

groups to warrant a multi-group analysis (Hair et al., 2006). A multi-group comparison was performed, first, with a free unconstrained model and next constraining the factor loadings to be equal across groups; no significant difference was found ($\Delta X^2 = 16.408$, $\Delta df = 16$ and $p > 0.5$). This means that the comparison is valid, and path coefficient values between the constructs can be examined for each group. The results are presented in Table 7. For the Caucasian group, all associations were significant except the link between operation and overall health care quality. For the non-Caucasian group the links between both operation and tangibles with overall health care quality were insignificant. In both groups doctor expertise and the outcome of treatment hold greater path coefficients. Additionally, a strong relationship between overall service quality and satisfaction can be seen in both groups.

We also ran pairwise comparisons of paths across the two groups to pinpoint path differences. Results are shown in Table 8. The value of z-test for the difference between coefficients of the two groups should be greater than $|1.96|$, so the difference between paths is statistically significant at $p < 0.05$. None of the z-scores exceeded $|1.96|$ and hence the values of path coefficients are not statistically different across two groups of patients.

In order to gain additional insight into group differences, and to explore whether disparities exist in the delivery of high-quality care to ethnic majority and minority patients, a comparison of means was carried out using a t-test in SPSS 21. The results illustrated no significant differences between Caucasian and non-Caucasian patients in all of the dimensions of service quality. In addition, overall health care quality and patient satisfaction were not significantly different across these groups. As seen in Table 9, the two groups are only likely to be different with regard to perceived tangibles as the p-value is not much greater than 0.05 for this factor. Thus, we could not find evidence

that proves lower ratings of health care quality among the minority group and discrimination in the delivery of outpatient service to the non-White population in NSW, Australia.

Common method bias is a subset of method bias and frequently encountered problem especially with survey studies (Burton-Jones, 2009). Since this study is based on a self-administered survey, common method bias in the form of single rater bias was very likely to occur. To detect the extent of this bias, Harman single factor analysis was carried out (Podsakoff et al., 2003). Results suggest that a single factor carrying 38.5% of variance emerged. Because this is less than 50%, common-method bias did not appear to be a significant problem in the present study (Podsakoff et al., 2003).

Table 7 Path analysis

Structural Model Estimates	Total sample		Caucasian		Non-Caucasian	
	Path estimate	t	Path estimate	t	Path estimate	t
Overall health care quality ---> Patient satisfaction	0.833	20.94***	0.860	14.94***	0.841	14.944***
Doctor professionalism ----> Overall health care quality	0.317	9.15***	0.331	6.62***	0.287	6.057***
Doctor empathy ----> Overall health care quality	0.268	7.87***	0.304	6.23***	0.241	5.124***
Doctor expertise ----> Overall health care quality	0.440	12.40***	0.392	7.87***	0.443	8.945***
Staff concern ----> Overall health care quality	0.179	5.22***	0.194	3.88***	0.161	3.427***
Outcome ----> Overall health care quality	0.472	13.04***	0.513	9.91***	0.469	9.287***
Timeliness ----> Overall health care quality	0.233	6.62***	0.194	3.83***	0.280	5.759***
Tangibles ----> Overall health care quality	0.120	3.49***	0.161	3.28**	0.088	1.863
Operation ----> Overall health care quality	0.036	1.03	0.033	0.66	0.047	0.983

P-values of t-statistics: any value greater than 1.96 is significant at $p < 0.05$, so denote significance by * ($P < 0.05$), ** ($P < 0.01$) and *** ($P < 0.001$)

Table 8 Pairwise tests of path coefficients

Structural Model Estimates	Caucasian		Non-Caucasian		Z-score
	Unstandardised Estimate	P-value	Unstandardised Estimate	P-value	
Overall health care quality ---> Patient satisfaction	1.016	0.000	1.131	0.000	1.130
Doctor professionalism ----> Overall health care quality	0.220	0.000	0.173	0.000	-1.083
Doctor empathy ----> Overall health care quality	0.183	0.000	0.149	0.000	-0.828
Doctor expertise ----> Overall health care quality	0.203	0.000	0.236	0.000	0.894
Staff concern ----> Overall health care quality	0.199	0.000	0.141	0.000	-0.875
Outcome ----> Overall health service quality	0.268	0.000	0.257	0.000	-0.270
Timeliness ----> Overall health care quality	0.114	0.000	0.156	0.000	1.029
Tangibles ----> Overall health care quality	0.109	0.001	0.065	0.062	-0.925
Operation ----> Overall health care quality	0.035	0.507	0.046	0.325	0.150

Table 9 Mean comparison between Caucasian and non-Caucasian groups

Measurement model	Mean Caucasian	Mean Non-Caucasian	T	p-value
Overall health care quality	5.32	5.42	1.13	0.25
Patients satisfaction	5.17	5.20	0.27	0.78
Doctor professionalism	5.55	5.56	0.08	0.93
Doctor empathy	5.54	5.57	0.31	0.75
Doctor expertise	5.50	5.66	1.73	0.08
Staff concern	5.92	5.99	1.24	0.21
Outcome	5.58	5.66	0.87	0.38
Timeliness	5.49	5.45	-0.372	0.71
Tangibles	5.83	5.96	1.95	0.05
Operation	6.09	6.12	0.64	0.51

P-values of t-statistics: any value greater than 1.96 is significant at $p < 0.05$

3.7 Discussion

One of the goals of this study was to develop a reliable and simple health service quality scale based on a review of the literature and viewpoints of ethnically diverse patients.

To our knowledge, no comparative study has investigated health service quality as

perceived by ethnically diverse patients in Australia. Therefore, compared with previous studies, we aimed to capture a more comprehensive perception of health care quality by facilitating the participation of ethnic people.

The findings of the qualitative study suggested that outpatients based their judgments of overall health service quality on eight dimensions, namely, doctor professionalism, doctor empathy, doctor expertise, the outcome of the treatment, staff concern, operation, tangibles, and timeliness. These findings also indicated that patients evaluated service quality on both an overall level and a dimensional level. They also evaluated doctors and other staff disjointedly, and the quality dimensions related to doctors were considered to be more important by the patients in an outpatient setting. Therefore, combining the quality dimensions related to doctors and other staff and using only one general term such as “staff” or “employees” in health care quality surveys may bring about confusion and produce inaccurate results. In addition, the findings showed that, assuming health care quality to be a higher-order reflective factor is problematic because patients may judge one dimension of quality to be poor (e.g., tangibles) but another aspect of quality to be high (e.g. doctor professionalism). The quantitative analysis confirmed that doctor professionalism, doctor empathy, doctor expertise, treatment outcome, staff concern, and timeliness were the influential factors in determining overall outpatient service quality in the total sample, as well as each Caucasian and non-Caucasian group. However the statistical results did not substantiate the relationship between operation and overall health care quality in the total sample and the sub-samples. Moreover, no significant association was found between tangibles and overall health care quality in the non-Caucasian group.

In contrast to some previous reports, our findings did not provide evidence of inequality in delivery of care to ethnic minorities and the majority (Mead & Roland, 2009). We did

not find a significant difference between the level of overall service quality and satisfaction between these two groups. In addition, in both groups doctor expertise and outcome of treatment were found to be the strongest determinants of overall health service quality. Although many scholars believe that patients do not have medical qualifications and therefore cannot judge providers' competence, the results of the qualitative and quantitative studies indicate that patients have views on caregivers' expertise and that providers' technical competence may be even more important to patients than their manner and communication skills. One possible reason for this may be the higher health literacy among the patients and increasing accessibility to medical information through the internet. It has been reported that patients and their family members are increasingly using the internet as a major source of advice regarding their illnesses, treatment options, dietary advice and disease prevention. The internet provides an opportunity for patients and family members to obtain additional medical information that they did not receive from their physicians (Ray, 2011; Rehman, 2012). The inconsistency between their physicians' instructions and the information they find on the web may deteriorate their perceptions of doctors' knowledge. Similarly, the consistency between their doctors' advice and online information may lead to a better perception of doctors' expertise. Thus, due to high internet usage and rather high health literacy among the Australian population (Australian Bureau of Statistics, 2006), the technical aspect of care should be included in health care quality measures in the Australian context. Some participants of our qualitative study mentioned that they use the web to search for the best doctor. In addition, before visiting a doctor, they collected information on their conditions from the internet (particularly for serious conditions), and some of them cross-checked the doctors' explanations and diagnoses with others in person or on the internet, which can affect their perceptions of doctor's expertise.

Moreover, some patients mentioned that the doctors they had visited were not very knowledgeable because they looked up the symptoms from a medical book or entered the symptoms into a computer program to identify the disease. Patients considered these issues to be proof of doctors' shortage of knowledge and diagnostic skills. Furthermore, patients perceive health professionals' expertise based on the information they obtain about providers' qualifications and professional achievements, including awards, publications, and research projects (Dagger et al., 2007) and some clinics provide patients with this information. In addition, some participants mentioned that they checked reviews posted in different virtual spaces (e.g., Google reviews, medical forums, and Facebook), which influenced their perceptions of the provider's expertise. Thus, we suggest that health care authorities should improve patients' perceptions of providers' expertise by recruiting skilled and knowledgeable health professionals using strict recruitment criteria and running ongoing technical trainings to continually improve technical quality. They should also provide patients with enough information about the qualifications of the providers. Moreover, in the ethnically diverse context, the health sector should attempt to improve doctors' knowledge about different ethnicities' physiological differences, different reactions to specific medications and the prevalence of particular types of disease among ethnic minorities which may help them make more accurate diagnoses.

The outcome of treatment is also an important predictor of health service quality. Health professionals can improve treatment outcomes by encouraging patients to follow their treatment and instructions given to them by offering detailed information on the treatment process and their future health status. Having knowledge about ethnically diverse patients' treatment practices and beliefs about health and illness can help providers adapt the treatment options with patients' preferences, which can increase

patients' adherence to treatment to achieve better results. The findings also indicate that the quality of the doctor-patient relationship is important, as is doctor professionalism. Patients prefer to have a friendly relationship with their doctors, and very formal interaction may not be desirable. Emotional support may mitigate patients' stress, and they may feel more comfortable in revealing information and expressing their concerns. Establishing rapport in an intercultural medical encounter wherein the doctor and provider are from different backgrounds may be more difficult due to language barriers or different communication styles. In these cases, being able to speak foreign languages (at least a few words such as greetings), particularly languages to which providers are frequently exposed, and having knowledge about diverse patients' backgrounds and their religious and cultural concerns can help providers establish culturally sensitive and respectful interactions with their patients. Furthermore, providers who have knowledge about ethnic communities may be able to show warmer empathy and alleviate patient's sense of anxiety. For instance, some ethnic patients diagnosed with HIV or infertility may feel greater stress compared to Caucasian patients with similar conditions (Culture, Ethnicity and Health, 2013). These patients may be criticised by their family members and experience stigma and shame in their communities as a result of having these diseases. In these cases, providers can offer better emotional support by understanding the patients' difficult situations and conversing about the issues that they undergo. Waiting time is also a significant contributor of health service quality. It has been reported that waiting time is a more serious concern for ethnic patients than the mainstream. Some experts believe that patients who cannot speak English or have limited English proficiency need to be accompanied by a family member with better English skills who is usually the wage earner of the family. These people may fear the loss of their job due to taking too much time off from work (Murray & Skull, 2005;

Thow & Waters, 2005). However, the findings of this study did not verify this issue and seemingly these two groups do not differ in their perceptions of waiting time. Moreover, in this study, no significant relationship was found between the operation factor and overall health care quality. The insignificant relationship does not imply that this factor is not important, considering that in our qualitative study, the participants referred to the working hours and simplicity of the administrative procedure as the elements of service quality. However, apparently patients who completed the surveys did not have serious issues with the operation aspect and other factors were more influential in their overall assessment. Moreover, in the non-Caucasian group, the tangibles factor referring to the physical aspect of the service and providers' appearance was not a significant contributor to overall health care quality. We argue that ethnic patients may place less importance on the physical aspect of service in assessing the quality of health care. Most of the ethnic participants were not Australian born, and they emigrated from less developed and more populous countries. Therefore, it may be claimed these patients experienced crowded clinics and hospitals in their home countries with a lower degree of hygiene compared to Australian Caucasians, and that this may result in lower sensitivity to the physical environment among ethnic patients. Nonetheless, in the overall model, this factor had a significant impact on overall health care quality; hence, cleanliness and a pleasant physical environment can improve patients' perception of health service quality. In addition, the findings suggest that overall service quality and satisfaction are distinct constructs, and perceived service quality is a critical determinant of patient satisfaction in the overall model and the divided models. As some studies have reported, both patient satisfaction and service quality may positively affect customers' behavioral intention (Dagger et al., 2007; Ramez, 2012). Hence, systematic

monitoring of health care service quality can enable providers to enhance service quality over time and to ensure customer retention and profitability.

3.8 Limitations and future studies

In this study we disbursed the questionnaires only in six medical centres in NSW, which may limit the generalisability of these findings to the whole country. Another limitation of this study is that respondents were asked to evaluate their last visits that occurred in the previous two months. The assumption behind this procedure was patients would be able to clearly remember their visits. However, some of them might not have been able to adequately remember what happened during their visits. In the future, the impact of patient-provider cultural dissimilarity on patients' perceptions of health care quality should be investigated. In addition, cultural knowledge and skills of providers can be explored to investigate if it helps them enhance their performance and positively affect the patients' ratings of health care quality as well as their satisfaction. Additionally, a comparison between the perceptions of inpatient care by the ethnic minority and majority should be investigated to explore whether any inequality in the delivery of care is experienced in that area. Moreover, a comparison between different ethnic minority groups such as Asians and Middle Easterners can be conducted to understand the specific needs of these groups and investigate whether some minority groups are receiving poorer quality care than other groups.

3.9 Conclusion

Patients' perceptions of health care quality are critical to a health care organisation's success because of their influence on satisfaction and hospital profitability. To identify areas of improvement and to provide equal care, health authorities need to continually assess the quality of care by obtaining the opinions of all groups of clients regardless of

their racial and socio-economic differences. Therefore, authorities should facilitate the participation of all customers, including the ethnic minority, to capture a comprehensive perspective of health service quality and prevent discrimination in the delivery of care. For this purpose, assessment instruments should be specifically tailored for certain types of services containing the attributes that are most important to the target patients. Moreover, the specific characteristics of the participants should be considered in designing measuring instruments (e.g., technical aspect of care should be included in assessing measures when target populations that have high levels of health literacy and internet usage). Additionally, service quality models should be implemented as easily as possible, not demanding very complicated statistical analyses to be suitable for practical use. This research described the most important limitations of previous health care quality models and measures, and a new procedure was proposed to overcome those shortcomings. The findings from this study provided managers with valuable insights into the dimensions of outpatient services and equality in providing health care services in the multicultural context of Australia.

CHAPTER 4 CULTURAL COMPETENCE DIMENSIONS AND OUTCOMES: A SYSTEMATIC REVIEW OF LITERATURE

Abstract:

It has been widely suggested that cultural competence is an individual's core requirement for working effectively with culturally diverse people. However, there is no consensus regarding the definition or components of this concept there is a dearth of empirical proof indicating the benefits of cultural competence. Therefore, a systematic review was conducted to identify the most common cultural competence dimensions proposed in the recent publications and to identify whether sufficient evidence exists regarding the efficacy of cultural competence in the health care context. A total of 1204 citations were identified through an electronic search of databases, of which 18 publications included cultural competence frameworks, and 13 studies contained empirical data on cultural competence outcomes. The overarching themes of the review were centred around the challenges faced by health care sectors in many countries due to growing cultural diversity, and the lack of cultural competence leading to predicaments that arise during intercultural interactions between patients and clinicians. This review will benefit researchers exploring cultural competence as one of the research variables impacting research outcomes.

Keywords: cultural competence, patient outcome, health care quality, systematic review

4.1 Introduction

Many countries are becoming increasingly culturally diverse as a result of migration and globalisation. In these countries, service providers are challenged to understand and address the cultural and linguistic needs of diverse populations. This diversity requires service suppliers to be aware of their customers' cultural needs and to be able to provide them with culturally congruent services (Sharma et al., 2009; Stauss & Mang, 1999). However, the unequal burden of disease and mortality borne by ethnic patients has been extensively reported in multicultural countries (Smedley et al., 2003; Weerasinghe, 2012). As one of the most critical industries in any country, the health sector should be well- equipped to address the growing diversity among patients as it must deliver equal high-quality care to patients of all cultural backgrounds (Campinha-Bacote, 2002; Harris, 2010). While the causes of health disparities are not clear, factors such as genetics, social and economic conditions, insurance coverage, provider knowledge, and access issues may be among the determinants. In addition, cultural and linguistic differences between patients and health professionals which result in poor communication between them, is considered another significant contributor (Fisher et al., 2007; Smedley et al., 2003; Thomas et al., 2004). In this regard, the cultural competence of health practitioners is proposed as a solution for providing equal and high-quality care to all groups of patients and as a way to reduce disparities and improve patient outcomes (Betancourt et al., 2003; Campinha-Bacote, 2002, Henderson et al., 2011). However, after years of attempted implementation of cultural competence in the health care context, there are still debates on how to define and operationalise this construct (Suarez-Balcazar et al., 2011). Moreover, insufficient evidence on the efficacy and effectiveness of cultural competence may hinder the infusion of this concept into health care organisations (Hayes-Bautista, 2003).

A few systematic reviews of cultural competence frameworks have been published that identify the proposed definitions and components of cultural competence (Andrews et al., 2010; Bhui et al., 2007; Shen, 2004; Spitzberg & Changnon, 2009). However, in these reviews, as the selected models are related to either the field of business or health care, the authors do not review cultural competence frameworks at an aggregate level. We believe that in reviewing definitions and components of cultural competence, excluding frameworks related to either of these fields may inhibit scholars and practitioners in one field from applying well-designed models developed in another field. This issue has also been stressed by Anand and Lahiri (2009). They advised health care scholars to consider robust cultural competence models generated for non-health care sectors. For example, they recommended employing a well-developed model produced by Deardorff (2006) in which only those elements of intercultural competence that all of the experts agreed on were included.

In addition, some of the authors do not differentiate between individual-level and organisational-level guidelines and frameworks for cultural competence. Reviewing models related to organisational cultural competence together with models specifying characteristics of culturally competent individuals may be problematic and may hinder the effective comparison of the frameworks. Furthermore, the extant reviews do not include some of the latest conceptual models. Thus, there is a need for an up-to-date review that comprehensively identifies and appraises the individual-level cultural competence frameworks. Because solely developing inclusive frameworks cannot lead to the effective implementation and realisation of practical outcomes in an important industry such as health care. The overall purpose of this paper is to educate researchers about recent cultural competence models and draw their attention to the necessity of investigating the effectiveness of cultural competence and applicability of the proposed

frameworks and scales in practical situations. Thus, in this paper, we also assess studies in which cultural competence models and measures are used to examine the impact of provider cultural competence on patient outcomes. This may assist researchers to apply better designed and more frequently employed models and assessment tools in future studies. Conducting more rigorous empirical studies and finding more dependable evidence on the efficacy of cultural competence may facilitate establishing and implementing cultural competence policies in the health care sector.

In detail, this particular review aims to appraise a wide range of cultural competence frameworks used in multiple fields to realise how cultural competence has been operationalised and what dimensions have been incorporated in recent models.

Additionally, it intends to explore how these conceptual models have been designed and validated. Moreover, this review aims to identify how frequently these cultural competence models have been utilised to evaluate the efficacy of cultural competence in the health care context and whether sufficient evidence exists with regard to the impacts of cultural competence on patient outcomes. We also assess the studies in which cultural competence models and measures are used to examine the impact of providers' cultural competence on patient outcomes. As stressed by Leung et al. (2014), intercultural competence instruments must also predict intercultural outcomes such as psychological, behavioural, and performance outcomes. Therefore, we identify conceptual models that represent attributes of culturally competent providers and studies in which the relationship between caregivers' cultural competence and patient outcomes are investigated. These outcomes may include any of the following subjects that have been broadly mentioned in the health care literature:: (1) increased numbers of patients seeking treatment; (2) lower rates of morbidity and mortality; (3) increased adherence to treatment; (4) higher level of trust; (5) increased feelings of self-esteem;

(6) improved health status; and (7) greater satisfaction with care (Kim-Godwin et al., 2001; Suh, 2004). This review can aid researchers in selecting appropriate conceptual models and measurement tools for assessing providers' cultural competence in the health care sector, and to explore whether culturally competent providers can lead to improved outcomes for clients.

4.2 Methods

This review was conducted focusing on several questions. As noted earlier, this review shows what dimensions have been proposed to operationalise and measure cultural competence and how the authors developed these frameworks. Moreover, it specifies how frequently these models have been employed in empirical studies and explores whether sufficient evidence exists to verify the efficiency of cultural competence in practical cases. A comprehensive literature search was accomplished to retrieve all relevant articles. The process of the review is explained in the following sections.

4.2.1 Data sources and search strategy

In March 2013, we searched the following databases: EBSCOhost, Springerlink, Emerald, ScienceDirect, SAGE Journals Online, Proquest, Web of Science, NLM Gateway, Medline/ Ovid, Medline/PubMed, IngentaConnect and CINAHLPlus. In addition, we also manually searched the bibliographies of key articles in several journals such as the Journal of Transcultural Nursing, the Journal of Cultural Diversity, and the International Journal of Intercultural Relations. We designed search strategies, specific to each database, to maximise sensitivity. For example, for the EBSCOhost search, we used the following combination: ("cultural competence" OR "cultural competency" OR "intercultural competence" OR "intercultural communication competence" OR "multi-cultural competence" OR "cross-cultural competence" OR

“culturally competent communication”) AND (“Model” OR “Framework” OR “Schematic design”). A similar search template was used by combining cultural competence terms and patient outcomes such as “patient satisfaction”, “patient trust”, “quality of health care”, “adherence to treatment”, “health status”, and “feelings of self-esteem”.

The types of references used in this paper include journal articles, reports, and dissertations. All studies referenced herein were published between 2000 and 2013. A few systematic reviews on cultural competence dimensions and outcomes have been conducted between 2004 and 2009; however as mentioned earlier the authors did not include both health-related and business-related conceptual models and they did not include some frameworks developed after 2005. Thus, to include more recent models and assessment tools, we excluded the papers published before 2000. This does not imply that research conducted before 2000 in this discipline was not significant, it just clarifies that this paper specifically conducted an in-depth review of literature published during 2000 to 2013.

4.2.2 Study selection

We excluded articles or dissertations that were not written in English or that were published before 2000. This date was applied to ensure relevance of the latest conceptual models, and to include the most recent evidence regarding cultural competence outcomes. Additionally, we excluded items that did not have a full text available for review.

The criteria for including studies were that they:

- 1) represent conceptual frameworks for cultural competence. The conceptual model refers to a visual presentation of variables that interrelate with one another as perceived

by the researcher. Transforming theories into a visual format helps identify key intersections of perspectives that are often missed in purely narrative readings (Spitzberg & Changnon 2009). Schematic frameworks, by their nature, are more explicit than narrative models and the differences between them are easier to understand in terms of how the key concepts and constructs and the relationships between them are configured and analysed (Pearce 2012). Thus, to make a clear comparison between conceptual models, merely schematic frameworks were included in this review.

2) present empirical data regarding the link between providers' cultural competence and patient outcomes.

4.2.3 Data extraction

We printed the title and abstract of all citations identified through the literature search, and two researchers independently reviewed the title and abstract for eligibility to confirm relevance to the research objectives. During the review of abstracts, papers which did not either introduce new conceptual models or quantitatively examine relationships between provider cultural competence and patient outcome were excluded. We designed our process such that no abstract would be excluded based on the opinion of only one reviewer. When reviewers agreed that a decision regarding eligibility could not be made because of insufficient information, the full article was retrieved for review and disagreements on the extracted data were resolved by consensus.

4.2.4 Data synthesis

Data are presented narratively to describe the characteristics of the identified cultural competence frameworks. Likewise, for the second group of papers (empirical studies), we conducted a narrative synthesis of the data. A quantitative synthesis (meta-analysis) was not possible due to the heterogeneity of research design, participants, types of

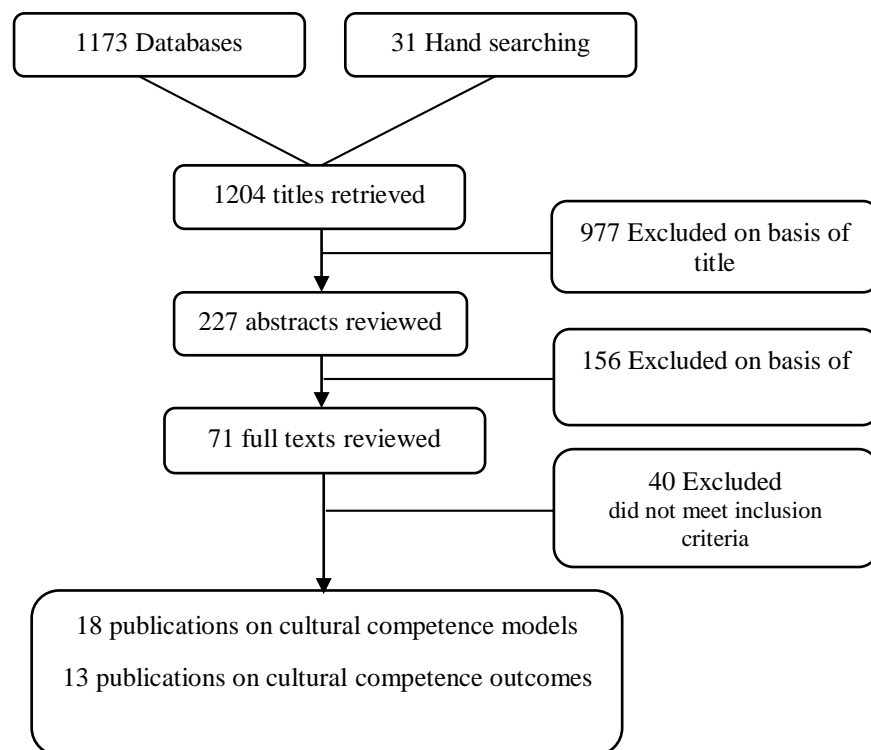
reported outcomes and the employed measures for assessing the same outcome.

Moreover, since the number of practical studies investigating the impact of cultural competence on patient outcomes was not sufficient to gain a good power, the narrative analysis was preferred to the meta-analysis (Borenstein et al. 2009).

4.3 Results

We screened 1,204 citations published up to March 2013. Of this total, 18 publications were found to meet the first inclusion criterion and 13 articles fulfilled the second criterion. A summary of the literature search and review process is shown in Figure 5.

Figure 5 Summary of the literature search and review process



Papers meeting the first criterion are listed in Table 10, which is titled “Cultural competence models”. In these articles, conceptual models that contained cultural competence attributes were described. While some of the models were presented and used in various papers by the developers, we only cited the papers in which schematic

formats of the models were provided and to which we had access to the full-text version of the paper. The publications that fulfilled the second criterion are listed in Table 11, which is titled “Cultural competence outcomes in the health care context”.

Table 10 Cultural competence models

Reference	Title of the model	Elements of cultural competence	Definition	Assessment tools	Methodology	Context
Balcazar et al. (2009)	Cultural Competence Conceptual Model	Desire, Awareness/Knowledg, Skill, Organisational Support	Becoming culturally competent is an on-going contextual, developmental and experiential process of personal growth that results in professional understanding and the ability to adequately serve individuals who look, think and behave differently from us	Cultural Competence Assessment Instrument- University of Illinois at Chicago (CCAI-UIC)	Literature review	Health care (Rehabilitation)
Burchum (2002)	A Model for Cultural Competence	Cultural Awareness, Cultural Knowledge, Cultural Understanding, Cultural Sensitivity, Cultural Interaction, Cultural Skills	Cultural competence is a process of development built on an ongoing increase in knowledge and skill development related to the attributes of cultural awareness, understanding, sensitivity, interaction, skill, and knowledge	-	Literature review	Health care (Nursing)
Campinha-Bacote (2002)	The Process of Cultural Competence in Delivery of Health Care Services	Cultural Desire, Cultural Awareness, Cultural Encounter, Cultural Skills, Cultural Knowledge	Cultural competence is an ongoing process in which the health care provider continuously strives to achieve the ability to effectively work within the cultural context of the client (individual, family, community)	Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals- Revised (IAPCC-R) and IAPCC-SV	Literature review	Health care (Nursing)
Kim-Godwin et al. (2001)	Culturally Competence Community Care	Caring, Cultural Sensitivity, Cultural Skills, Cultural Knowledge	-	Cultural Competence Scale (CCS)	Literature review	Health care (Nursing)

Reference	Title of the model	Elements of cultural competence	Definition	Assessment tools	Methodology	Context
Papadopoulos et al. (2004)	Model for Developing Cultural Competence	Cultural Sensitivity, Cultural Awareness, Cultural Knowledge	Cultural competence is both a process and an output, and results from the synthesis of knowledge and skills that we acquire during our personal and professional lives and to which we are constantly adding	Cultural Competence Assessment Tool (CCA Tool)	Literature review	Health care (Nursing)
Doorenbos & Schim (2004)	Cultural Competence Model	Cultural Diversity, Cultural Awareness, Cultural Sensitivity	Cultural competence is a behavioural construct encompassing actions taken in response to cultural diversity, awareness, and sensitivity. Cultural competence changes over time, in response to changes in individual diversity experiences: gaining awareness and sensitivity, learning skills, and expanding abilities	Cultural Competence Assessment (CCA)	Literature review	Health care (Hospice, Nursing)
Sue (2001)	Multidimensional Model of Cultural Competence	Awareness/Attitude, Knowledge, Skill	Multicultural counselling competence is defined as the counsellor's acquisition of awareness, knowledge, and skills needed to function effectively in a pluralistic democratic society (the ability to communicate, interact, negotiate, and intervene on behalf of clients from diverse backgrounds)	Cultural Competency Measure (Developed by Lucas et al. 2008)	Literature review	Health care (Counselling)

Reference	Title of the model	Elements of cultural competence	Definition	Assessment tools	Methodology	Context
Suh (2004)	The Model of Cultural Competence	<p>Attributes of cultural competence: Ability, openness, and flexibility</p> <p>Elements of cultural competence:</p> <p>Cognitive Domain: (Awareness, Knowledge),</p> <p>Affective Domain: (Sensitivity),</p> <p>Behavioral Domain: (Skills)</p> <p>Environmental Domain: (Encounter)</p>	Cultural competence is an ongoing process with a goal of achieving the ability to work effectively with culturally diverse groups and communities with a detailed awareness, specific knowledge, refined skills, and personal and professional respect for cultural attributes, both differences and similarities	-	Literature review	Health care (Nursing)
Teal & Street (2009)	Culturally Competent Communication	Self- and Situational Awareness, Adaptability Knowledge, Communication Skills	-	-	Literature review	Health care (Physicians)
Abbe et al. (2007)	Cross-cultural Competence in Army Leaders	Knowledge, Affect/Motivation, Skill	Cross-cultural competence refers to the knowledge, affect/motivation, and skills that enable individuals to adapt effectively in cross-cultural environments. Cross-cultural competence is defined here as an individual capability that contributes to intercultural effectiveness regardless of the particular intersection of cultures	-	Literature review	Business (Army)

Reference	Title of the model	Elements of cultural competence	Definition	Assessment tools	Methodology	Context
Arasaratnam (2006)	Model of Intercultural Communication Competence	Empathy, Motivation, Global Attitude, Experience, Interaction Involvement, Intercultural Communication Competence	Intercultural communication competence is characterised as effective (accomplishing one's goals) and appropriate (expected, accepted) behaviour in intercultural communication	ICC measure (developed by adjusting other measures)	Qualitative study (Interview)	Business (University)
Deardorff (2006)	Process Model of Intercultural Competence	Motivation/Attitude, Knowledge and Comprehension, Skill	Intercultural competence is the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and attitudes	-	Delphi study	Business (University-Education)
Earley (2002)	Facets of Cultural Intelligence	Cognitive/Meta Cognitive, Motivational, Behavioural	Cultural intelligence refers to a person's capability to adapt effectively to new cultural settings based on multiple facets including cognitive, motivational and behavioural features.	Cultural Intelligence Scale (CQS) (developed by Ang et al., 2004; Ang et al. 2007)	Literature review	Business (International management)
Fantini (2006)	Intercultural Competency and Components	Attitude, Awareness, Knowledge, Skill	Intercultural competence is defined as a complex of abilities needed to perform effectively and appropriately when interacting with others who are linguistically and culturally different from oneself.	Assessment of Intercultural Competence (AIC)	Literature review	Business
Johnson et al. (2006)	A Model of Cross Cultural Competence in International Business	Personal Attributes, Personal Skills, Cultural Knowledge	Cross-cultural competence is defined as an individual's effectiveness in drawing upon a set of knowledge, skills, and personal attributes to work successfully with people from different national cultural backgrounds at home or abroad.	-	Literature review	Business (International management)

Reference	Title of the model	Elements of cultural competence	Definition	Assessment tools	Methodology	Context
Kupka & Everett (2007)	The Rainbow Model of Intercultural Communication Competence (ICC)	Foreign Language Competence, Cultural Distance, Self-Awareness, Knowledge, Skills, Motivation, Appropriateness, Effectiveness, Contextual Interactions, Intercultural Affinity	ICC is defined as a self-conscious cognitive, attitudinal, emotional, and behavioural guidance scheme for impression and uncertainty management that allows members of different cultural systems to interact effectively and appropriately with each other using diverse symbols across various contexts with the result of mutually satisfying relationships.	Intercultural Communication Competence Inventory (ICCI)	Literature review	Business
Overall (2009)	Cultural Competence Model for Library and Information Science Professionals	Cognitive, Interpersonal, Environmental.	Cultural competence is the ability to recognise the significance of culture in one's own life and in the lives of others; and to come to know and respect diverse cultural backgrounds and characteristics through interaction with individuals from diverse linguistic, cultural, and socioeconomic groups; and to fully integrate the culture of diverse groups into services, work, and institutions to enhance the lives of both those being served by the library profession and those engaged in service.	-	Literature review	Business (Library and Information Science)

Reference	Title of the model	Elements of cultural competence	Definition	Assessment tools	Methodology	Context
Thomas et al. (2008)	Domain of Cultural Intelligence	Cultural Knowledge, Cultural Skills, Cultural Meta-Cognition, Culturally Intelligent Behaviour	Cultural intelligence is a system of interacting knowledge and skills, linked by cultural metacognition that allows people to adapt to, select, and shape the cultural aspects of their environment.	-	Literature review	Business

Table 11 Cultural competence outcomes in the health care context

Reference	Sample size/ethnicity	Country	Types of illness/care	Cultural competence tool	Findings
Ahmed (2007)	306 Patients: (83%) Caucasian American, (2.3%) African-American, (11.8%) Native-American, (0.3%) Asian-American, (2.6%) N/S	USA	N/S	Public Perceptions of Physicians' Cultural Competence (PPPCC) (Patient-rating tool- developed by the author)	Physicians' global cultural competence related to proxemics/chronemics physicians' patient-centeredness cultural competence was positively associated with patient satisfaction. Physicians' global cultural competence was not associated with cultural and linguistic knowledge.
Castro & Ruiz (2009)	218 patients: Latina 15 Nurse practitioners	USA	N/S	IAPCC (Self-reporting tool- developed by Campinha-Bacote, 2003)	Nurse practitioners' cultural competence was positively associated with patient satisfaction
Chen (2008)	81 Clients: Chinese 30 Caregivers	USA	Aged care	IAPCC (A self-reporting tool developed by Campinha-Bacote, 2003)	Caregivers' linguistic competence referring to the ability to explain and ability to speak Chinese was positively associated with client satisfaction * The author did not clearly explain the correlation between caregivers' cultural competence and client satisfaction in the results and only stated caregiver linguistic competence
Constantine (2002)	112 Clients: (46.4%) African-American, (25.9%) Latino(a)-American, (22.3%) Asian-American, (2.7%) Native-American, (2.7%) Biracial-American.	USA	Mental health	Cross-cultural Counselling Inventory-Revised (CCCI-R) (Client-rating tool- developed by LaFromboise et al., 1991)	Counsellors' cultural competence was positively associated with client satisfaction
Cook et al. (2005)	80 Patients: (13.8%) African-American, (25.0%) Hispanic American, (16.3%) Native American, (10.0%) Caucasian American, (21.3%) Sudanese, (12.5%) Vietnamese, (1.3%) N/S	USA	N/S	Community Assessment Instrument (CAI) (Client-rating tool developed by the authors; one part of this tool measured cultural competence and other parts measured other variables)	Providers' cultural competence was not associated with patient satisfaction
Damashek et al. (2012)	1,305 Clients: (70%) Caucasian American,	USA	Mental health	Client Cultural Competence Inventory	Providers' cultural competence related to respect for cultural differences, and community/family

Reference	Sample size/ethnicity	Country	Types of illness/care	Cultural competence tool	Findings
	(16%) Native American, (8%) African American, (4%) Hispanic American, (2%) N/S			(CCCI) (Client-rating tool- developed by Switzer et al., 1998)	involvement was positively associated with client satisfaction. Provider cultural competence related to appointment convenience and matched ethnicities was not associated.
Fuertes et al. (2006)	51 Clients: (27.5%) African American, (33.3%) Asian American, (15.7%) Hispanic American, (23.5%) Caucasian American	USA	Mental health	Cross-cultural Counselling Inventory- Revised (CCCI-R) (Client-rating tool- developed by LaFromboise et al., 1991)	Therapist cultural competence was positively associated with client satisfaction
Kerfeld et al. (2011)	40,723 Clients (parents of children with health problems): (71.3%) Caucasian American, (4.6%) White Hispanic, (10.3%) African American, (0.5%) Black Hispanic (7.8%) Multiple/Other non-Hispanic, (4.6%) Multiple/Other Hispanic, (0.9%) N/S	USA	Allergies, asthma, attention deficit	Five questions developed by the authors (Client-rating)	Providers' cultural competence was negatively associated with client dissatisfaction
Limberger (2010)	465 Patients: (44%) African American, (38%) Caucasian American, (8%) Hispanic American, (5%) Asian American, (3%) Native American, (2%) N/S 155 Provider	USA	Emergency and trauma	Cultural Competence Assessment (CCA) (Self-reporting tool- developed by Schim, 2004) Patient-rating Provider Cultural Competency (PRPCC)	Self-perceived cultural competence of the practitioners was not associated with patient satisfaction with provider-patient interaction * The author did not present the correlation between providers' patient-reported cultural competence and patient satisfaction

Reference	Sample size/ethnicity	Country	Types of illness/care	Cultural competence tool	Findings
				(Client-rating tool-developed by Thom and Tirado, 2006)	
Michalopolou et al. (2009)	322 patients: African-American	USA	Ambulatory general practice, asthma, mental health, domestic violence	Cultural Competency Measure (Client-rating tool- developed by Lucas, 2008)	Physicians' cultural competence was positively associated with patient satisfaction
Paez et al. (2009)	123 Patients: (69%) African-American, (3%) Caucasian American 26 Physicians	USA	Hypertension	Provider Cultural Competence Measure (Self-reporting tool- developed by Paez et al., 2008)	Physicians' cultural competence was positively associated with patient satisfaction, but not with patient trust
Saha et al. (2013)	437 Patients: (57%)African American, (14%) Latino, (23%) Caucasian American, (6%) other 45 Providers	USA	HIV	Provider Cultural Competence Measure Self-reporting tool- developed by the authors)	Providers' cultural competence was positively associated with self-efficacy, and adherence to antiretroviral therapy
Thom & Tirado (2006)	429 Patients: (26.4%) Caucasian American, (21.9%) Latino/Hispanic, (26.9%) African American, (17.5%) Asian American, (7.3%) N/S 53 Physicians	USA	Diabetes-hypertension	Patient-rating provider cultural competency (PRPCC) (Patient-rating tool- developed by the authors) Self-assessment of cultural competency (PSACP) (Self-reporting tool- developed by the authors)	Physicians' patient-reported cultural competence was positively associated with patient satisfaction and patient trust and negatively associated with blood pressure. Physicians' self-reported cultural competence was not associated with patient trust or satisfaction or blood pressure

4.3.1 Cultural competence conceptual models

4.3.1.1 Field of the research

In the present review, we categorised conceptual models into two contexts: health care and business. Nine of the identified models were developed specifically for the health care context and were mainly targeted at nurses, physicians, rehabilitation teams, psychiatrists

and counselors. Another group of models was developed for settings other than health care, which, we named generally as being from a business context. These models were tailored for fields such as international business or international management, education/universities, library and information science (LIS), and the army.

All of the health-related models used the term “cultural competence”, while the business-related frameworks used various terms such as “cultural competence”, “intercultural competence”, “intercultural communication competence”, “cultural intelligence”, “cross-cultural competence”, and “intercultural competency”. The term “cultural competence” is apparently more popular in the health care field than in the business field. Two of the business-related models used the term “cultural intelligence”. As stated by Earley and Ang (2003), both motivational and behavioural factors can be considered as elements of cultural intelligence. Since, the nature of cultural intelligence with a behavioural component is very similar to the concept of cultural competence, we included these two models as cultural competence models in this paper.

4.3.1.2 Definitions and dimensions of cultural competence

Generally, the authors considered cultural competence as the ability to work and communicate effectively and appropriately with people from culturally different backgrounds. Appropriateness implies not violating the valued rules, while and effectiveness means achieving the valued goals and outcomes in intercultural interactions (Spitzberg 1989). Most of the authors emphasised that cultural competence is an ongoing process, not an endpoint event, meaning that competency capability can be continuously enhanced over time.

Cultural awareness, cultural knowledge, and cultural skills/behaviour were posited as the most important elements of cultural competence in the majority of the frameworks. In some

models, cultural awareness and cultural knowledge were combined as one element of cultural competence, namely the cognitive element. Generally, cultural awareness was defined as an individual's awareness of her/his own views such as ethnocentric, biased, and prejudiced beliefs toward other cultures, and cultural knowledge was pronounced as the continued acquisition of information about other cultures. Cultural skills or behaviour was described as the communication and behavioural ability to interact effectively with culturally different people. In the business context, these skills mainly stressed communication skills, while in the health care context, the ability to make an accurate physical assessment and collect health data of culturally/ethnically diverse patients was also included.

Apart from the above-mentioned dimensions, two other factors, namely cultural desire/motivation and cultural encounter/interaction were replicated across several models. Cultural desire was defined as an individual's motivation or willingness to engage, participate and learn about cultural diversity and to raise his/her cultural awareness, knowledge and skills. Cultural encounter referred to face-to-face contacts or other types of interactions with culturally different people.

4.3.1.3 Extra components in the cultural competence models

Nearly all of the authors emphasised the effectiveness or appropriateness of cultural competence in the definitions or descriptions of the models. Although effectiveness refers to the outcomes of cultural competence, in only four conceptual models, were outcomes of cultural competence included. Two of these models were related to health care and indicated outcomes such as improved patient quality of life, patient satisfaction, adherence to treatment, and provider performance. The remaining models were related to the business

field and depicted outcomes such as enhanced job performance, personal adjustment, and interpersonal relationships for individuals working in culturally different settings.

In addition to the components of cultural competence and the outcomes, other elements are evident in several models. These are generally categorised as environmental or organisational factors. The authors of these models believed that these factors can affect outcomes and influence the degree to which a culturally competent person can work successfully in a culturally different context. According to this perspective, intercultural outcomes are not merely determined by the capability of an individual, but are shaped by the larger context as it can affect outcomes directly and indirectly by influencing the individual's behaviour. One such variable is cultural distance, which is defined as the actual or perceived discrepancy between one's own cultural practices and values and those of another culture. A very culturally different environment may cause individuals to experience high levels of stress, and may undermine their aptitude to adapt effectively (Johnson et al. 2006). Institutional ethnocentrism promotes the home culture's ways of behaving and accomplishing tasks, and accordingly, this factor was included in one model to show its negative impact on an individual's ability to respond appropriately to cultural differences in the workplace (Johnson et al. 2006). Institutional ethnocentrism and cultural distance can deter an individual from using his/her cultural knowledge and skills to achieve favourable outcomes (Abbe et al. 2007). Moreover, adoption of cultural knowledge and skills can be facilitated or hindered by the degree of organisational support where the service providers work. Organisational support varies in the degree to which agencies encourage or impede cultural competence through policies, procedures, and allocation of resources in everyday practices. Thus, organisational support was incorporated into one of the models as an important factor in determining an employee's capability to achieve desirable outcomes and deliver culturally competent services (Balcazar et al. 2009).

4.3.1.4 Design methods and assessment tools

The authors mainly developed their conceptual models by reviewing existing definitions and frameworks. Only one author developed their model by using a number of expert views through a Delphi study. For eight of these models, we could not find any assessment tools. Thus, we concluded that these frameworks were not tested quantitatively by the original inventors or by other scholars. For 10 models, we found related measuring instruments. All of the assessment tools developed by the original authors of the models were self-rating instruments that used individuals' personal perceptions to measure their level of cultural competence. Among the proposed assessment tools, only one scale was a client-rating instrument that measured the cultural competence of an employee by obtaining the perspective of the clients. The characteristics of cultural competence models are summarised in Table 12.

Table 12 Characteristics of the reviewed papers (cultural competence models)

Item	Characteristic	N	%
Context	Health care	9	50%
	Business	9	50%
Method for developing model	Review of literature	16	90%
	Interview	1	5%
	Delphi study	1	5%
Assessment tool	N/S	8	45%
	Client-rating tool	1	5%
	Self-rating tool	9	50%

4.3.2 Empirical studies on cultural competence outcomes

Thirteen papers satisfied the second inclusion criterion. Patients who received services such as counseling, aged care, emergency treatment, or treatment for hypertension, diabetes, and HIV were surveyed in these studies. The association between provider cultural competence

and outcomes such as patient satisfaction, patient trust, adherence to treatment, and health index were examined in these papers. Patient satisfaction was the most popular outcome measured in 12 studies. Two studies investigated the link between provider cultural competence and patient trust, whereas only one study examined the relation between provider cultural competence and patient health index, such as blood pressure, and one study examined if higher cultural competence leads to higher adherence to treatment.

4.3.2.1 Study characteristics and samples

All of the empirical studies were conducted in the United States. Only two studies included a large sample size of patients, while the others had relatively small to medium sample sizes that ranged from 50 to 450 clients. The majority of the patients belonged to one of four ethnic groups: Caucasian Americans, African Americans, non-white Hispanics, or Asian Americans. Six studies examined the cultural competence of the providers through the perspectives of the patients. In seven studies, the providers' self-rated cultural competence was used for analysis. Two studies used both self-reporting and patient-reporting tools to measure providers' cultural competence. Four studies used the assessment tools related to some of the conceptual models described in Table 10. In three of these studies, self-assessment tools, namely IAPCC and CCA, which were related to Campinha-Bacote's and Schim's models, respectively, were used to evaluate providers' cultural competence. Only one of these studies used a patient-assessment tool to measure the cultural competence of the caregivers. This scale was developed by Lucas et al. (2008) and was based on Sue's conceptual model. Moreover, in nine studies, the authors used assessment tools that were not generated based on a specific model. Three assessment tools incorporated the three dimensions of cultural competence (awareness, knowledge, and skills) (Constantine 2002, Fuertes et al. 2006, Paez et al. 2009), while in six papers, not all of these dimensions were

included in the measuring instruments (Cook et al. 2005, Thom & Tirado 2006, Ahmed 2007, Kerfeld et al. 2011, Damashek et al. 2012, Saha et al. 2013).

4.3.2.2 Impact of cultural competence on outcome variables

No significant relationship between provider cultural competence and patient satisfaction was found in two studies; in three studies, this link was partially confirmed, and in seven studies, the results indicated small to moderate associations. Additionally, only one of the two studies investigating the link between provider cultural competence and patient trust substantiated this association. A brief summary of the reviewed empirical papers can be seen in Table 13.

Table 13 Characteristics of the reviewed papers (cultural competence outcomes)

Item	Characteristic	N	%
Type of outcome	Patient satisfaction	12	92%
	Patient trust	2	15%
	Health status	1	7.7%
	Adherence to treatment	1	7.7%
Region of study	US	19	100%
	Non-US	0	0%
Cultural competence instrument	Self-rating tool	7	54%
	Patient-rating tool	4	30%
	Both self-rating and client-rating tools	2	15%
Sample size (patient)	>500	2	15%
	300-500	5	38%
	100-300	3	23%
	<100	3	23%
Patient ethnic groups	Caucasian American	9	69%
	African American	11	85%
	Latino(a) (White-Hispanic & Non-white Hispanic)	9	69%
	Asian American	7	54%
	Native American	5	38%

Item	Characteristic	N	%
Cultural competence-patient satisfaction	Confirmed	7(12)	58%
	Partially confirmed	3(12)	25%
	Rejected	2(12)	17%
Cultural competence-patient trust	Confirmed	1(2)	50%
	Rejected	1(2)	50%
Cultural competence-patient health status	Rejected	1(1)	100%
Cultural competence-adherence to treatment	Confirmed	1(1)	100%

4.3.2.3 Methodological quality of empirical studies

The methodological quality of the 13 empirical papers was appraised independently by two authors using the revised version of Estabrooks' Quality Assessment and Validity Tool for Cross-sectional Studies (Squires et al. 2011). Differences in quality assessment were resolved by discussion. The modified tool consists of 11 criteria which examine sampling, measurement, and statistical analysis. The quality score of each empirical study included in this review was calculated by dividing the total number of points obtained by the total number of possible points, yielding a score between 0 and 1 for each study. The studies were then classified as weak (< 0.50), moderate-weak (0.51- 0.65), moderate-strong (0.66- 0.79), or strong (0.80 - 0.10). Five studies were of weak methodological quality, and five had moderate-weak strength. Three papers had moderate-strong quality while no paper was rated as strong (quality score > 0.80). Table 14 summarises the methodological quality scores of the empirical studies.

Table 14 Quality assessment of empirical studies (n = 13)

Author, Year	Sample					Measurement		Statistical Analysis				Total Points	Score	Quality
	1	2	1	1	1	1	1	1	1	1	1			
	Probabilistic sample used	Representative	Sample size appropriate for power (sample size justified)	Sample drawn > 1 site	Response rate > 50%	DV directly measured/administrative	DV reliably and validly Measured.	Appropriate tests used	p values reported	CI reported	Missing data managed appropriately			
Ahmed (2007)	0	0	1	1	1	0	1	1	1	0	1	7/12	0.58	Moderate -weak
Castro & Ruiz (2009)	0	0	1	1	1	0	1	1	1	0	0	6/12	0.50	Weak
Chen (2008)	0	0	0	1	1	0	1	1	1	1	1	7/12	0.58	Moderate -weak
Constantine (2002)	1	0	0	1	1	0	1	1	1	0	0	6/12	0.50	Weak
Cook et al. (2005)	1	0	0	1	1	0	0	0	0	0	0	3/12	0.25	Weak
Damashek et al. (2012)	1	1	1	1	1	0	1	1	1	0	1	9/12	0.75	Moderate -strong
Fuertes et al. (2006).	0	0	0	1	1	0	1	1	1	0	0	5/12	0.41	Weak
Kerfeld et al. (2011)	1	2	1	1	1	0	0	1	0	0	1	8/12	0.66	Moderate -strong
Limberger (2010)	1	1	1	0	1	0	1	1	1	0	1	8/12	0.66	Moderate -strong
Michalopoulou et al. (2009)	1	0	0	1	1	0	1	1	1	1	0	7/12	0.58	Moderate -weak
Paez et al. (2009)	1	0	0	1	1	0	0	1	1	1	0	6/12	0.50	Weak
Saha et al. (2013)	1	0	0	1	1	0	1	1	1	1	0	7/12	0.58	Moderate -weak
Thom & Tirado (2006)	1	1	1	1	1	0	0	1	1	0	0	7/12	0.58	Moderate -weak
Total Points: No. of points possible= (12 – N/A) < 0.50= weak; 0.51-0.65= moderate-weak; 0.66-0.79= moderate-strong; > 0.80= strong DV=Dependent Variable; CI=Confidence Interval														

4.4 Discussion

In the first group of reviewed articles, characteristics of culturally competent individuals were proposed for both business and health care environments. The second group of the reviewed articles investigated the link between health practitioners' cultural competence and outcomes such as patient satisfaction and trust.

The reviewed studies revealed that there is general agreement among the researchers in the field of health care regarding the term cultural competence. Despite the slight differences in defining cultural competence, there is consensus regarding the continuous nature of this concept and with respect to the three components of cultural competence: cultural awareness, cultural knowledge, and cultural skills. These three components have been replicated in all reviewed cultural competence models, as shown in Table 10. However, additional components such as cultural desire/motivation and cultural encounter/interaction were also incorporated in several conceptual models and assessment tools. Including these additional dimensions may assist researchers to assess cultural competence of individuals more accurately in future studies.

Moreover, this study found that most of the conceptual frameworks were developed based on literature reviews and on authors' personal experiences and that notably few efforts have been made to produce conceptual models and assessment tools based on the perspectives of leading experts on cultural competence or based on methods such as Delphi. Furthermore, in health care-related studies, the authors did not usually analyse or cite the business-related models and vice versa. However, some of the well-developed frameworks in the business field were recommended to be used in the health care context. For instance, Anand and Lahiri (2009) advised health care scholars to use a framework generated by Deardorff (2006) in which only those elements of intercultural competence that all of the experts agreed on were included.

As not many of the proposed models have been sufficiently validated and tested, there is a need for more empirical studies to assess the strength of the proposed frameworks. Most of the assessment tools created by the models' original authors were self-rating tools. In addition, half of the reviewed studies investigating the outcomes of cultural competence in the health care field adopted self-reporting cultural competence instruments. Although studies showed good reliability of a number of these tools, some researchers in the fields of both business and health care have voiced concerns over the potential shortcomings of the self-rating assessment tools. For instance, Thom and Tirado (2006) posited that patient-reported cultural competence may be more strongly associated with the outcomes of care than with the results of self-reporting. Moreover, Moleiro et al. (2011) found that individuals tend to overestimate their level of intercultural competence, a factor that may mislead managers as to their employees' actual abilities to work with culturally diverse clients. Furthermore, Deardorff (2006) recommended using qualitative interviews or observations combined with a quantitative method to measure the cultural competence of individuals.

Most of the reviewed empirical studies only considered patient satisfaction as the patient outcome. Very few papers reported the impact of providers' cultural competence on patient trust and health status and no studies investigated outcomes such as adherence to treatment or health service utilisation. Additionally, the findings of these inquiries were contradictory. While some indicated a meaningful statistical relationship between provider cultural competence and patient satisfaction and trust, others provided no support for these associations. Furthermore, the majority of the reviewed empirical studies suffer from poor methodological quality which limits the strength and generalisability of the research findings. Although theory and logic suggest abundant benefits from cultural competence, without empirical support obtained from high quality and dependable investigation, it may

be difficult to convince managers to invest time and money in promoting cultural competence within their organisations. Hence, more attempts are needed to examine the impact of providers' cultural competence on various patient outcomes and in future studies, better sampling methods, larger participant numbers, and more accurate statistical analysis should be adopted.

Most of the reviewed models and all of the empirical studies were developed and conducted in the United States. Jirwe et al. (2009) emphasised that cultural competence frameworks may reflect the socio-cultural, historical, or political context in which they were developed. As countries usually have different socio-cultural demographics, there is a need to develop and test new conceptual models in other multicultural countries. Additionally, more empirical studies should be conducted in different countries to explore whether the cultural competence of service providers, especially health practitioners, affects outcomes for clients.

4.5 Limitations

We limited our review to articles published in English and to those articles published after 2000 meaning that some relevant papers may have been omitted. Moreover, this paper did not review qualitative studies that investigated the impact of cultural competence on patient outcome and therefore could not offer information about the outcomes that were considered in those studies. Furthermore, this review incorporated papers with visual conceptual models of cultural competence and narrative frameworks were excluded. Therefore, elements of cultural competence suggested through narrative frameworks were overlooked in this review. Finally, heterogeneity of empirical studies that prevented meta-analysis and caused difficulty in comparing the results of the reviewed papers also represents an important limitation. Conducting a more inclusive systematic review and including recent

qualitative and quantitative studies may modify these limitations and provide researchers with more in-depth information about cultural competence dimensions and outcomes in the health care context.

4.6 Conclusion

Globalisation and growing cultural diversity in societies necessitate that to interact effectively with culturally diverse clients and to achieve better outcomes employees must become culturally competent. This need encouraged scholars to define the concept of cultural competence and generate conceptual models that describe the attributes of culturally competent individuals. This review identified latest cultural competence frameworks and elaborated how this concept has been operationalised in various models. It also indicated how frequently these models have been used in empirical studies that examine efficacy of cultural competence in practice. The results of this review show that despite the slight differences, there is general agreement on the definitions and the major components of cultural competence. However, researchers should be aware of all different dimensions included in various models and assessment tools to employ strong and inclusive frameworks and measuring scales in future investigations. Moreover, further studies that include a meticulous review of the literature combined with the perspectives of experts and customers are needed to develop frameworks of cultural competence. Further research should also test the validity of the proposed models across different countries with different types of diversity. This review also revealed the paucity of evidence regarding the impact of cultural competence on patient adherence to therapy, health status, equity and quality of service. Thus, future research should focus on the outcomes of cultural competence in various industries, especially the health care industry. It is further

recommended that to achieve more reliable results, both qualitative and quantitative methods should be used to measure cultural competence.

CHAPTER 5 THE EFFICACY OF CULTURAL COMPETENCE IN THE HEALTH CARE

CONTEXT: A QUALITATIVE INQUIRY

Abstract

Health care sectors in many countries are challenged by a growing cultural diversity and the issues that are raised during intercultural interactions between patients and clinicians. This paper explores the issues caused by cultural dissimilarities between patients and providers in the multicultural context of Australia. Forty semi-structured interviews were conducted with patients from diverse ethnic origins who live in Australia. Results indicate patient - provider cultural dissimilarity can negatively affect patient perceptions of providers' qualities such as professionalism, empathy and expertise. Further, providers' cultural competence can assist them bridge the distance with their patients and enhance the ratings of these qualities. This paper highlights barriers to providing culturally congruent health services in Australia and addresses the scarcity of empirical evidence on the efficacy of cultural competence for enhancing the quality of health care services.

Keywords:

Intercultural medical encounter, cultural competence, cultural difference, health care quality

5.1 Introduction

“Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 1978, p. 1). Having access to health care services is a fundamental human right and attaining the highest possible level of health is the most important worldwide social goal (World Health Organization, 1978). To provide superior medical services and remain competitive, health sectors should not only keep up with the latest equipment and treatment techniques, but also be able to address challenges such as ageing populations, demographic differences, increasing demand and a variety of expectations amongst diverse clients (Zineldin, 2006). In multicultural countries, coping with these challenges may be more difficult because of the cultural diversity among both patients and health professionals. For example, Australia is known as the second most multicultural country with a population of approximately 21 million, representing 250 ethnic backgrounds and nearly 400 languages (ABC News, 2010). One-quarter of this population was born overseas and 16% speak a language other than English at home (Australian Bureau of Statistics, 2006). Moreover, due to the policy on the entry of skilled workers and the migration of health workers from different countries to Australia, one-third of medical workers are foreign-born (Australian Institute of Health and Welfare, 2009). The diversity amid patients and health practitioners leads to concerns about intercultural interactions in medical institutions. Culturally different customers may have different expectations of service, and without being aware of these differences, service employees and providers may fail to meet customers’ requests (Campinha-Bacote, 2002; Sharma et al., 2009). For instance, the Chinese believe in the harmony of energies and the balance of hot and cold in the body. If a doctor prescribes these patients a therapy that includes consuming cold drinks or exposure to a cooler environment to reduce fever, they may not adhere to this treatment because they interpret it as a violation of the body’s natural harmony (Chen,

2008). Additionally, medication/dosage errors may also occur when providers fail to consider differing responses to certain medications among different ethnicities. For example, some providers may not be aware that Asians and Native Alaskans may need lower doses of anxiolytic agents than Caucasian patients, or that Asians, Indians, and Pakistanis require lower doses of lithium and antipsychotic drugs (Burroughs et al., 2002). Many of the noted cultural and communication issues can be avoided if providers become culturally knowledgeable and skilled at dealing with culturally and linguistically diverse (CALD) patients. While numerous scholars have argued that the role of cultural differences and providers' cultural competence in the delivery of health services need to be considered, very few studies provide empirical support for the negative impact of cultural dissimilarity and positive impact of cultural competence on the quality of care and patient satisfaction (Hayes-Bautista, 2003; Saha et al., 2011). Without empirical evidence indicating the outcomes of cultural competence, it is difficult to convince managers to invest time and money on promoting cultural competence training, techniques and practices. In this paper, we address this issue by providing empirical evidence of the negative impact of patient-provider cultural dissimilarity on health care quality and the efficacy of cultural competence for improving quality of care in the multicultural context of Australia.

5.2 Literature review

5.2.1 Cultural differences and cultural competence

In cross-cultural service encounters in which the service provider is culturally different from the client, high-quality services may not be delivered and intercultural service encounters are more likely to cause customer dissatisfaction (Barker & Härtel, 2004; Cooper et al., 2003). Culture shapes the milieu in which the patient - physician encounter takes place. Patients' cultural backgrounds can influence communicative practices, treatment

preferences and expectations of interaction with clinicians, and cultural differences between provider and patient may lead to different understandings of infirmity, well-being and treatment (Betancourt, 2006; Campinha-Bacote, 2002). Furthermore, in racial discordant encounters, patients may not reveal their beliefs about illness and treatment preferences thoroughly and this may lead to lower patient participation and an ineffective treatment plan (Cooper et al., 2003; Saha et al., 2011; Street et al., 2008). Scholars believe that globalisation and changes in the demographic trends necessitate cultural competence to improve patient outcomes, and increase the overall quality of care. They view that providers with a higher level of cultural competence are better able to respond to a diverse population and supply optimal care in an equitable manner. These professionals have more knowledge about health-related beliefs and cultural values, disease incidence and prevalence, and treatment efficacy (Betancourt & Green, 2010; Campinha-Bacote, 2002; Suh, 2004). This knowledge may help them negotiate various alternatives with patients in order to reach an agreement and reduce the risk of misdiagnoses and accordingly achieve better treatment outcomes. Additionally, during medical encounters patients are pleased when they establish a good rapport with providers who possess a higher level of understanding of their patients' particular needs (Castro & Ruiz, 2009).

A number of cultural competence frameworks have been developed to explain the characteristics of culturally competent health professionals. Although, there is no consensus over the definition and dimensions of this concept, there are major similarities among the extant frameworks. In most of the recent conceptual models, three dimensions, namely cultural awareness, cultural knowledge, and cultural skills have been replicated as the main elements of cultural competence (see Table 15).

Table 15 Cultural competence frameworks

Authors	Title of the model	Elements of cultural competence
Balcazar et al. (2009)	Cultural competence conceptual model	desire, awareness/knowledge, skill, organisational support
Burchum (2002)	A model for cultural competence	cultural awareness, cultural knowledge, cultural understanding, cultural sensitivity, cultural interaction, cultural skills, cultural competence
Campinha-Bacote (2002)	The process of cultural competence in delivery of health care services	cultural desire, cultural awareness, cultural encounter, cultural skills, cultural knowledge
Kim-Godwin et al. (2001)	Culturally competence community care	caring, cultural sensitivity, cultural skills, cultural knowledge
Papadopoulos et al. (2004)	Model for developing cultural competence	cultural sensitivity, cultural awareness, cultural knowledge, cultural competency
Schim et al. (2004)	Schim and Miller cultural competence model	cultural diversity, cultural awareness, cultural sensitivity
Sue (2001)	Multidimensional model of cultural competence	cultural awareness/attitude, cultural knowledge, cultural skills
Suh (2004)	The model of cultural competence	attributes of cultural competence: ability, openness, and flexibility elements of cultural competence: cognitive domain (awareness, knowledge), affective domain (sensitivity), behavioural domain (skills) environmental domain (encounter)
Teal & Street (2009)	Culturally competent communication	self- and situational awareness, adaptability knowledge, communication skills

Cultural awareness is a cognitive element of cultural competence and refers to a provider's own biases and prejudices towards individuals from different backgrounds, the awareness of cultural differences and the extent to which an individual tries to understand the views of culturally different clients. Cultural knowledge describes the provider's accumulated

knowledge about culturally/ethnically different groups; this knowledge may include information about health-related beliefs and cultural values, disease prevalence, and treatment practices. Cultural skill is a behavioural dimension, including the ability to transform knowledge and cultural awareness into effective health care delivery. This element includes the ability to collect relevant cultural data to make an accurate physical assessment of diverse patients, and the cross-cultural communication skills to interact with clients in an adaptive and culturally compatible manner (Balcazar et al., 2009; Burchum, 2002; Campinha-Bacote, 2002; Lucas et al., 2008; Selvarajah, 2006; Sue, 2001; Suh, 2004). Some scholars merely considered these three components as the most important aspects of an individual's cultural competence (Lucas et al., 2008; Sue, 2001), while others included additional dimensions such as cultural desire, cultural diversity, and cultural sensitivity in their conceptual models (Balcazar et al., 2009; Burchum, 2002; Campinha-Bacote, 2002; Kim-Godwin et al., 2001; Suh, 2004). Most of the cultural competence frameworks and scales have been developed based on a self-perspective, meaning that individuals evaluate their own level of cultural competence. However, a number of researchers have criticised this method. For example, Lucas et al. (2008) and Thom and Tirado (2006) asserted that patients could judge the level of providers' cultural competence more accurately than providers themselves, and patient-reported cultural competence may have a stronger association with the outcomes of care than self-reported results. Moreover, it is believed that providers tend to overestimate their level of cultural competence (Moleiro et al., 2011). This issue can mislead managers about the true ability of their employees to work with culturally diverse clients. Hence, scholars have recommended employing a patient-rating method to evaluate the cultural competence of health professionals.

5.2.2 Quality of health care

The quality of health care has usually been defined in terms of the technical delivery of care and “measured using objective indicators such as mortality and morbidity” (Dagger et al., 2007, p. 124). Nevertheless, the significance of customers’ perceptions for evaluating service quality is increasingly stressed by researchers (Andaleeb, 2001; Dagger et al., 2007; Yavas et al., 2008). Scholars have opined that there are two main aspects of service quality in the health care context, namely functional aspect and technical aspect. The technical aspect refers to the accuracy of diagnostic and treatment processes and the quality of results (de Ruyter & Wetzels, 1998), whereas the functional aspect refers to the way that the service is delivered and the manner and behaviour of the health care providers during the service delivery process (Babakus & Mangold, 1992). In the health care setting, due to the high level of risk and stress, the functional aspect of service and the customer-provider interaction significantly contributes to the clients’ overall perception of the service. Patients request more information and more personalised attention compared to customers in other industries (Carman, 2000). Thus, patients’ judgment of health care provider attributes can influence their overall attitudes towards quality (Badri et al., 2008; Lin & Guan, 2002). A number of marketing scholars, have categorised service provider attributes into two sets as “process attributes” which implies the quality of interaction with providers and “outcome attributes” which refers to the result of the interaction (de Ruyter & Wetzels 1998; Lin & Guan, 2002). In the context of health care, carers’ soft qualities have been differentiated from their professional and technical abilities. Terms such as empathy, humaness, interpersonal relationship and compassion reflect the soft qualities of a provider such as a physician, and these characteristics indicate that a provider treats a patient as a human being and expresses kindness, respect and genuine interest which are demanded by the patient (Dagger et al., 2007; Hall & Dornan, 1988; Lin & Guan, 2002). Additionally, scholars

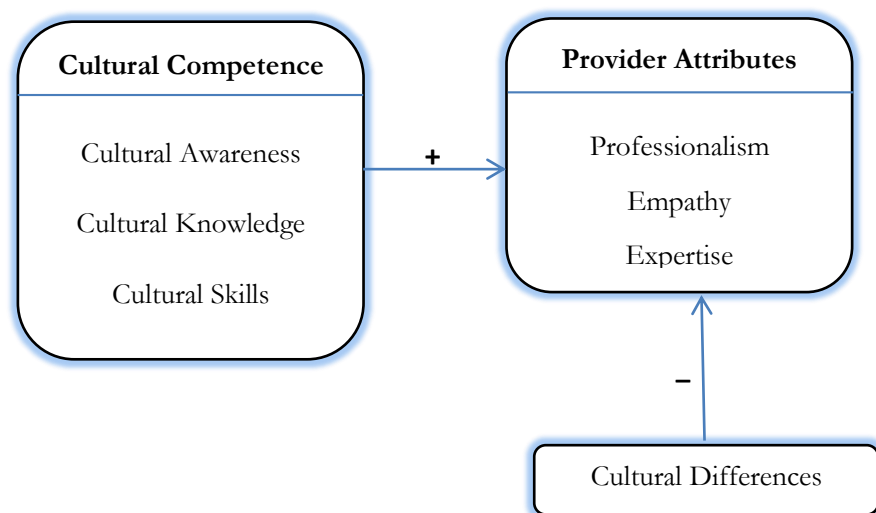
proposed a behavioural attribute of the provider named “professionalism” with regard to the patient-provider interaction process. This attribute illustrates how a provider performs his or her professional tasks, such as providing sufficient information, shared decision making, and building an interactive consultation through active listening and asking enough questions (Hall & Dornan, 1988; Lin & Guan, 2002; Solomon et al., 2005; Suki et al., 2011). Finally, patients assess providers based on technical knowledge and proficiency (Badri et al., 2008; Dagger et al., 2007; Zineldin, 2006). Hence, patient perceptions of providers’ ability to make accurate diagnoses, provide effective treatment advice and execute treatments that cause minimum pain for patients are also drivers of the overall assessment of health service quality.

5.3 Research model

In this study, first, we explored whether the three main qualities related to the attributes of health care providers, namely professionalism, empathy, and expertise are considered important by patients. Second, we aimed to explore the most important elements of cultural competence according to the patient perspective to realise whether the dimensions of cultural competence match the elements (e.g., cultural awareness, cultural knowledge and cultural skills) proposed in the literature. Finally, we sought to identify whether patient-provider cultural differences negatively affect, and provider cultural competence positively influences patient perceptions of provider qualities (see Figure 6). Limited studies have provided empirical support for the impact of patient-provider cultural dissimilarities and cultural competence on the perceived quality of care. The findings are also contradictory. For example, some studies have confirmed the positive impact of provider cultural competence on quality of care (Castro & Ruiz, 2009; Chen, 2008), whilst others have found no evidence to support the link between these concepts (Cook et al., 2005). Moreover, all of

these studies have been conducted in the US and only a quantitative approach has been adopted to examine the associations. In most of these studies provider cultural competence has been assessed using the self-rating method and patient perspectives have been overlooked. In this study, these issues are addressed by investigating qualitatively how cultural differences can affect the quality of health service and whether there is a relationship between provider cultural competence and quality of care.

Figure 6 Research model



5.4 Research method

5.4.1 Data collection

A qualitative approach was used in this research to understand how cultural and linguistic barriers hinder the delivery of high-quality care and to explore the efficacy of providers' cultural competence in mitigating cultural issues. Qualitative research is used when interactions among people are difficult to measure, especially when measures are not sensitive to race and economic status differences. Moreover, qualitative approaches are used when we need a detailed understanding of the issue that can only be established by talking directly with people and allowing them to tell their stories (Creswell, 2012). Forty semi-

structured interviews were conducted with patients from diverse ethnic origins living in Australia. The interview guide was developed in English and translated into Chinese (Mandarin), Vietnamese, Arabic and Persian. The interviews were conducted in English. Some patients with lower levels of English proficiency were accompanied by their family members to answer the questions and share their stories. The participants were asked to provide specific details about the low- and high-quality services that they had received during their visits to a clinic or hospital in Australia. Patients were also explicitly asked to discuss whether any of their experiences with the health care system involved cultural dissimilarity with the providers as a source or potential source of problems and how the providers had managed the situations. The interviews were conducted in August 2012 to September 2012.

5.5 Data analysis

Each unit of analysis was given a code based on demographic characteristics, including ethnicity, religion, gender, education, age and number of years living in Australia. Ethnicity was coded as: Afghan (AFG), Anglo Saxon (ANG), Arab (ARA), Chinese (CHI), Indian (IND), Indonesian (IDO), Iranian (IRA), Islander (ISL), Malaysian (MAL), Serbian (SER) and Vietnamese (VIE). Religion was coded as: Christian (CHR), Muslim (MUS), Hindu (HIN), Baha'i (BAH) and no-religion (NOR). Gender was coded as: male (M), and female (F). Education was coded as: illiterate (IL), high school graduate (HI), Tafe (TA), Bachelor's degree (BA), Master's degree (MA) and PhD (PH). Age was coded as: 21-25 (1), 26-30 (2), 31-35 (3), 36-40 (4), 41-45 (5), 46-50 (6), 51-55 (7) and 56-60 (8). Number of years living in Australia was coded as 1-3 (1), 4-6 (2), 7-9 (3), 10-12 (4), 13-15 (5) and >15 (6). For example, the code AFG-MUS-M-IL-8-3 refers to someone who is Afghan, Muslim, male, illiterate, 56-60 years of age and who has lived in Australia for 7-9 years.

One interviewee was Afghan, nine were Anglo-Saxon Caucasian, five were Arab, five were Chinese, three were Indian, two were Indonesian, six were Iranian, two were Pacific Islanders, two were Malaysian, one was Serbian and four were Vietnamese (see Appendix 2).

All interviews were recorded, transcribed and then entered into NVivo (10). Coding was performed based on a coding frame to identify themes from the interviews. This frame can be developed deductively prior to research or inductively during the research. A codebook was built based on the existing knowledge (a priori). Although the coding began by using preset codes, the possibility of finding new sets of codes when reading and analysing the data was not overlooked. These emergent codes are those ideas, concepts, etc., that were found in the data and differ from the preset codes (Strauss, 1987). Weber's protocol was used to apply these codes to the transcript (Weber, 1990).

5.6 Results

The results confirm that the key themes related to provider's attributes in the delivery of optimal health care services are professionalism, empathy and expertise. Furthermore, we found evidence that patients perceive the cultural competence of a provider based on the three major elements of cultural awareness, cultural knowledge and cultural skills. The positive impact of cultural competence and the negative effect of cultural dissimilarity on patient ratings of provider qualities were also substantiated. Some quotes and supportive literature are presented below.

5.6.1 Provider professionalism

In this study, participants distinguished the affective and professional aspects of care they receive from providers.

She (GP) was very friendly, she wanted to know about my family and my background, and I prefer to see her when I have a problem. But for the other doctors in that clinic it is just a business, doing routines as a doctor not warm and emotional. (Patient ISL-CHR-M-BA-5-2)

As stated by a few researchers, the “soft” side of providers and their compassion and empathy is differentiated from a more procedural and professional side (Hall & Dornan 1988; Lin & Guan, 2002).

The major elements of provider professionalism (especially physicians) are listening carefully, asking enough questions, providing adequate information about the problem and treatment, involving patients or their families in making decisions, performing thorough examinations, and conveying information in a simple way that patients understand. These qualities were frequently repeated by participants.

Even when things are complicated she tries to explain them in easy language, she knows how to do her job (Patient IND-HIN-F-HI-4-3)

The doctors there were very professional, not rushing you and took time to examine and understand the problem. They listened carefully and asked me questions to make sure I told them everything. (Patient CHI-NOR-M-BA-4-2)

We found evidence that in medical visits, cultural similarities and differences can affect patient perceptions of provider professionalism. For example, when an Australian Caucasian visited Chinese doctors:

I prefer not to visit Asian doctors since they are reluctant to have long chats with patients. It must be a cultural thing I suppose. They don't tell patients the details; I think they don't like to talk to strangers much. (Patient ANG-CHR-F-HI-3-6)

One possible explanation for this issue is the different communication style between high- and low-context cultures. In high-context cultures such as Asian, Middle Eastern and Hispanic cultures, communication depends heavily on the context of what is being communicated rather than on the specific words (Galanti, 1991). Conversely, people in low-

context cultures, such Caucasian Swiss, German and Australian cultures, rely much more heavily on precise, direct and logical spoken communication and less on an assumed understanding.

Language barriers in cross-cultural visits also affect patient ratings of provider professionalism.

I had to wait for about an hour, eventually saw a doctor who couldn't clearly explain my test results due to problems communicating in English. You spend your time but can't get clear information. (Patient ANG-CHR-M-BA-6-6)

He didn't let me explain my problem much, my English is not bad but I need more time but he didn't give me time. (Patient VIE-CHR-F-HI-7-6)

It has been reported that doctors may not take enough time to listen to patients who cannot speak English well or may keep interrupting them due to time shortages. Moreover, overseas-born or trained doctors may not be able to provide sufficient and clear information due to their inadequate English proficiency (Davidson et al., 2007).

In intercultural medical encounters, provider cultural competence can help bridge these differences. In the following examples, the differences between culturally competent and incompetent providers can be seen.

In one case, an Iranian woman who had her first childbirth experience in Australia was completely informed by her provider about the treatment differences and procedures in Australia. In another case the patient was not informed about the labour procedure and differences.

I didn't know how the procedures are here, she (GP) asked about my previous labours and practices in Iran and informed me of potential differences in Australia (Patient IRA-MUS-F-HI-4-2)

Before my labour they (GP and midwife) didn't give me enough information about the procedures in Australia, they never asked me about my previous experience in

my country, e.g. during my delivery one nurse was closing my rectum with her fingers, it made a lot of pain there too, in Iran they gave me an enema, I didn't know why they didn't do that and why they didn't even tell me what they would do to me. Neither was I told that hospitals do not admit pregnant women right after the waters break, while in Iran this is the case. (Patient IRA-MUS-F-BA-4-3)

Providers with higher cultural awareness understand that cultures are different and that different people may approach problems differently and have different expectations. For instance, they try to understand the potential differences by asking more detailed questions (Lucas et al., 2008). In the first case the provider made a greater effort to understand how procedures are different in the two countries and then tried to supply all of the information that the patient needs. Another example shows a Caucasian doctor's cultural knowledge about Arab communities and how his cultural skills positively affect patient perception of doctor professionalism:

My wife prefers not to go to see a doctor alone and I usually go with her. Her doctor knew about Muslims I believe, (---), he listened to us carefully, even though we had to think sometimes to find the words. He also asked me if I have any questions and if I'm ok with my wife's surgery. I was unsure about the treatment and asked some questions and he explained everything. I could see he was not speaking too fast and I could understand almost everything he said. (Patient ARA-MUS-M-TA-4-2)

Involving family members, especially husbands, in making major decisions regarding women's surgeries is usually expected by Arabs (Hammoud et al., 2005). In this case, the doctor made a shared decision in consultation with the patient's husband. His adaptive communication style, changing his natural speaking speed and opting to use simple terms instead of complex terms, prevented misunderstanding and led to effective information transfer (Stewart et al., 2007).

Culturally competent providers are better able to realise the troubles that patients may face during a consultation; they also try to understand patient communication preference.

I think the doctor expected me to ask more questions, to be more active, but I wanted her to ask me questions, because sometimes we don't know what to ask and some of my people may not ask many questions since their English is not good or they don't want to tire the doctor. (Patient IDO-CHR-M-MA-4-2)

Insufficient cultural awareness and knowledge about different patients resulted in a less participative encounter in this case. Caucasian doctors should be aware that some ethnic patients, such as African Americans, normally have a lower tendency to ask questions than Caucasians. Ethnic patients may refrain from asking multiple questions due to language insufficiency as well as the fear of taking up too much of a busy doctor's time or the rejection of their inquiries by providers (Fallowfield & Jenkins, 1999; Michalopoulou et al., 2010). Due to a lack of knowledge about this issue, physicians may not apply sufficient effort to encourage patients to participate and reveal information, which may hinder the provision of adequate information needed by patients.

5.6.2 Provider empathy

Participants emphasised the role of provider empathy and humanness in providing optimal care. They repeatedly described providers using terms such as warm, kind, friendly, courteous and respectful and explained how compassionate providers tried to consider patients' particular needs and concerns, and how they attempted to alleviate patients' stress and worries.

She (doctor) came and said bla bla bla, do this do that just doing the job. I did have a very bad experience there; though she was a doctor I expected her to kind of come down to my level and understand that I'm a mother, I was so upset and worried about my kid. She showed no empathy at all. (Patient IND-HIN-F-BA-5-6)

Empathy is an essential component of service quality and has been included in many service quality measuring scales. Due to the vulnerability of patients caused by their physical or mental complications, empathy is a critical factor for establishing interpersonal

relationships with patients and delivering optimal care. Studies have indicated that medical professionals who communicate with empathy can improve patient experiences and outcomes (Dagger et al., 2007; Riess et al., 2012). However, there is evidence of a decline in empathy among medical students and providers. High workloads, time shortages and the stressful nature of health care may be responsible for this decline, and providers may dehumanise patients to experience less distress (Neumann et al., 2011). Cultural barriers may also hinder incorporating empathy in clinical care. Health professionals may have trouble responding empathetically to patients from different backgrounds due to communication barriers and different expectations for emotional support. Having different communication styles can negatively impact perceived quality of care (Ngo-Metzger et al., 2006; Thornton et al., 2011). In the following examples, two patients, one Iranian and the other Australian Caucasian with an Irish background, described issues they faced during consultations with Chinese and Japanese doctors:

I am not very happy with those (Chinese and Japanese doctors) I've visited so far. I have a communication problem with them. They are not chatty or emotional like us. I'm not comfortable with them. Arab doctors are better; their culture is less different from ours. (Patient IRA-CHR-F-HI-6-5)

Asian doctors are not very friendly, they are too formal and not willing to make any conversation other than about your disease, but I think talking about different things can reduce our stress. (Patient ANG-CHR-F-HI-3-6)

The issues arising in these cases can be explained by the difference between high- and low-context cultures and the difference between affective and neutral cultures. Different patients may have different preferences of formality during the visit; people from high-context cultures, such as those of Asian countries, prefer more formal interpersonal relations, while in the low-context cultures, such as the Australian culture, informal and somewhat friendly relations are preferable (Leong & Lee, 2006). Moreover, a study on recent Chinese

immigrants indicates a significant difference between the abilities of Chinese immigrants and Australian Anglo-Saxons in making small talks. People can show friendliness and build a good relationship with others by small talk. However, to many Chinese professionals engaging in small talk is a new social experience. Unlike Anglo-Australians who easily make small conversations with people they don't know well, Chinese people have more boundaries in their interpersonal behaviour and there are distinct levels of intimacy across their relationships, ranging from the closest familial, to the furthest stranger and thus they prefer to have formal interactions beyond their close social circle (Cui, 2012). The inability to make small talk with strangers and the reticent attitudes of Chinese physicians can cause discontent among patients who expect more interactive and less formal relationships with their doctors. Therefore, some patients may feel disrespected by doctors' informal manner or may not receive enough emotional support and friendliness because the doctors express emotionally controlled behaviour that is not compatible with those patients' standards. Moreover, in an affective culture, people do not conceal their emotions, while in a neutral culture, people are discouraged from expressing their feelings overtly. Differences between patients and doctors in showing emotions may negatively affect patients' perceptions of doctors' ability to build empathetic relationships. Middle Eastern nations such as Iran have more affective/expressive cultures than Asian countries, such as China and Japan (Supraner, 2010; Trompenaars & Hampden-Turner, 1997). In addition, culturally different patients communicate their pain in different ways. Members of cultures such as Middle Eastern and Italian are more expressive about pain and it is acceptable to show emotions and express their pain to seek attention and support and encourage caregivers to attend to them. In contrast, cultures such as Asian cultures value stoicism and patients are expected to suffer in silence (Narayan, 2010; Preston et al., 2013). When physicians and patients have different norms about the degree of emotion and expression about pain, this may cause problems or

misunderstanding during consultations. For example, an Asian provider may consider that his/her Arab patients are exaggerating their pain and these patients may not receive the expected emotions from culturally different providers.

We found evidence that the cultural competence of providers helps them offer respectful care, pay attention to patients' particular concerns and put patients at ease by making soothing conversation.

The male doctor asked for my permission and I said it's ok because it's for medical condition and Islam is ok with that, but it was very nice that they asked me first(---). After the labour they didn't ask if we wanted the placenta or not. In our country we bury the placenta. We felt embarrassed to ask, they did not know that some people may want to bury the placenta, you know you feel it might be really weird for them, but it is necessary in our culture so my husband just asked. They didn't know about our culture and didn't ask if we had any rituals after labour, but it was good that they didn't show any disrespectful reaction like they were surprised. Maybe they thought it is weird but they didn't say why do you want this or didn't show that by reacting improperly. (Patient MAL-MUS-F-MA-2-1)

I asked them to tell me before they come to see me, because I wanted to cover my hair. Sometimes they just came into my cubicle without giving me a warning, and I didn't have time to cover my hair, I felt uncomfortable. It would be respectful to ask permission first. (Patient ARA-MUS-F-MA-3-2)

He knew about Muslims, he shook hands with me, but not with my wife. He knew my wife might not be very comfortable with the body examination; he asked to make sure if we are fine with that. (Patient ARA-MUS-M-TA-4-2)

He respected my religious belief. He asked me if I'm ok with taking fish oil and tried to explain that the tablets break down in the stomach without touching my system. He did not force me, he had very respectful manner. (Patient IND-HIN-F-HI-4-3)

They should show respect in the way they talk to you, appropriateness of what they say, e.g., I do not want the doctor or staff to talk with me about my dad's personal things in the presence of him. We don't talk about such things in front of our male

relatives. They never asked us if it's ok to discuss those issues in front of my dad; that made my dad very uncomfortable. Things that concern us may not be important for them. (Patient ISL-CHR-F-HI-6-6)

The doctor had visited China twice and could speak a few words in Mandarin with a cute accent; it really cheered me up while I was so desperate because of my terrible infection. (Patient CHI-NOR-M-MA-2-2)

I used to take pills for ovarian cysts and I had done ultrasound three times during three years in Iran. I asked the GP here for another ultrasound, I was very concerned about my fertility. The GP was amazed that I asked for another ultrasound, she said why have you done this many times? She harshly criticised my Iranian doctor and said I can't let you do ultrasound so many times, but I think ultrasound is not dangerous. We didn't have very nice chat. Then the GP said you don't have to take pills either. I am not sure if she is right, she didn't really care how worried I was. Fertility is greatly important to us as many young Iranian women want to have only one child in their mid-30s and need to make sure their reproductive system is healthy enough. At the end she told me women get pregnant here all the time and don't make a big deal out of it; I didn't like her attitude. Maybe we are a bit too worried about our pregnancy but I think doctors should understand our worries not just ignore them because they don't find them important. (Patient IRA-NOR-F-MA-2-1)

These cases indicate that culturally competent providers try to identify patients' religious/spiritual beliefs (cultural awareness) to adapt their behaviour (cultural skills) and provide appropriate support. Knowledge about diverse patients' cultural/religious norms (cultural knowledge) also helps providers avoid showing disrespect or causing discomfort for patients and their families. Scholars have emphasised the significance of cultural awareness, knowledge and behaviour in treating patients respectfully and acknowledging their particular concerns and needs (Gibson & Zhong, 2005; Kagawa-Singer & Kassim-Lakha, 2003; Whitley, 2012).

5.6.3 Provider expertise

We found evidence that patient perceptions of providers' medical knowledge and technical expertise plays an important role in shaping patient perceptions of the health service quality.

During the consultation the knowledge and confidence of the doctor impressed me. When I told him I have some kinds of symptoms, he added to them and even told me more symptoms; this shows his knowledge. (Patient VIE-NOR-M-MA-4-2)

The doctor was looking at a medical book in front of me to check my symptoms and said ok yes it is in the book, and I felt he was not knowledgeable. (Patient CHI-NOR-M-BA-4-2)

We found support for the hypothesis that cultural/ethnic dissimilarity can have a negative association with patient ratings of provider expertise.

I am not racist and this has nothing to do with doctors' races, it is about knowledge and medical standards. I cannot trust non-white doctors not because I have a problem with their backgrounds, I'm not sure about the standard of the schools they were trained in. I was misdiagnosed by a couple of ethnic doctors before. (Patient ANG-CHR-F-HI-3-6)

When I was pregnant, I was fasting during Ramadan, but I didn't tell the doctor. I think non-Muslim doctors are not very familiar with the advantages of fasting and don't know enough about options to manage it during pregnancy. They just think fasting is very dangerous for the body but it is not and actually it helps the body to rest and function better. I thought the doctor could not give me very useful advice for my condition. (Patient ARA-MUS-F-HI-2-2)

I had depression and needed to see a therapist who could speak my language. I think they can give me better advice. My English is fluent but when I speak in my own language I don't have to put as much effort in as I do to find English words. I think you should speak in your own language when you want to talk about your emotional and mental problems. I found an Iranian therapist and that helped a lot. An Iranian therapist can understand our concerns and issues better. He knows how things may

affect us here. Besides you can talk about your background and the problems you had in the past and he can understand your situation more than someone who is not familiar with the issues and lifestyles in your country. (Patient IRA-BAH-M-BA-4-2)

In cross-cultural medical encounters, insufficient knowledge about different patients' religious practices and lifestyle, the impact of certain habits and practices on patients' physical and mental status, and the methods used to handle patients with certain conditions may degrade patients' trust in providers' knowledge. For instance, not being well-informed about fasting during pregnancy or fasting with diabetes, which are fairly widespread among Muslims, or about female circumcision can create mistrust regarding providers' knowledge and the effectiveness of medical advice (Ambanpola et al., 2005; Clark et al., 2010; Wikberg & Bondas, 2010).

Additionally, the findings show that a higher cultural competence of the provider is associated with a more positive evaluation of provider medical expertise, while low cultural knowledge and skills can negatively affect patients' perceptions of providers' ability to treat them.

Once I visited a white doctor but was not sure if I would receive a good gynaecology care for my condition in Australia (she did not mention the condition). I felt that Australians might not be familiar with some medical issues that people in other countries experience. However, I visited a kind doctor. She asked me some questions and explained some issues, I felt that she may be more familiar with the case more than what I thought and have knowledge to help me with my situation. I trusted her and told her everything and did what she told me and got better. (Patient ARA-MUS-F-HI-4-3)

I got a wrong diagnosis from an ethnic doctor who told me I had Thalassaemia. I went to another doctor and she told me that this is not common among us (Whites) and is prevalent among Middle Easterners and Polynesians, but I think the first doctor had no idea about this. (Patient ANG-NOR-F-BA-4-6)

In Australia I have come across a few doctors who were not very knowledgeable and their prescriptions did not work for us. I have gout, a white doctor here gave me some tablets but I still had the problem. I went back and asked for the medicine I used to consume back in Fiji, the doctor said oh oh we can't give you that one. The other tablet was supposed to fix it in one or two days but it was still there and I got it back so many times, the medicine they give didn't work, but what I get in Fiji works. I couldn't walk and I insisted but they didn't give me what I needed. They gave me something else and it didn't work either, it was almost two months and I couldn't walk so I decided to ask a friend to bring some pills from Fiji. My wife had a lung infection and the cough didn't go away. The antibiotic the doctor gave her was weak, compared to the antibiotics she got in Fiji. My wife had the infection for a long time; we knew it couldn't fix it. I think Australian doctors should know that people are different. Not all medications affect everyone the same way. Some people may need stronger things to get better. (Patients ISL-CHR-M-BA-5-2)

To provide high-quality care and reduce the risk of misdiagnoses, providers should learn about diverse populations' communication styles, lifestyles and dietary preferences: how they express their pain; their physical characteristics; and their prevalence of certain diseases and responses to certain medications (Campinha-Bacote, 2002; Fortin, 2002). For instance, some dermatology conditions may be rare in Caucasian skin but are much more common in ethnic patients and vice versa (Cole et al., 2009; Crane, 2013). Thalassaemia is also more prevalent in certain races, with the type and prevalence varying by place of origin. Dark-skinned people who regularly cover their skin may lack vitamin D in temperate climates, and rickets have been reported, especially with a high consumption of chapattis, which are high in phosphate. The patient's race may be a consideration in determining the best treatment for hypertension (Rull, 2011). Ethnic or regional differences that could potentially contribute to differences in drug response include not only genetic differences (most of those described) but also diet, practice of medicine, and pattern of concomitant medication use (Yasuda et al., 2008). Culturally competent providers are aware that there

are cultural and communication barriers to making accurate diagnoses and may be better able to assess both medical and socio-cultural aspects of the patient's situation to avoid potential misdiagnoses, unnecessary suffering, and harmful complications (Teal & Street, 2009; Thom & Tirado, 2006).

5.7 Discussion

This study provided qualitative support for the negative impact of cultural/ethnic dissimilarity on the perceived quality of health care by affecting patient perception of provider professionalism, empathy and medical expertise. Some of the Caucasian participants preferred to seek treatment from providers of their own race. They believed that ethnic doctors are more likely to make wrong diagnoses because many of them received their qualifications from less developed countries. On the other hand, a few non-Caucasian patients stated that Caucasian doctors may have better theoretical knowledge but they are not necessarily as experienced as non-Caucasian providers who worked in populous countries and dealt with more types of diseases. Some ethnic patients doubt the technical expertise of Caucasian providers in treating cases that are not common in Australia. Both Caucasian and non-Caucasian patients experienced encounters in which they did not receive quality care due to language barriers. It is perceived that providers who do not have English as their first language, may not be able to fully understand Caucasian patients (especially patients with a strong Australian accent) and they may not provide patients with accurate information owing to insufficient English proficiency. Compared with Caucasian patients, the linguistic barrier was a more serious issue for non-English speaking patients. There are many different ways of describing symptoms and types of pain in different languages and ethnic patients could not find equivalent words and expressions in English. Some ethnic patients mentioned that they usually cannot understand everything, not only during

consultations with doctors with an Australian accent but also with doctors who have other accents. Nevertheless, they usually pretend to understand, not wanting to be looked down on or exhaust providers. Different communication styles and different expectations of the level of formality during clinical interactions can negatively affect patient perceptions of the health care quality. Different cultural values and treatment preferences also cause difficulties in the delivery of optimal service. Some non-Caucasian participants confessed that they may not disclose everything in race-discordant visits. They may not reveal their beliefs about illness, their treatment preferences, medication habits and the causes of the problem because they do not want to be criticised. Some of the treatment preferences were about the type and dose of drugs and the use of diagnostic imaging, and had been formed by receiving certain medical instructions in their own countries. Some of these practices cannot be accepted in the Australian health care system; this issue negatively affects patient perceptions of the providers' performance with regard to both their knowledge in treating diseases and their relationship with providers. Some ethnic patients were harshly criticised by Caucasian providers for their treatment preferences and this issue deteriorated their relationships.

Participants stated that culturally competent providers are aware that people from different backgrounds may have different religious/cultural concerns and may follow different treatment practices. As a result, they attempt to explore and learn about these differences by asking patients more detailed questions about their particular needs and encouraging them to express their concerns.

Participants viewed that possessing knowledge about diverse patients' religious values, preferred communication styles, preferences for care and prevalence of particular diseases among different ethnicities is another characteristic of culturally competent providers. Some misdiagnoses can be avoided if providers know about the high or low incidence of certain

diseases among particular races. Cultural knowledge helps providers predict what kind of information may be concealed by patients, so they can implicitly refer to those issues and encourage patients to reveal more information. When patients feel that the providers are knowledgeable about their particular issues, they may feel more comfortable to talk to them and feel more trust in the providers' advice. Additionally, cultural knowledge contains knowledge about diverse patients' treatment options. The findings suggest that overusing medication and diagnostic imaging may be seen frequently among Iranians and Arabs. Doctors who are well informed about this issue may make a greater effort to explain the negative consequences of the medication overuse and clarify the advantages of the provided treatment plan. Accordingly, patients may be convinced that the diagnosis and the instructions are reliable. This attitude may positively affect patients' judgments of doctors' expertise and encourage them to comply with the instructions. Some patients, e.g., Muslims, do not take medications containing alcohol or pork-based gelatin, so the doctors should know about this issue to reduce the risk of medications being rejected by patients. Additionally, some patients such as the Chinese may follow both pharmaceutical and supplementary treatments at the same time; the doctors need to know about this problem and discuss the situation with patients to avoid medication contradictions. In this study, a few patients claimed that Australian doctors may lack sufficient knowledge about different people's bodies and conditions. They mentioned that some medications they are prescribed in Australia are not as effective as those they were given in their own countries. Hence, diverse populations' responses to medications should also be taken into account by providers.

The participants referred to several behavioural skills that they believed should be considered by providers during interaction with culturally diverse patients. The main behavioural factors mentioned by the participants in this study were: speaking English

fluently without a strong foreign accent; being able to understand different patients' accents; obtaining patients' permissions before examinations particularly from Muslim female patients and not entering these patients' private cubicle without prior notice; gaining patients' or their families' permission to talk about personal issues (like reproductive organs) in front of family members of the opposite sex, providing open communication; being less formal with patients such as Caucasians and Middle Easterners who demand more emotional and therapeutic relationships with the providers; not rushing or ignoring patients with poor English through impatient gestures or interrupting them while they are explaining their symptoms and concerns; repeating information for patients for whom English is their second language until the patients understand; trying to show respect in both words and gestures when patients express their concerns even though those issues may not be very important to people from the providers' background; showing respect for patients' particular rituals such as post-labour or post-death rituals; using a proper way of referring to certain physical characteristics such as skin colour or height; using a proper amount of eye contact, a respectful choice of words especially in interacting with aged ethnic patients (addressing them by last name, or Mr., Mrs., my father, etc.); discussing patients' health beliefs and treatment preferences in a non-judgmental manner and not harshly criticising medical advice that patients were given in their own countries that is not acceptable in Australia; and explaining kindly the alternatives to achieve greater compliance with the new treatment plans.

Although discussing and appreciating cultural differences are crucial for the delivery of appropriate and effective care, the risk of stereotyping should not be underestimated. Providers should consider that individuals are different, even if they belong to a certain community. Thus, sociocultural knowledge should not prevent providers from understanding individuals' differences in order to provide personalised treatment. To

enhance the quality of care in the Australian health sector and to respond to the growing diversity in Australia, increasing diversity among health professionals is strongly recommended. Thus, immigrants are granted chances to receive health services from culturally/ethnically similar providers. Additionally, to improve health professionals' performance and prevent misunderstandings and stereotypical assumptions, cultural competence programs should receive especial attention in medical schools and settings. The content of these courses should be based on the real needs of Australian society considering its particular demographic characteristics.

5.8 Limitations and future research

In this study, patients who could not speak any English were not included. Future research should attempt to collect data from a larger sample of patients representing a variety of cultures/ethnicities, especially Jewish patients, Aboriginals and Central and Southern Africans who were not interviewed in this study. Furthermore, more quantitative and qualitative studies should be directed at examining the hypothesised relationships in the research model. Applying a mixed methodology that combines qualitative and quantitative approaches may lead to a more in-depth understanding of the constructs and the suggested causal paths.

5.9 Conclusion

Ignoring the role of culture during medical encounters may lead to unequal outcomes and disparities in the burden of disease among culturally/ethnically diverse patients. Hence, health professionals need to obtain knowledge and build skills to establish culturally sensitive medical interactions in order to raise the quality of life for all groups of patients. The qualitative findings illustrate how patient-provider cultural differences can hinder the delivery of optimal care during intercultural medical encounters and confirm the

significance of promoting cultural competence in the health sector to achieve desirable outcomes, reduce medical errors and prevent conflicts between patients and providers.

CHAPTER 6 THE IMPACTS OF ETHNIC DISTANCE, CULTURAL DISTANCE AND CULTURAL COMPETENCE ON THE QUALITY OF OUTPATIENT CARE – A COMPARATIVE STUDY IN AUSTRALIA

Abstract

In order to ensure the delivery of optimal care, in a multicultural society such as Australia, health professionals need to understand specific needs of their clients and to communicate effectively and sensitively with patients from culturally and linguistically diverse backgrounds. The paucity of empirical research regarding the impact of patient-provider ethno-cultural distance and provider cultural competence on the quality of care in intercultural medical encounters necessitates further research, which this study addresses. A cross-sectional study was conducted with 447 patients, consisting of 195 Caucasian and 252 non-Caucasian patients from six outpatient clinics in New South Wales, Australia. Structural equation modelling was used for data analysis. The findings demonstrated that cultural distance is an influential factor in determining the quality of outpatient care. Both Caucasian and non-Caucasian patients' perceptions of cultural distance from their physicians affected their ratings of physicians' professionalism, empathy and expertise. However, ethnic distance had a significant influence only on the rating of physicians' expertise. Furthermore, in both Caucasian and non-Caucasian patients' opinion, physicians with a higher level of cultural competence provided more professional care, expressed greater emotional support and made more accurate diagnoses which accordingly led to higher ratings of overall health care quality.

Keywords: ethnic distance, cultural distance, cultural competence, quality of health care

6.1 Introduction

Disparities in health and health care among racial, ethnic, socioeconomic and geographic groups have been extensively documented in multicultural countries (Orsi et al., 2010; Smedley et al., 2003). The latest census confirms the growing diversity in various countries such as the United States and Australia (Aplin, 2007; Australian Bureau of Statistics, 2006). Australia has a population of approximately 21 million, representing 250 ethnic backgrounds and nearly 400 languages. One-quarter of this population are overseas-born and 16% speak a language other than English at home. In recent decades, Australia's cultural diversity has increased due to a remarkable rise in the number of immigrants from non-European and non-Christian countries (Australian Bureau of Statistics, 2006). The increasing population of ethnic minorities raises concerns about racial/ethnic disparities in health care (Saha et al., 2011). As in the UK and the US, disparities may exist in Australia in the burden of disease and death experienced by ethnic minorities and indigenous Australians compared with Australian Caucasians (NSW Department of Health, 2010; Thow & Waters, 2005). Scholars believe that apart from genetic and socioeconomic factors, cultural/linguistic barriers and a lack of trust in Western medicine contribute to racial/ethnic health disparities (Chen, 2008; Kagawa-Singer et al., 2010). Due to the deficiency in the number of ethnic health workers, minority patients are usually treated by caregivers from a different ethnic background (McGinnis et al., 2010). Differences in language and communication styles hinder a building of effective rapport and participatory relationships between patients and providers (Johnstone & Kanitsaki, 2007; Lindström, 2008). As individuals' cultural values and lifestyles influence their beliefs about illness and health and their treatment preferences, reaching agreement with racially/ethnically different patients may be challenging (Kakai et al., 2003; Street et al., 2008). For instance, some scholars

examined the role of culture in patient-physician interactions by using Hofstede cultural dimensions. Hofstede (1980) proposed four dimensions of culture as: individualism–collectivism (individualistic cultures stress individuals goals, whereas collectivistic cultures stress group goals); power-distance (accepting unequal distribution of power); uncertainty-avoidance (being reluctant to take risks and avoid uncertainty through adopting more rules and instructions); and masculinity-femininity (division of roles between the genders). Ishikawa and Yamazaki (2005) found that four basic characteristics of Japanese culture, i.e. collectivism, high context, masculinity, and Confucianism, are associated with characteristic of patient-doctor relationships in Japan. For example, they argued that Japan has a high masculinity culture and members of high masculinity cultures tend to view opposite-sex relationships as less intimate, and perceive more difficulty in opposite-sex relationships than members of low masculinity cultures (Ishikawa & Yamazaki, 2005). Therefore, gender can have a greater influence on shaping the physician-patient relationship and adapting communication styles in medical encounters with Japanese patients. Hence, recognising a patient's cultural norms and values, then better understanding his/her personal communication patterns, and, finally, proceeding to discuss diagnosis and treatment issues can result in more effective cross-cultural communication in health care. Hence, researchers have suggested that racial discordance between patients and providers may affect disparities in health care quality and may be associated with lower ratings of health care and higher levels of dissatisfaction (Saha et al., 2011; Street et al., 2008). To reduce the consequences of patient-provider cultural dissimilarity, and to ensure the delivery of equitable and proficient care, understanding the cultural and linguistic needs of diverse patients is a crucial goal that health care professionals should strive to achieve (Karmali et al., 2011; Wilson-Stronks & Mutha, 2010). In the multicultural context, cultural competence has been widely emphasised as an essential strategy for enhancing clinical outcomes for diverse

patients and reducing health disparities (Campinha-Bacote, 2002; Wallace & Duffy, 2010). It has been argued that caregivers who possess adequate knowledge about the cultural views of different communities are more likely to build trusting relationships with them. Caregivers' cultural knowledge and behavioral skills help them to bridge the distance in racially discordant visits to deliver culturally congruent care and achieve patient compliance (Karmali et al., 2011; Lie et al., 2011; Perloff et al., 2006). Although outstanding efforts have been devoted to highlighting the negative impact of cultural distance and positive outcomes of cultural competence in clinical settings, very few empirical studies have been undertaken to evaluate whether providers' cultural competence is associated with a better quality of care. Limited research has measured patient-provider cultural distance and cultural competence based on patients' perspective when examining the effect of these constructs on patient experience and outcomes (Saha et al., 2011; Thom & Tirado, 2006). In this study, we seek to measure the perceived quality of care received by both ethnic minorities and the Australian majority from their physicians to determine whether patient-physician cultural dissimilarity and physicians' cultural competence are associated with the quality of outpatient care.

6.2 Literature review

The extant literature on cultural competence and cultural distance is reviewed in the following section to identify how patients perceive the congruence with their providers and how this perception affects their assessments of health care quality. In addition, the main elements of cultural competence are extracted from the literature, and various definitions of cultural competence along with methods for measuring it are described.

6.2.1 Cultural distance

Culture can be defined broadly as “integrated patterns of human behaviour that include the language, thoughts, communications, actions, customs, beliefs, assumptions, values, reasoning and institutions of racial, ethnic, religious, or social groups” (Cross et al., 1989). Defining and measuring cultural distance are challenging due to the broad nature of this concept. Researchers have employed different methods to measure the cultural distance between service providers and customers. One of the most acknowledged approaches was proposed by Kogut and Singh (1988). They defined cultural distance as the overall discrepancy between national cultures in terms of the cultural dimensions (power distance, individualism, masculinity, and uncertainty avoidance) introduced by Hofstede (1980) (Kogut & Singh, 1988). Even though a wide range of studies has utilised Hofstede’s national cultural dimension scores to evaluate cultural distance, the efficiency of this approach has been called into question at the individual level. As a result, several researchers have adopted the concept of perceived cultural distance or psychic distance, in which an individual’s perception of the difference between cultures, values, ethnicities or communication styles is used to measure cultural distance (Ng et al., 2007; Sousa & Bradley, 2006; Street et al., 2008). Reasoning that the cultural differences between countries are not always identical to the cultural distance between individuals from those countries (Stauss & Mang, 1999), the researchers adopted clients’ perceptions to measure the cultural distance between customers and providers. In the context of health care, the role of cultural distance between patients and providers has been overlooked, and there are few empirical studies that investigate its impact on patients’ experience with health care services (Saha et al., 2011). In one study, Street et al. (2008) introduced two concepts, namely ethnic similarity and personal similarity, to measure patient perceptions of similarity to their providers. Ethnic similarity includes items solely related to race, background and

community, while personal similarity consists of cultural features such as communication style, language, reasoning and general values. They found personal similarity to be a stronger predictor of patients' rating of health care quality than ethnic similarity. In another attempt, Saha et al. (2011) measured perceived dissimilarity to providers using reverse items of personal similarity proposed by Street et al. (2008), and as this construct includes cultural elements, they named it cultural distance instead of personal distance. They argued that differences in traits such as communication style, reasoning about problems, speech/language, and general values are adequate indicators for assessing cultural distance in the context of health care. In the present study, we capture patients' perspective on both ethnic and personal dissimilarity to identify which factor is more influential on patients' perceptions of outpatient care. Similar to Saha et al. (2011), in the present paper, the term cultural distance is used instead of personal distance for the factor determining patient-provider dissimilarity in communication style, language, reasoning and general values. Thus, this study examines the impacts of both ethnic and cultural distance on the quality of health care.

6.2.2 Cultural competence

Health care providers' cultural competence, which refers to their ability to work effectively with culturally and linguistically diverse (CALD) patients based on cultural awareness, knowledge and skills, is acknowledged as imperative when it comes to building proper communication with these clients, improving the quality of care for them and reducing medication errors and health disparities (Aplin, 2007; Harris, 2010). Historically, Leininger (1978) acknowledged cultural competence in the health care context as a critical factor in addressing the cultural needs of minorities to reduce health disparities and improve health outcomes (Edwards, 2003). She stated that patients' cultural beliefs, values, and practices

should be respected and appreciated through delivering culturally competent care (Leininger, 1978). Although there are many studies on cultural competence, this concept lacks a unified definition and recognised dimensions (Suarez-Balcazar et al., 2011). One of the most commonly accepted cultural competence models in the health care context was proposed by Campinha-Bacote (2002). She defined cultural competence as an “ongoing process in which the health care provider continuously strives to achieve the ability to effectively work within the cultural context of the client (individual, family, community)”. Her framework entitled “The process of cultural competence in the delivery of health care services” consists of five interdependent dimensions: (a) cultural awareness, (b) cultural knowledge, (c) cultural skills, (d) cultural encounters, and (e) cultural desire (Campinha-Bacote, 2002). Cultural awareness is the process of self-examination of one’s own biases towards other cultures and exploring one’s racist or ethnocentric beliefs. Cultural knowledge is the process of obtaining educational insights into diverse cultural and ethnic groups; this knowledge includes information about health-related beliefs and cultural values, disease prevalence, and treatment practices. Cultural skill is the ability to collect relevant cultural data and make an accurate physical assessment of diverse patients. The cultural encounters dimension describes the process of encouraging caregivers to engage in interactions with people of different cultural backgrounds in order to modify their beliefs about them and prevent stereotyping. Cultural desire connotes the real motivation of an individual to deal with culturally diverse people and become culturally competent. Despite the numerous definitions and components of cultural competence, there is a certain degree of consensus among scholars on the three dimensions of awareness, knowledge and skills (Lucas et al., 2008). Measuring cultural competence has been dominated by the use of the self-rating method and patients’ perceptions of providers’ cultural competence have been drastically disregarded (Paez et al., 2009). A number of researchers believe that providers

tend to overestimate their own level of cultural competence and this issue can mislead health care managers about the real ability of their employees to work with culturally diverse clients (Thom & Tirado, 2006). Additionally, some authors believe that patient-reported cultural competence may be more strongly associated with the outcomes of care than self-reported results (Moleiro et al., 2011). Hence, several researchers have employed patient-rating scales to measure providers' cultural competence (Limberger, 2010; Lucas et al., 2008; Michalopoulou et al., 2010), and this approach is followed in the current study.

6.2.3 Quality of health care service

Health care centres should regularly assess the quality of their services to identify areas for improvement. Although continuous enhancement of service quality and customer satisfaction is important for all types of service organisations, this process may be even more essential for the health care industry because of the complex nature of this service and its remarkable impact on the quality of life (Gaur et al., 2011; Priporas et al., 2008).

Various models and instruments have been developed to identify the most important dimensions of health service quality. One of the most widely recognised tools is SERVQUAL, which measures recipients' perceptions of the physical aspect of service and numerous attributes of service providers (Parasuraman et al., 1988). Although SERVQUAL is a generic assessment tool that can be used in different industries, some scholars consider that the unique aspects of health service quality are not sufficiently addressed by this instrument. They believe that the service quality measure should be tailored to the specific service setting even within the health care context, so further assessment tools have been proposed to measure the quality of health services in various areas, such as inpatient care, outpatient care and emergency care (Arasli et al., 2008; Dagger et al., 2007; Qin, 2009). Patients' overall perception of a health service is influenced by their perceptions of the

quality of care that they receive from health professionals, as well as the quality of operation and tangibles dimensions (Dagger et al., 2007; Fotiadis & Vassiliadis, 2013; Ramsaran-Fowdar, 2008). Attributes of caregivers, especially those of physicians, have been considered as major elements of service quality. These traits have been divided into two major groups, one that focuses on the soft side of the providers and another that targets providers' technical or professional characteristics (Lin & Guan, 2002). Patients are believed to differentiate interpersonal and emotional relationships with their providers from the professional aspect of care. The main providers are physicians in an outpatient setting, and a patient's judgment of a physician's attributes and idiosyncrasies plays a crucial role in forming his or her overall perceptions of the service provided (Rao et al., 2006; Yang-Kyun et al., 2008). In the outpatient setting, three main characteristics of physicians have been proposed as important factors that influence patients' perceptions of the health care service. One attribute refers to the soft side of the physician, which includes traits such as caring, respectful, personalised attention, and sympathetic manner. This factor has been termed as humanness, empathy or personal relationship (Lin & Guan, 2002; Margolis et al., 2003). This factor mainly refers to affection and the sympathetic emotions provided by the physician. Another factor is professionalism, which primarily refers to the way in which the physician undertakes his or her professional tasks, such as offering an interactive consultation, taking sufficient time to ask questions and engage in active listening, patient involvement and participatory decision-making with patients or their families, clear explanations of disease and treatment options that are easily understood by patients, and performing a thorough examination and physical assessment (Hiidenhovi et al., 2002; Kersnik, 2000; Lin & Guan, 2002; Ramsaran-Fowdar, 2008). Additionally, the technical accuracy of medical diagnosis or the degree of pain and physical discomfort that patients experience during examinations is embedded in the overall assessment of the quality of care

(Gaur et al., 2011; Priporas et al., 2008). Thus, doctors' medical proficiency and technical experience in making a correct diagnosis and proposing effective treatment options are crucial to delivering optimal quality care. In this study, we collect patients' perspectives on outpatient care with respect to physicians' attributes explained above.

6.3 Research model

6.3.1 Cultural distance and doctor professionalism

Differences in cultural values and communication styles may hinder the establishment of rapport between patients and providers and may affect patients' perceptions of physicians' attributes. For instance, some ethnic patients, such as African Americans, normally show a lower tendency to ask questions than Caucasians and they abstain from making inquiries that they think the doctor may find objectionable (Michalopoulou et al., 2010). Due to a lack of knowledge about this issue, physicians may not make sufficient effort to encourage patients to participate and reveal information, which may hinder the provision of adequate information needed by patients.

Moreover, culturally different people may have different treatment preferences. Doctors need to consider these differences to reach an agreement with patients rather than ordering patients to follow instructions. Considering patients' cultural/religious beliefs, providing justifications for the prescribed medication and involving patients in decision-making on treatment strategies that are mutually acceptable to both patients and providers can prevent patients from adopting a negative perception of their doctor's professionalism. For instance, patients following Hindu beliefs may refuse to consume meat or fish products. Prescribing religious patients fish oil pills for vitamin D deficiency without asking about their concerns may lead to passive interactions during the visit and accordingly, failure to adhere to the prescribed treatment.

Furthermore, cross-cultural medical visits are less likely to be participatory. Limited-English Proficient (LEP) patients or patients who do not speak English as their primary language may have difficulties explaining their symptoms in another language and may need more time. However, doctors may not take enough time to listen to them well or may keep interrupting them due to time shortages (Davidson et al., 2007; Villani & Mortensen, 2014). Likewise, during consultations with ethnic doctors who are not native English speakers, patients may not receive enough information due to the doctors' inadequate language proficiency. The linguistic barrier may also deter doctors from asking enough questions that are sufficiently clear. This leads to the following hypotheses:

H1: Ethnic distance is negatively related to doctor professionalism.

H2: Cultural distance is negatively related to doctor professionalism.

6.3.2 Cultural distance and doctor empathy

The building of effective interpersonal and close relationships between patients and physicians may be hindered due to cultural hurdles. For instance, patients may become offended by or uncomfortable with the way doctors address them, their body language such as tone of voice and direct eye contact, or even the way they undertake physical examinations (Carroll et al., 2007; Chenoweth et al., 2006; Teal & Street, 2009).

Similarly, expectations of interactions may not match in terms of values, needs, and preferences. For example, different patients may have different preferences for formality during the visit; people from high-context cultures prefer more formal interpersonal relations while in the low-context culture informal relations are preferable (Leong & Lee, 2006). Therefore, some patients may feel disrespected by doctors' informal manner; conversely, some patients may not receive enough emotional support and the friendliness that they expect because the doctors are too formal and exhibit emotionally restrained

behaviour that does not meet the patients' standards. Likewise, the delivery of bad news may not be carried out in an appropriate manner preferred by patients. In Western countries, it is normal to break bad news to patients directly and Caucasian patients usually expect to be informed about their condition; such behaviour is not acceptable in non-Caucasian communities, such as Asian and Middle Eastern communities and may be perceived as inhumane (Torres & Rao, 2007; Xu, 2010). Moreover, differences between patients and doctors in showing emotions may result in discontent among patients especially when the doctor belongs to a neutral culture and the patient belongs to an emotional/affective culture (Trompenaars & Hampden-Turner, 1997). Members of Asian cultures, for example, which are affectively neutral, do not openly express their feelings. In these cultures, touching or excessive body language are discouraged. On the other hand, people of affective cultures, such as Middle Eastern and Latin cultures, show emotions more openly and passionately (Trompenaars & Hampden-Turner, 1997). Likewise, the ways that patients respond to pain are influenced by cultural factors. Stoic patients such as Asians are less expressive about their pain while emotive patients such as Hispanics and Middle Easterners tend to show their suffering with verbal complaints, moaning or crying and seek attention and prompt reliefs (Clark et al., 2010). When doctors do not express the emotions expected by the patients, they may be viewed as cold or too task-oriented and thus unable to understand the patients' worries. This issue can negatively affect patients' perceptions of doctors' empathy. Thus, the following hypotheses can be formulated:

H3: Ethnic distance is negatively related to doctor empathy.

H4: Cultural distance is negatively related to doctor empathy.

6.3.3 Cultural distance and doctor expertise

Cultural norms and lifestyle shape patients' perceptions of illness and health and the treatment preferences and cultural differences may affect the degree to which patients trust physicians' knowledge about treatment options. For instance, the Chinese may prefer to follow both pharmaceutical and supplementary treatments, or they may believe in the harmony of energies and the balance of hot and cold in the body. If a doctor prescribes them a therapy that includes the consumption of cold drinks or exposure to a cooler environment to reduce fever, they may consider this advice harmful and interpret it as a violation of the body's natural harmony (Chen, 2008). Moreover, in cross-cultural encounters, assessing patients' conditions, giving diagnoses and deciding on suitable medication types and doses might be challenging due to differences in physical characteristics, expressions of pain and symptoms and even reactions to medications among different ethnicities (Burroughs et al., 2002; Campinha-Bacote, 2002). These issues may increase the likelihood of misdiagnosis and medication errors and accordingly may affect clients' ratings of doctors' technical expertise. For example, some physicians may not be aware that Asians and Native Alaskans may need lower doses of anxiolytic agents than Caucasian patients, or that Asians, Indians and Pakistanis require lower doses of lithium and antipsychotic drugs (Ajdukovic et al., 2007; Burroughs et al., 2002). Likewise, children from diverse populations can demonstrate different symptoms from Caucasians, which can result in misdiagnosis. It has been reported that somatisation is more frequently associated with anxiety and depression in minority youths. African American and Hispanic children may show anger or disruptive behaviour while experiencing internalising disorders, and psychosis is often over diagnosed in these populations. Emotional reactivity during episodes of illness can also vary across ethnic groups. For example, depressed individuals of Asian origin show heightened reactivity compared with Caucasians, and this may hamper the evaluation of the severity of their

mood disturbance (Pumariega et al., 2009). A physician's limited knowledge about culturally bound illnesses and patients' past and present life circumstances may delay the discovery of the problem or even lead to misdiagnosis and mistreatment. For instance, Caucasian doctors may not be very well informed about fasting during pregnancy or fasting with diabetes, which are common among patients of the Muslim faith. This prevents them from analysing the physical impacts of fasting or delivering special instructions to minimise negative consequences in cases in which patients refuse to stop fasting (Ambanpola et al., 2005; Clark et al., 2010). Likewise, some western physicians may not have sufficient knowledge about the complications resulting from female circumcision and the proper methods to handle patients with this condition during medical procedures (Vissandjee et al., 2014; Wikberg & Bondas, 2010). This issue may cause mistrust with regard to doctors' knowledge and the efficacy of the prescribed instructions and healing strategies. A lack of familiarity with different people's physical characteristics or reactions to medications together with miscommunication and misunderstanding caused by linguistic and communication barriers can lead to serious cases of misdiagnosis and errors in prescription dosage, which can diminish patients' ratings of physicians' medical competence. Thus, it is proposed that:

H5: Ethnic distance is negatively related to doctor expertise.

H6: Cultural distance is negatively related to doctor expertise.

6.3.4 Cultural competence and doctor professionalism

While cultural differences can create distance and negatively affect patients' perceptions of providers' attributes, increasing the knowledge of different ethnic beliefs across diverse patient populations and improving cultural skills can help physicians to provide a professional service for patients. Culturally competent physicians attempt to understand

patients' support networks and the role of the family in the health care process. For instance, they may routinely ask patients in private about the nature and extent of the family's involvement and request patients to sign waiver forms if they wish to fully disclose their medical information to family members (Clark & Vercler, 2007). During cross-cultural medical visits, it is important to decide on the proper type of information and the level of detail that should be shared in each case. Understanding this, physicians can adjust their behaviour to accommodate. For example, patients from an Asian background may prefer to indicate what should be done if a specific side effect occurs rather than providing a long list of possible side effects. Similarly, non-verbal communication is important in conveying respect. In high-context cultures, such as Asian, Middle Eastern, Hispanic and Native American cultures, communication depends heavily on the context of what is being communicated rather than on the specific words (Galanti, 1991). Conversely, those of low-context cultures, such as Caucasian Swiss, German, Scandinavian and Australian, rely much more heavily on precise, direct, and logical spoken communication and less on an assumed understanding. High-context cultures sometimes have belief systems that relate illness to the weather, social environment, or eating habits. These patients may therefore spend a large amount of time describing the circumstances surrounding their illness rather than focusing on the illness itself (Vanservellen, 1997). In the practice of Western medical care, such discourses are discouraged and seen as distracting whereas for some non-Caucasian patients, providing such seemingly anecdotal information is preferable and seems more professional (Vanservellen, 1997). By having cultural knowledge, understanding, and respect for culturally different individuals, adaption is more likely to take place to address particular needs of patients. Culturally sensitive doctors are more considerate in choosing terms and the speed of transmitting medical information when interacting with patients who have poor English skills. This phenomenon also applies to situations in which doctors are

not native English speakers and have strong foreign accents. Possessing knowledge about the importance of folk remedies to some ethnic groups may help doctors to discuss supplementary medicines and reach an agreement with patients on the best treatment options (Collins & Fund, 2002). Hence, the following hypothesis is established:

H7: Cultural competence is positively related to doctor professionalism.

6.3.5 Cultural competence and doctor empathy

Physicians with a high level of cultural competence are more likely to develop close interpersonal relations and express human emotions and behaviour that are acceptable in different cultures (Bhui et al., 2007). Likewise, to establish trusting therapeutic relationships with ethno-culturally different patients, they allow patients to express their beliefs and concerns. By acknowledging differences and understanding patients' particular needs, they are capable of offering respectful care rather than being condemning (Betancourt, 2006; Lie et al., 2011). Furthermore, their knowledge about different cultural traits such as whether a culture is emotional or neutral, assists them in providing the emotional support demanded by patients. These physicians may be better able to show patients that they are genuinely interested in their concerns. Minority patients with poor English speaking and listening comprehension can create a situation in which it seems practically impossible to develop a friendly relationship. When possible, knowing a few phrases in the corresponding language of that ethnicity as well as being able to comprehend their accent could potentially help prevent alienation and put a patient at ease (Gibson & Zhong, 2005). Thus, the following hypothesis is established:

H8: Cultural competence is positively related to doctor empathy.

6.3.6 Cultural competence and doctor expertise

Communication styles, demonstrations of emotion (including pain or sorrow), prioritisation, the prevalence rate of particular diseases, and responses to certain medication vary among different ethnic populations (Gathani et al., 2014; Fortin, 2002). For instance, some dermatologic conditions may be rare in Caucasian skin but are much more common in ethnic patients and vice versa (Cole et al., 2009; Crane, 2013). Thalassaemia is also more prevalent in certain races, with the type and prevalence varying between places of origin. Dark-skinned people who regularly cover up may lack vitamin D in temperate climates, and rickets have been reported, especially with a high consumption of chapattis that are high in phosphate. The patient's race may be a consideration in determining the best treatment for hypertension (Rull, 2011). Culturally competent providers are aware that there are cultural and communication barriers to accurate diagnosis and may be better able to assess both medical and socio-cultural aspects of the patient's situation to avoid potential misdiagnosis, unnecessary suffering, and harmful complications (Teal & Street, 2009; Thom & Tirado, 2006). Thus, the following hypothesis is established:

H9: Cultural competence is positively related to doctor expertise.

Moreover, as discussed earlier (in Chapter 2 and Chapter 3), doctor attributes are positively associated with the overall health care quality. Therefore, it can be proposed that:

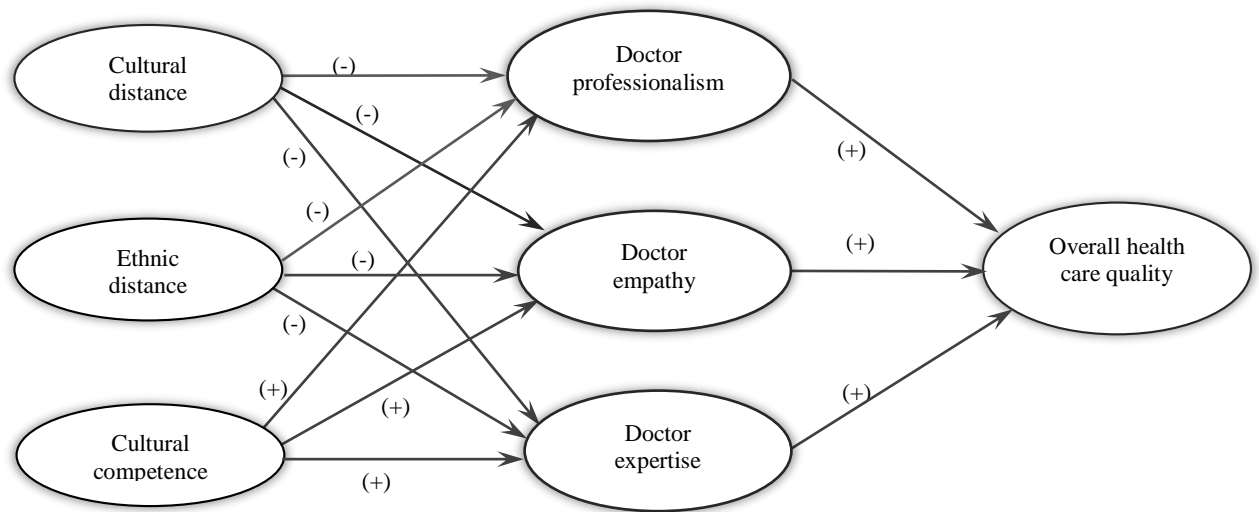
H10: Doctor professionalism is positively related to the overall health care quality.

H11: Doctor empathy is positively related to the overall health care quality.

H12: Doctor expertise is positively related to the overall health care quality.

The conceptual model is presented in Figure 7. The relationships among the constructs depicted in the model were empirically tested based on the total sample and the split dataset of Caucasian and non-Caucasian patients.

Figure 7 Research conceptual model



6.4 Methodology

6.4.1 Study sample

The health sector should endeavour to obtain opinions on health services from all groups of patients to supply optimal and equal care. Unfortunately, factors such as language barriers, a low level of literacy, a lack of trust and budget issues have resulted in low participation of ethnic communities in clinical research (NHMRC, 2005). Consequently, there is inadequate knowledge about these clients' perceptions of the health service. To address this issue, the data used in this study were drawn from representatives of both the ethnic majority and ethnic minorities, whom we refer to as Caucasian and non-Caucasian patients. This research focused on patients' experience of care during medical visits to outpatient clinics. We collected the quantitative data from the patients of six outpatient medical centres in the state of New South Wales, Australia, located in different suburbs inhabited mostly by specific groups of ethnic people (generally Middle Eastern, Indian and Asian: mostly Vietnamese and Chinese) and Caucasians. The sample was restricted to adults between 18 and 80 years

of age who visited a doctor in an outpatient clinic in Australia during the two months prior to their participation in the survey. We did not elicit information about the current visit and patients were asked to recall their last visit with a doctor and answer the questions based on that visit. It was believed that seeking information after the visit may influence the doctors to modify their normal behaviour and routine. Posters inviting the patients to participate in the study were attached to the reception counters. Patients were requested to return the completed questionnaires to the receptionists and receive a \$15 gift card in return. A total of 470 questionnaires were placed on the reception counters. Since we planned to run a multi-group analysis between Caucasian and non-Caucasian patients using structural equation modelling (SEM), we needed a sample size of approximately 200 participants for each group (Hoelter, 1983). Therefore, certain numbers of questionnaires were placed in clinics in different stages to ensure that we received the desirable number of responses from each of these groups. To ensure validity, the conventional translation and back-translation process was followed (van de Vijver & Leung, 1997). Accordingly, all posters, information sheet and questionnaires were translated into Chinese (Mandarin), Vietnamese, Arabic and Persian and translated back into English. All questionnaires were returned but 23 questionnaires were excluded because they had more than 5% missing values. For the analysis, 447 questionnaires were usable, of which 252 respondents were non-Caucasian and 195 respondents were Caucasian and these sample sizes were sufficient for adopting SEM. The data collection process lasted for about 3 months, from February to April 2013.

6.4.2 Measures

6.4.2.1 Demographic questions

Each participant completed a questionnaire that elicited her own demographic information, along with some of the doctor's characteristics such as race/ethnicity, gender, ability to

speak the patient's first language, and the number of visits to the doctor. We asked patients to identify their own and their doctors' race/ethnicity from a list of options including Middle Eastern, Indian, Asian (Far East Asian), White/Caucasian, Black/African, Aboriginal/Torres and other. We considered everyone identifying themselves as White/Caucasian to be Caucasian and all others to be non-Caucasian.

6.4.2.2 Cultural distance

To measure patients' perceptions of ethnic distance from their doctors, we used a three-item scale based on the instrument developed by Street et al. (2008). These items measure patients' perceptions of distance in terms of ethnic and cultural background and skin colour. Additionally, a four-item scale based on the instrument developed by Saha et al. (2011) and Street et al. (2008) was used to measure cultural distance (See Appendix 3). This scale assesses patient-physician differences regarding the way they speak and reason about problems, their communication styles and their general values. These questions contain a seven-point Likert scale from 1 (least distant) to 7 (most distant) to assess the perceived ethnic and cultural distance.

6.4.2.3 Cultural competence

We adopted a patient- reporting tool to measure providers' cultural competence, which was designed by Lucas et al. (2008). This instrument was developed based on Sue's (2001) conceptual model in which cultural awareness, cultural knowledge and cultural skills are considered the main elements of cultural competence (See Appendix 3). As explained earlier, these three elements of cultural competence have been replicated in many conceptual frameworks and measuring instruments.

6.4.2.4 Quality of health care

As explained in Chapter 3, we developed a scale to measure patients' perceptions of overall health care quality and attributes of doctors. The scale comprises of three items to measure the overall health care quality as follows: "The quality of care I received from the clinic was very good", "The quality of service I received from the clinic was of a high standard in every way" and "Overall, the quality of the service provided by the clinic was excellent". In addition, Six items were used to measure patient perceptions of doctors as follows: the doctor listened to them well, gave adequate information, explained things in a way that they could understand, undertook a thorough examination, involved patients (or families) in making decisions and asked enough questions. Four items were used to measure perceived empathy, including whether the doctor was nice and caring, courteous and respectful, cared about the patient's concerns, and tried to put the patient at ease (e.g., by making friendly conversation rather than talking only about the illness). Three items were used to measure doctors' expertise, asking patients whether the doctor was well trained and knowledgeable, was highly experienced and made a correct diagnosis (See Appendix 3).

6.5 Results

6.5.1 Sample characteristics

The majority of the total sample was female (62% female, 38% male). This result was consistent in the two groups of Caucasian and non-Caucasian patients. The majority of the total sample was married. The majority of the patients in the total sample as well as each group was aged between 26 and 45. A total of 45% of the patients reported discordant visits wherein the doctor and patient were from different racial/ethnic backgrounds. 60% of non-Caucasians had discordant visits, while 50% of Caucasians visited doctors from different backgrounds. The results are summarised in Table 16.

Table 16 Demographic characteristics

Characteristics	Total sample	Caucasian	Non-Caucasian
Age			
18-25	12%	9%	15%
26-35	32%	22%	40%
36-45	29%	30%	28%
46-55	15%	17%	13%
56-65	9%	15%	4%
≥ 66	4%	7%	1%
Gender			
Male	38%	35%	40%
Female	62%	65%	60%
Employment status			
Full-time	48%	53%	43%
Part-time	20%	21%	19%
Unemployed	32%	26%	37%
Annual household income			
≤ \$20,000	10%	9%	10%
\$20,001 – \$40,000	23%	19%	27%
\$40,001 – \$60,000	24%	24%	25%
\$60,001 – \$80,000	24%	27%	22%
\$80,001 – \$100,000	14%	15%	13%
≥ \$100,001	4%	6%	4%
Education			
Some primary school	1.1%	0.0%	2.0%
Completed primary school	1.8%	0.0%	3.2%
Some high school	6.0%	8.7%	4.0%
Completed high school	24.8%	30.3%	20.6%
Tafe or trade certificate or diploma	19.5%	21.0%	18.3%
Bachelor's degree	33.1%	32.3%	33.7%
Postgraduate (Master's/PhD)	13.6%	7.7%	18.3%
Race			
African/Black	0.4%	0%	0.8%
Aboriginal/Torres	0%	0%	0%
Asian (Far East Asia)	23%	0%	40.9%
White/Caucasian	43%	100%	0%
Indian/Sri Lankan/Bangladesh	6.9%	0%	12.3%
Middle Eastern/North African	26%	0%	46%
Religion			
Protestant	17.2%	36.9%	2%
Catholic	18.8%	31.3%	9.1%
Other Christianity (Orthodox, Coptic, etc.)	2%	0.5%	3.2%
Native Australian	0%	0%	0%
Buddhism	4.9%	0.5%	8.3%
Islam	24.6%	0.5%	43.3%
Hinduism	4.5%	0%	7.9%
Judaism	0.4%	1%	0%
No religion	23.7%	23.1%	24.2%
Other	3.8%	6.2%	2%

Characteristics	Total sample	Caucasian	Non-Caucasian
English as 1st language			
Yes	49.2%	100%	10.3%
No	50.8%	0%	89.7%
Employment proficiency			
Very well	57.5%	100%	24.6%
Well	26.8%	0%	47.6%
Not well	13.9%	0%	24.6%
Not at all	1.8%	0%	3.2%
Years living in Australia			
≤ 1 year	1.6%	0%	2%
1 – 4 years	17%	3.1%	28.6%
5 – 8 years	17.7%	1%	30.6%
9 – 12 years	9.4%	2.1%	15.1%
≥ 12 years	54.4%	93.8%	23.8%
Number of visits with this doctor			
1	24.2%	24.1%	24.2%
2	32.2%	28.7%	34.9%
3	19.5%	20%	19%
More than 3 times	24.2%	27.2%	21.8%
Racial/ethnic concordant visit	45%	51%	40%
Racial/ethnic discordant visit	55%	49%	60%

6.5.2 Reliability and validity

Cronbach's coefficient alpha was used to test the internal consistency (reliability) of the constructs. The results are as follows: (a) overall health service quality = 0.93, (b) doctor professionalism = 0.94, (c) doctor empathy = 0.92, (d) doctor expertise = 0.93, (e) ethnic distance = 0.94, (f) cultural distance = 0.88, (g) cultural awareness = 0.90, and (h) cultural knowledge = 0.91, and (i) cultural skills = 0.93. A Cronbach's alpha value of 0.70 or above is considered acceptable (Hair et al., 2006). The summated scale as the mean value of symmetrical items appertaining to each factor is used. The technique reduces measurement error and boosts the representativeness of construct concepts into a singular-dimension (Hair et al., 2006). The interconstruct correlations shown in Table 17 are all below the suggested value of 0.85 (Tabachnick & Fidel, 2007), pointing to the absence of multicollinearity and presence of the discriminant validity of the constructs.

Table 17 Correlation matrix

	Mean (SD)	Overall health care quality	Doctor professionalism	Doctor empathy	Doctor expertise	Cultural competence	Cultural distance	Ethnic distance
Overall health care quality	5.38 (0.99)	1						
Doctor professionalism	5.55 (0.87)	0.828***	1					
Doctor empathy	5.56 (0.86)	0.805***	0.820***	1				
Doctor expertise	5.59 (0.99)	0.834***	0.797***	0.770***	1			
Cultural competence	4.98 (1.15)	0.546***	0.516***	0.535***	-0.474***	1		
Cultural distance	2.95 (1.22)	-0.483***	-0.427***	-0.446***	-0.397***	-0.504***	1	
Ethnic distance	3.98 (1.97)	-0.172***	-0.203***	-0.215***	-0.110**	-0.464***	0.298***	1

* (P<0.05), ** (P<0.01) and *** (P<0.001)

6.5.3 Model fit and hypothesis verification

The hypothesised model was examined using maximum likelihood path analysis, applying AMOS 21. First, the model fit statistics were used to examine the fit between the data and the model (Byrne, 2010). To assess the model fit we considered the following goodness-of-fit indices and their cut-off values were applied based on the suggestions of Hu and Bentler (1999): 1) normed Chi-square: (X^2/df), in which, a value of less than 3, preferably lower than 2, indicates a good fit; 2) Goodness-of-Fit Index (GFI); 3) the Adjusted Goodness-of-Fit Index (AGFI) which is desired to be higher than 0.9; and 4) Root Mean Square Error of Approximation (RMSEA) which should be a value less than 0.08 with PCLOSE greater than 0.05 indicating acceptable fit. The majority of indices satisfy the criteria, thus assuring a satisfactory level ($X^2 = 13.67$, $df = 6$, $X^2/df = 2.27$, $RMSEA = 0.05$, $GFI = 0.95$, $AGFI = 0.83$). Therefore, the paths were estimated to test the hypotheses. First a path analysis was performed on the model with the entire sample and then a multi-group path analysis was carried out in which the model was tested for two separate groups of non-Caucasian and Caucasian patients. The results, as illustrated in Table 18, show that the hypotheses on the

associations among ethnic distance, doctor professionalism and doctor empathy were not verified in the total sample, while the link between ethnic distance and doctor expertise was statistically significant. Likewise, in the Caucasian group, ethnic distance had no significant association with doctor professionalism and doctor empathy but had a meaningful impact on doctor expertise. However, none of these links were substantiated in the non-Caucasian group. This indicates that the difference in ethnicity per se does not impact non-Caucasian patients' perceptions of doctor professionalism, empathy and expertise, while it may impact Caucasian patients' perceptions of doctor expertise. The hypotheses on the association among cultural distance, doctor professionalism, doctor empathy and doctor expertise were verified for the total sample as well as the non-Caucasian and Caucasian groups. Similarly, the relationships between cultural competence, doctor professionalism, doctor empathy, and doctor expertise were substantiated in the total sample along with both groups. The links between doctor professionalism, doctor empathy, doctor expertise and the overall health care quality were verified in both cohorts. The results are summarised in Table 18. Since this study is based on a self-administered survey, common method bias in the form of single rater bias was very likely to happen. To identify the magnitude of this bias Harman single factor analysis was performed (Podsakoff et al., 2003). Results indicate that a single factor carrying 32.7% of variance emerged. Because this is not greater than 50% we can argue that the effect of method variance is negligible.

Table 18 Path analysis

Structural Model Estimates	Total sample		Caucasian		Non-Caucasian	
	B	t	β	t	β	t
Cultural distance ---> Doctor professionalism	-0.230	-5.02***	-0.268	-3.90***	-0.190	-3.15**
Cultural distance ----> Doctor empathy	-0.241	-5.35***	-0.322	-4.92***	-0.165	-2.74**
Cultural distance ----> Doctor expertise	-0.226	-4.83***	-0.297	-4.52***	-0.150	-2.36*
Ethnic distance ---> Doctor professionalism	-0.066	-1.47	-0.081	-1.27	-0.015	-0.25
Ethnic distance ----> Doctor empathy	-0.062	-1.42	-0.053	-0.87	-0.026	-0.42
Ethnic distance ----> Doctor expertise	-0.159	-3.47***	-0.175	-2.87**	-0.070	-1.08
Cultural competence ---> Doctor professionalism	0.430	8.71***	0.392	5.46***	0.467	7.07***
Cultural competence ----> Doctor empathy	0.442	9.11***	0.401	5.87***	0.493	7.48***
Cultural competence ----> Doctor expertise	0.433	8.59***	0.442	6.45***	0.451	6.48***
Doctor professionalism ---> Overall health care quality	0.370	14.23***	0.362	9.75***	0.379	10.42***
Doctor empathy ----> Overall health care quality	0.32	12.41***	0.335	8.93***	0.308	8.46***
Doctor expertise ----> Overall health care quality	0.480	18.61***	0.473	12.61***	0.465	12.96***

Model fit: $X^2 = 13.67$, $df = 6$, $X^2/df = 2.27$, RMSEA = 0.05, GFI = 0.95, AGFI = 0.83

p-values of t-statistics: any value greater than 1.96 is significant at $p < 0.05$, so denote significance by * ($P < 0.05$), ** ($P < 0.01$) and *** ($P < 0.001$).

6.6 Discussion

To rectify health care inequalities and improve the well-being of the population, scholars have requested an improvement of cultural competence among medical providers and integration of cultural competence into clinical practices in the multicultural context (Betancourt et al., 2003; Campinha-Bacote, 2002). However, these recommendations have mainly been based on theoretical justifications rather than empirical evidence that shows the negative impact of cultural differences and the practical effectiveness of cultural competence. As the number of non-English speaking patients and the number of overseas-born/trained health workers are on the rise in Australia, the likelihood of misunderstandings, medical errors and frustrating encounters between culturally different patients and providers may increase. In this study, we aimed to explore whether cultural differences are associated with lower ratings of outpatient care as well as to identify whether any practical evidence

exists to support the efficacy of cultural competence. We obtained the opinions of both mainstream and minority populations in this study. The findings illustrate that while physicians are different from their patient in terms of the way they speak as well as their communication styles, reasoning and general values, they may offer a lower-quality service. Our results are consistent with those of Street et al. (2008) who found that the perception of similarity to one's physician is a multidimensional construct and ethnic similarity is a less influential factor on the patients' perceptions of the outcomes than cultural similarity. Specifically, patients who felt that they had more in common with their doctors in regard to beliefs, values and manner of communication reported receiving more professional care and emotional support from their doctors as well as more accurate diagnoses and a higher level of knowledge about their condition. These results are consistent among both Caucasian and non-Caucasian patients. However, patients' perceptions of being different from their physicians in terms of race, background and community did not remarkably affect their perceptions of their doctors' professionalism and empathy. The results indicate that ethnic difference may negatively affect Caucasian patients' judgment of doctors' expertise, while no significant relationship was found between ethnic distance and doctor expertise in the non-Caucasian group. One possible explanation is that Caucasian patients may have less trust in the quality of training and education systems in the developing countries where some non-Caucasian physicians obtained their degrees. As a result, Caucasian patients may assume that non-Caucasian doctors are generally less knowledgeable than Caucasian doctors. However, the findings show that cultural distance is a more influential factor on health care quality factors than ethnic distance. This outcome indicates that even if a patient and physician are from different ethno-cultural backgrounds, they may not feel a very big gap in terms of values, reasoning and communication style. Moreover, both groups of patients reported higher quality care delivered by physicians who have greater cultural

competence. Thus, the efficacy of cultural competence in the outpatient setting is supported by our findings. The knowledge about different treatment practices and the prevalence of certain medical conditions among specific ethnicities allow physicians to ask patients more relevant questions to obtain accurate information. These doctors may be more aware of cultural and psychological barriers that might discourage patients from disclosing certain information. For instance, some patients who use traditional remedies may be reluctant to inform their physicians about this issue. This phenomenon has the potential to lead to dangerous interactions between medications (Collins & Fund, 2002). They can also understand different patients' communication preferences during the visit such as their tendency to ask questions or be questioned by physicians. The clarity of communication leads to higher patient ratings of physicians' professionalism and accordingly the overall quality of care. These doctors make a greater effort to build interactive encounters involving patients or their families. They can provide patients with the specific information that they need and are less likely to neglect patients and show impatience evoked due to linguistic and cultural hurdles. Culturally competent providers can use their knowledge to empathise with different patients and take their concerns seriously, even though those concerns are not critical to people belonging to the physicians' race. Physicians' use of cultural knowledge and culturally sensitive behaviour can lead to more respectful interactions and the offering of treatment options that are consistent with patients' preferences and thus assist in achieving a common understanding between patients and providers regarding the patients' health conditions and effective treatment plans. Even in situations where legal rights and medical ethics in a Western country, such as Australia, mandate a certain behaviour such as disclosing the whole truth about terminal diseases to patients, physicians' cultural knowledge about communities that may not praise the exchange of straightforward messages in these situations can encourage them to make a greater effort to find an

appropriate way to deal with this issue. Additionally, it may be difficult for a patient who is in a vulnerable position to disclose himself or herself openly in a consultation to a physician (often a complete stranger). This issue is even more serious in the presence of cultural and linguistic barriers. Providers' knowledge about the lifestyle and beliefs of a particular group assists them in looking for clues concerning patients' fear of providing sensitive information or disclosing emotional difficulties, such as feelings of distress or even physical pain. These providers are better able to develop trust across these barriers and alleviate patients' fear of being judged for their conditions or concerns. They can make patients feel comfortable enough to fully disclose information that they may have considered personal or sensitive. In addition, their cultural ability can help them to realise circumstances in which a patient disagrees with the treatment plan, but does not say so because disagreeing with the authority of the doctor would be considered rude according to his or her cultural norms. A culturally competent physician may recognise this issue and make a greater effort to understand patients' thoughts and encourage them or their family to participate more actively in making decisions, which can increase the likelihood of compliance with treatment that is acceptable to the patient. Moreover, the results indicate that patients have more trust in culturally competent physicians' diagnoses. Apparently, cultural knowledge about the prevalence of disease caused by genetic differences, differences in dietary habits and lifestyles and reaction to medication may assist doctors in determining the problem faster and avoiding misdiagnoses. These physicians have more knowledge about typical conditions that are common among a particular group of patients, which aid them in making a reliable diagnosis.

Our findings have important implications for medical education and health workforce recruitment intended to improve health care delivery. Considering that the findings indicate a less positive assessment of service quality in consultations with greater cultural distance

between physicians and patients, an increase in the diversity among health professionals and the hiring of more non-Caucasian doctors by the Australian health care system may enhance the rating of health care quality among minority populations. However, diversifying the health workforce should be undertaken through a careful evaluation of overseas-trained doctors' qualifications and expertise. Considering that ethnic distance has been associated with higher negative ratings of physician expertise among Caucasian patients, meticulous skills assessment is recommended to integrate knowledgeable overseas doctors into the Australian health system. Reassuring patients about the technical skills of their doctors by providing information about physicians' qualifications, including awards, publications and research projects, is also suggested. Moreover, cultural competence training should be incorporated into medical education and programs and students should be exposed to the diverse patient population before starting their professional careers. This training can empower students to translate cultural knowledge into practices and provide culturally congruent health care services. It should be noted that possessing knowledge about a particular community does not imply that all individuals with a particular background are similar; even though they may represent some or many traits of an ethno-cultural group. Thus, a physician should treat each patient as an individual and not simply as part of a group. Focusing on the characteristics of cultural groups can inadvertently cause physicians to rely on stereotypes as the basis for culturally appropriate interactions with diverse clients (Betancourt et al., 2003). Hence, cultural training should also focus on raising physicians' understanding of stereotyping as psychologically normal but important to counteract through various strategies (Burgess et al., 2007). For example, rather than focusing on the community to which patients belong, doctors should assess the core cultural needs of each individual, i.e. situations, interactions and behaviour that have the potential for cross-cultural misinterpretation and conflict (Carrillo et al., 1999). This approach would alert

physicians to areas of potential cultural differences with any patient and promote individuation as a strategy to reduce group-based stereotyping (Burgess et al., 2007) and the delivery of proficient and personalised care.

6.7 Limitations and future studies

The delivery of equal and effective care in multicultural health settings is a complex topic and more empirical studies are required to identify how cultural barriers affect the patient-provider relationship. To assist the infusion of cultural competence into the health sector, more empirical evidence should be found to encourage managers and policy makers to invest time and money in promoting cultural competence in the educational and medical settings. This study is the first attempt in Australia to explore practical evidence indicating the negative impact of cultural distance as well as the effectiveness of cultural competence in the delivery of outpatient care. Although the questionnaires were administered in four languages to facilitate the participation of ethnic patients, patients with poor English skills who could not speak these languages were not able to participate in this study. The data were collected from NSW, which is the most multicultural state in Australia, and this can limit the generalisation of the results to the entire country. Only patients' perceptions were acquired to test the models in this research. Future studies can compare doctors' self-reported and patient-reported cultural competence to disclose whether any deviation exists between the perceptions of patients and those of doctors regarding the physicians' cultural competence.

6.8 Conclusion

The present study found new evidence in the Australian context that patient-physician cultural distance can negatively affect effectiveness of clinical encounters and result in poorer quality of service. Both Caucasian and non-Caucasian patients viewed that

physicians' cultural competence is associated with their levels of professionalism, empathy and technical expertise. The findings highlight significance of integrating cultural practices and concepts into health service delivery and raising providers' cultural competence to improve health and wellbeing of culturally diverse patients. Hence, further attempts should be made in medical schools and health care practices to facilitate the development of cultural communication competence for physicians and other clinicians.

CHAPTER 7 CONCLUSION

7.1 Introduction

This chapter summarises the primary findings of the papers and outlines a few recommendations to foster higher quality of health services and deliver culturally congruent care. The limitations of the study and suggestions for future studies are then provided.

In general, this study had two main objectives. First, it intended to explore the major dimensions of two concepts “health care service quality” and “cultural competence” to employ efficient instruments for measuring these constructs. Second, it intended to investigate the role of patient- provider cultural distance and provider cultural competence in the delivery of health care services in the multicultural context of Australia.

7.2 Summary of the findings

The findings of the papers included in the earlier chapters are summarised into two sections, one addressing “health service quality” and the other “cultural competence”.

7.2.1 Findings related to the health service quality

In an extensive review of the literature (presented in Chapter 2 and Chapter 3), the authors encountered some inconsistency regarding the primary dimensions of service quality and measuring items used in the existing assessment tools. This issue, in a more serious way, also applied to the studies that aimed to measure quality of service in the health care context due to a remarkable variety in the dimensions of health service quality and the related measuring items as well as the terms used to name the quality components. This first group of research results focused on answering the first and second research questions respectively, “What are the main aspects of service quality in the outpatient context?” and “Are there any differences between the views of ethnic minorities (non-Caucasians) and the

ethnic majority (Caucasians) regarding critical elements of service quality in the outpatient context?. Thus, a qualitative study was conducted to identify the primary dimensions of health care service quality tailored to outpatient care in Australia.

The qualitative findings can be summarised as follows: (i) patients evaluate both “overall service quality” as well as some detailed attributes. Therefore, the attribute-level performance and the global perceived service quality are distinct entities and the overall assessment of service quality may be different from evaluations of specific quality features; (ii) patients evaluate doctors and other staff separately, and merging the quality factors related to these groups is problematic (in conflict with the approach used in many studies); (iii) in addition to the functional aspect of service, patients consider the technical aspect including such dimensions as doctor expertise and treatment outcome, to assess the quality of outpatient service. Thus, excluding these factors from health service quality assessment tools can yield inaccurate results (in conflict with the approach used in the majority of health care studies); and (iv) outpatients base their judgements on overall health service quality on eight dimensions: doctor professionalism, doctor empathy, doctor expertise, treatment outcome, staff concern, operation, tangibles and timeliness.

Based on the qualitative findings, a service quality model was developed for the outpatient setting. Afterwards, all of the relationships in the model were tested using structural equation modelling (SEM). To measure the model constructs, an initial pool of items was extracted from the literature. The final items were then selected through analysis of the interviews in the qualitative phase, that is, the items that were referred to by interviewees were incorporated in the questionnaire.

The quantitative analysis confirmed that doctor professionalism, doctor empathy, doctor expertise, treatment outcome, staff concern, tangibles and timeliness were the influential

factors in determining the overall outpatient service quality in the total sample of respondents. Additionally, a multi-group analysis was conducted to identify whether these quality factors are influential in both Caucasian (the ethnic majority in Australia) and non-Caucasian patients (ethnic minorities in Australia). The findings suggested that seven out of eight determined quality factors were influential for the overall rating of outpatient care quality in the total sample: doctor professionalism, doctor empathy, doctor expertise, treatment outcome, staff concern, tangibles and timeliness. However, the relationship between operation and overall health care quality in both the total sample and the sub-samples was not substantiated. Moreover, no significant association was found between tangibles and the overall health care quality in the non-Caucasian group. Apparently, the patients who completed the surveys did not experience serious problems with the operation aspect, and other factors had stronger impacts on their overall judgement. Moreover, in the non-Caucasian group, the tangibles factor, referring to the physical aspect of the service and providers' appearance, was not a significant contributor to the overall quality appraisal. It can be argued that ethnic patients may place less emphasis on the physical aspect of service in assessing the quality of health care. Most of the ethnic participants were not Australian-born, and had emigrated from less developed and more populous countries. Therefore, it can be suggested that these patients have experienced crowded clinics and hospitals in their home countries with a lower degree of hygiene compared with the Australian Caucasians, and that may result in a lower sensitivity to the physical environment among the ethnic patients. In addition, the quantitative findings suggested that overall service quality and satisfaction are two distinct constructs and that perceived service quality is a critical determinant of patient satisfaction in the total sample and sub-groups. Moreover, to answer the third research question "Do ethnic minorities receive inferior quality of care than the ethnic majority?", we compared levels of overall service quality and satisfaction between

Caucasians and non- Caucasians. In contrast to some previous reports, our findings did not provide evidence of inequality in the delivery of care to the ethnic minorities and the majority. We did not find a significant difference between the level of overall service quality and satisfaction between these two groups.

7.2.2 Findings related to cultural distance and cultural competence

This part of findings answered the fourth, fifth and sixth research questions respectively “What are the main elements of cultural competence?”, “How do cultural differences between patient and provider impact the quality of health care service?”, and “How does provider cultural competence assist the delivery of optimal health care services?”. The qualitative findings indicated that: (i) patient-provider cultural differences can hinder the delivery of optimal care; (ii) patients assess the cultural competence of providers based on three main elements, namely, cultural awareness, cultural knowledge and cultural skills; (iii) patient-provider cultural distance can negatively impact patient perceptions of provider professionalism, empathy and expertise; and (iv) provider cultural competence can positively impact patient perceptions of provider professionalism, empathy and expertise.

The quantitative findings confirmed the impact of patient- doctor cultural distance, patient-doctor ethnic distance and doctor cultural competence on the doctor-related aspects of health service quality, namely, doctor professionalism, doctor empathy and doctor expertise. Cultural distance negatively influences the delivery of care. Thus, patients who felt they had less in common with their doctors in regard to values, language, reasoning and manner of communication reported receiving less professional care and emotional support from their doctors. They also reported less accurate diagnoses and a lower level of doctor medical knowledge. The results were consistent among both Caucasian and non-Caucasian patients. In contrast, ethnic distance, which refers to patients’ perceptions of being different from

physicians merely in terms of race, background and community, did not significantly affect their perceptions of doctor professionalism and empathy. The results showed a significant negative impact of ethnic distance only on Caucasian patients' judgement of doctor expertise, while no significant relationship was found between ethnic distance and doctor expertise in the non-Caucasian group. Therefore, ethnic distance (differences regarding race and background) was found to be a less influential factor in the delivery of health care services than cultural distance (differences regarding reasoning, values, language, and communication style). This outcome indicates that a patient and a physician may be from different ethnic backgrounds, but not perceive massive differences concerning the major aspects of culture, such as social values, reasoning and communication style. Hence, the delivery of ideal care is hindered more when the patient and the doctor are remarkably different in terms of cultural traits than when they merely differ in ethnic characteristics. Moreover, both groups of patients reported higher-quality care from physicians who had greater levels of cultural competence. Thus, the efficacy of cultural competence in the outpatient setting has been supported by empirical evidence in this study.

7.3 Practical implications and recommendations

The perception of customer service quality has been proven to be influential on customer satisfaction, customer retention and the long-term financial success of service organisations (Alrubaiee & Alkaa'ida, 2011; Gilbert & Veloutsou, 2006; Ferguson et al., 2006; Naidu, 2009). Thus, assessing quality of care from the patients' perspective is essential for identifying shortcomings and enhancing organisational performance. In the health sector, employing suitable measurement tools that are customised for specific types of services in this industry and the systematic evaluation of service quality can assist authorities in

performing continuous improvement practices to meet customers' needs and increase their satisfaction.

The crucial role of physicians in the care of patients and in shaping patients' perceptions of the health service quality is acknowledged, especially in the outpatient setting. This study showed that doctor empathy, doctor professionalism and doctor expertise are three major dimensions of outpatient care quality that are attributed specifically to doctors. Hence, detailed plans at both the national and institutional levels should be developed to improve the doctor-related features of health service quality. As presented in this thesis, in a multicultural country, such as Australia, patient-doctor cultural differences and doctor cultural competence can significantly affect the quality of outpatient care. Thus, actions should be taken to reduce the negative consequences of cultural distance in the health care environment and improve the cultural competence of providers. Some recommendations for the health sector are described below.

7.3.1 Training and education: Medical schools and health care settings

Today's health care workers must be equipped with the awareness and skill to treat patients with different cultural, religious and language backgrounds. Training programs can help health professionals learn about the beliefs and expectations of their patient population and show acceptable levels of empathy and respect despite the differences. Through the training process, practitioners can be persuaded to not only tolerate but also try to understand and accept the different cultural practices of their patients.

As shown in the present study, a lack of cultural and linguistic knowledge and skills may prevent physicians from expressing sufficient affection and sympathetic emotions, undertaking their professional tasks efficiently, making accurate diagnoses and supplying patients with effective treatment plans. This empirical evidence on the efficacy of cultural

competence justifies an investment in training programs to promote cultural competence among health workers.

Apart from the findings of this thesis, the results of other studies stress the significance of cultural training in the health sector. For instance, a few studies have revealed that despite the significant role of empathy in the delivery of optimal care, the level of empathy is declining among medical students and practitioners. High workload, time shortage, the stressful nature of the work and a fear of intense emotional involvement are some contributors to this issue. Moreover, due to cultural barriers, providers may fail to understand patients' concerns and patients may experience insufficient empathy during the medical encounter (Chen et al., 2008; Neumann et al., 2011).

Cultural diversity training can increase knowledge about people from different ethnic backgrounds. In the field of health care, cultural diversity training can increase students', employees' and managers' understanding of different beliefs, expectations, and practices along with biological differences that exist among diverse populations. Hence, cultural diversity training should be a key component of formal education programs in both the university sector and the practice setting. However, there is a considerable variation in the content and methods of cultural competence training in medical schools and health care practices. Additionally, medical schools in developed countries do not provide adequate teaching of cultural issues. For example, in the US, only 9% of medical schools teach cultural competence as a separate course for medical students, and 7% have no multicultural program at all. Of the cultural competence training courses, 96% were taught only in the first and second years of medical school (Genao et al., 2003). In Australia, cultural competence is endorsed by the Australian Medical Council (AMC), and to meet accreditation requirements, medical courses must provide some level of training in this area

(Australian Medical Council, 2010). Nevertheless, cultural training is not taken seriously in medical schools, and academics believe that the skills and attitudes required for culturally sensitive medical practice should be taught and assessed in an integrated fashion throughout all years of medical courses (Goulston & Oates, 2007). Thus, there is a need for an infusion of cultural competence training throughout the curricula in Australian medical schools to raise students' awareness of cross-cultural differences and sensitivities (Goulston & Oates, 2007). These programs can provide students with experience with and an understanding of the process of providing quality care for multi-ethnic populations.

Similarly, in health care agencies, continuing cultural training can reinforce and enhance the cultural competence of health workers such as doctors and nurses. Cultural competence training not only improves providers' attitudes towards minority patients but also enhances cross-cultural communication among culturally diverse health professionals. Therefore, developing initial and periodic cultural-competence training programs in medical settings is recommended. Furthermore, consultation services on cultural competence can be supplied in medical centres or local health districts. Health sectors should also actively disseminate information on cultural competence training opportunities and policies among health professionals. These trainings can be offered in various forms, such as lectures, classroom didactic experiences, seminars (offline and live online seminars) and interactive workshops, to maximise the outcomes for the participants.

7.3.2 Content of the training programs

7.3.2.1 Demographic factors

Updating clinicians about the demographic characteristics of Australia's population in general as well as the census in each state and suburb can give them a clearer picture of the context in which they are working and the clients whom they are serving. Examples of these

characteristics are gender, age, ethnicity, religion, employment status, income and education. In addition, health workers can be informed about recent immigration trends (for example, an increase in the number of immigrants from African, Middle Eastern and South Asian countries) that will further add to the cultural diversity of the population. Segregated information about the socio-economic status of different ethnic communities can be included in the training programs to promote an understating of the similarities and differences between ethnic communities.

7.3.2.2 Cultural factors

The training programs should elevate clinicians' knowledge about the factors that contribute to health disparities and educate them about different cultural norms and practices (Betancourt & Green, 2010; Bull & Fitzgerald, 2008; Delgado et al., 2013; Leonard, 2006).

They should be equipped with cultural knowledge and skills that are generally applicable and are related to specific relevant groups to interact with diverse clients effectively and appropriately. It should be considered that cultural competence training is not simply learning a list of important values pertaining to a specific patient population; rather, it requires an acknowledgment of the importance of cultural practices in people's lives, respect for cultural differences and an active effort to minimise potential conflicts that may be caused by cultural dissimilarities in the health care context (Padela, 2009). Health professionals can be taught about the cultural factors that involve personality, values, beliefs, rituals, interests, and lifestyles to learn about the differences and similarities between different groups of the society.

In addition, medical students and health workers, especially physicians, should be educated about complementary and alternative therapies. Some reports have indicated that complementary therapies and supplementary medicines are broadly used in Australia,

especially among ethnic populations (NPS Medicinewise, 2008). However, doctors are not always familiar with these therapies or do not discuss these treatments with patients (Williamson et al., 2008). Today's doctors need to be educated in complementary and alternative medicine (CAM). Although it is unrealistic to expect physicians to learn about all forms of complementary and traditional medicine, they should at least be aware of the most common alternative therapies among different populations.

As supported by both the qualitative and quantitative findings of this study, patients evaluate providers' cultural competence mostly based on three elements: cultural awareness, cultural knowledge and cultural skills. Therefore, the training scheme should incorporate a general awareness training to inform providers about potential biases and stereotypes and how their attitudes and values can influence their perceptions, assumptions and behaviours in a clinical setting. Moreover, training programs should help providers achieve practical skills to ensure effective cross-cultural communication (e.g., verbal and non-verbal communication skills). Furthermore, the effects or implications of patients' spiritual beliefs on their health should be taught in the training programs. Training courses should also provide staff and students with knowledge about different religious practices related to health issues (e.g., not consuming medications that contain alcohol or pork gelatine, refusal of blood transfusions, pre- and post-mortem/labour rituals, personal space during physical exams and different food and dietary habits). Although health professionals may not be able to learn all of the details about different populations, the training courses can be beneficial by alerting employees' about potential differences and encouraging them to ask patients about their particular needs during medical encounters. Hence, they may ask indirect or direct questions to learn more about their patients and to build a respectful communication

with the patients and their families. This attitude may facilitate the sharing of relevant information regarding cultural beliefs and practices to achieve holistic well-being.

In addition to cultural and communication knowledge, medical staff and students should learn about the prevalence of certain diseases among particular ethnicities and the prevalence of chronic conditions and differences in the burden of disease by geographic location and ethnicity. For instance, they should be informed about the higher risk of developing abnormal glucose tolerance (AGT) among South Asian women living in Australia relative to women of all other ethnicities (Girgis et al., 2012). They should also be taught about racial differences in the response to different medications to reduce the likelihood of diagnostic and medication errors. Knowledge of the variations in drug responses between different ethnic groups can alert physicians to the need to consider patients' ethnic origins and offer proper dosage regimens and individualised treatment (Ajdukovic et al., 2007; Burroughs et al., 2002; Yasuda et al., 2008).

Moreover, knowing about the social pressures that some patients experience in their communities can facilitate establishing a rapport with patients and offering a satisfactory level of empathy. For instance, knowing about the high degree of stigma against patients with HIV or mental illness among Muslim communities can promote doctors' understanding of these patients' concerns. This knowledge can also help doctors discover whether patients are being completely forthcoming. For instance, disclosure of mental illness is considered shameful among some Muslim groups (Shibre et al., 2001; Youssef & Deane, 2006) and their condition may cause serious consequences for their entire family (e.g., other community members would be unwilling to marry into their family due to the existence of the mental disease). This issue may prevent Muslim women from revealing their distress and discussing their issues with doctors or counsellors (Ciftci, 2012). Thus, specific

knowledge about different communities' physiological and cultural characteristics should be included in cultural competence training programs.

For organisations that conduct their own trainings, the involvement of community representatives from the earliest stages of planning will help curriculum developers and trainers understand the needs, cultures and views of the people the organisation is serving to modify the training's content properly based on the practical needs of these populations. During the training process, health organisations and universities can arrange regular opportunities for staff and students to interact with members of specific communities to learn more about their expectations and the cultural issues they experience in the health care environment.

As explained above, acquiring cultural knowledge about diverse groups assists providers in understanding different patients' concerns and particular needs. However, the general knowledge about an ethnic population, may lead to some extent of stereotyping if improperly applied. Practitioners may overlook the uniqueness of each patient and treat a patient from a certain community based on cultural facts that may be inaccurate when applied to that patient. Differences always exist between individuals who belong to a certain ethno-cultural background and the length of time they have spent in the new country and their degree of assimilation are crucial factors in creating these differences (Galanti, 2000). Thus, during cultural competence training, health workers should be notified about the cultural variation within cultures to provide personalised care.

It should be reiterated that it is unrealistic to expect clinicians to know every cultural fact about different communities before caring for patients. Acquiring this level of knowledge is not possible during short-term training courses. Therefore, health organisations should supply their employees with continuous training during their working life to develop

cultural competence through an ongoing process. This approach ensures the acquisition and application of the knowledge and skills to accurately and safely take care of patients from various cultural backgrounds (Chrisman, 2007).

7.3.2.3 Language training

The findings of the qualitative study indicated that providers' inadequate English skills can hinder establishing a rapport during medical interactions and limit doctors' ability to provide patients with sufficient and clear information about the illness and treatment options to make informed decisions. This issue negatively affects patient ratings of provider quality attributes such as professionalism, empathy and expertise. Additionally, the findings of the quantitative study suggest that cultural dissimilarity (which includes mismatch in speech (language), values, reasoning and communication style) can significantly affect patient perceptions of health care quality factors. Moreover, the additional findings of the quantitative study revealed that 34% of the respondents (of 447 patients) prefer race/ethnic-concordant physicians, and 74% of these patients stated the language similarity as their main reason for this preference (see Appendix 5). Patient-physician language concordance can lead to a better comprehension of medical information by patients. Among Caucasian patients who mentioned preferring race-concordant visits, 68% cited language similarity as the reason. This indicates that some English-speaking patients have had language issues with physicians who speak English as a second language.

Foreign health workers should provide evidence of their English skills during the registration process in Australia. They should meet the English language proficiency requirement by achieving certain scores in the International English Language Testing System (IELTS) or Occupational English Test (OET). However, according to the findings of our study, some health workers do not have high-level language skills despite passing

these English tests. Several participants in our study (both native and non-native English speakers) experienced difficulties in understanding doctors with strong foreign accents. On several occasions, doctors could not communicate with Caucasian Australians efficiently as they were unable to cope with subtle concepts and understand colloquialisms. Language skills are fundamental to effective and safe practices. Hence, both the ability to understand and pronounce English should be assessed carefully during the registration process for health workers. Moreover, regular language training should be provided after recruitment to enhance practitioners' English knowledge and accents over time and to enable them to speak clearly and communicate effectively. Hiring international medical graduates (IMGs) is a convenient strategy to resolve the health worker shortage in regional and remote areas of Australia and expand the access to health care across Australia's vast land (Australian Health Ministers' Advisory Council, 2012). Although this solution can result in enhanced access to care, it may also lead to dissatisfaction with medical interactions due to language and cultural differences between foreign health professionals and local Australians. Thus, the health sector should have effective plans for ongoing improvement of the language and communication skills of overseas-trained practitioners.

7.3.3 Promoting workforce diversity

The additional quantitative findings of this study showed that 36% of non-Caucasians and 30% of the Caucasian participants prefer to visit doctors from their own background. The findings provide a rationale for national programs and policies to promote racial/ethnic diversity in Australia's health care system and investment in the recruitment and retention of diverse clinicians representing different communities. Likewise, sufficient funding should be supplied to attract more students from various backgrounds to medical schools. Medical schools' enrolment should reflect Australia's cultural diversity and financial support should

be provided to give students from different cultural and socio-economic backgrounds access to a medical degree. Thus, Australian medical schools have a responsibility to select students who can respond to the needs and challenges of diverse groups of patients in the future.

Australia is experiencing workforce shortages across a number of health professions and is attempting to resolve this issue by importing skilled workers from other countries. To provide a better care for diverse populations, immigration trends should be considered for future recruitments from overseas to prevent underrepresentation of racial and ethnic minority groups in medicine. For instance, the number of immigrants from South Asian and Middle Eastern countries is increasing (Australian Bureau of Statistics, 2006), which should be considered during the admissions and retention process to ensure an adequate representation of staff from these backgrounds among the health workforce. Increasing health workers diversity can give minority patients more opportunity to visit practitioners from their own background. Moreover, patients with limited English proficiency can have a greater chance to see a practitioner who speaks their primary language. Ultimately, the quality of patient-provider relationships as well as the levels of comfort, trust, partnership, and decision-making may improve and the use of health care and adherence to effective programs may increase. This will eventually result in enhanced health outcomes in the entire society.

7.3.4 Conducting systematic evaluations

Systematic evaluations of perceived health care quality can assist health care managers with identifying problems and taking steps to meet the needs and wishes of patients. To perform quality assessments, health organisations should target all groups of patients to measure the quality of service accurately. However, the low participation of ethnic minorities in clinical

research makes it difficult to obtain a comprehensive picture of patients' experiences. To solve this issue, financial resources are needed to provide incentives and tools (such as surveys or interviews in different languages) to encourage ethnic minorities to express their opinions about the quality of care. Moreover, in medical schools and medical practices, students and health professionals should be regularly assessed regarding their levels of cultural competence, empathy, professionalism and technical skills. In addition to discovering areas of improvement, these periodic assessments can indicate the progress of health workers and identify whether the training programs are effective. For example, pre- and post-training assessment of cultural competence can provide information about participants' existing levels of cultural competence, give an indication of the effectiveness of the training to the trainers and provide participants with a measure of their progress. To achieve accurate results from the evaluation process, we believe that it is best to use a combination of quantitative and qualitative techniques to assess the cultural competence of providers and the quality of health services. Furthermore, both self- and patient-rating methods can be used to evaluate the attributes of practitioners. These ongoing and comprehensive assessments can increase and sustain health care quality.

7.3.5 Assessing providers' technical expertise

Although the non-technical skills of practitioners play an important role in shaping patient perceptions of health care quality, the findings of this study highlighted the remarkable importance of doctors' technical skills in the delivery of optimal care. According to the findings, doctor technical expertise and experience are critically important for making an accurate diagnosis and providing high-quality care. Doctors play a pivotal role in the delivery of health care services and having highly trained physicians is vital to ensure patient safety and to sustain Australia's social and economic well-being. Unfortunately,

Australia faces similar issues to other Western countries regarding the technical skills of health practitioners and misdiagnosis. According to the World Health Organization, Australia has a high rate of medical errors -which include inaccurate or incomplete diagnosis or treatment of a disease- in the world (Clinical Negligence Australia). Some reports have found approximately 140,000 cases of diagnostic errors a year in Australia, with 21,000 cases of serious harm and between 2000 and 4000 deaths (Graber, 2013). Interestingly, a study of complaints made against doctors in Australia has found that medical graduates who trained overseas are far more likely to have complaints lodged against them than locally-trained medical graduates (Elkin et al., 2012). Thus, although diversifying health workers is recommended for addressing the specific needs of diverse patients and providing culturally sensitive service, this does not justify any lenience in assessing overseas-trained professionals to expedite diversification among the health workforce.

Several participants in our study reported multiple malpractices and misdiagnoses during consultancies with a doctor of similar race. Some limited-English-proficient patients continued visiting doctors from their own backgrounds for a rather long period of time despite being misdiagnosed by them. This indicates that increasing diversity among the health workforce without meticulous technical assessment can result in serious consequences especially for ethnic populations. Because of language and cultural similarities, some ethnic patients may tend to or feel compelled to continue visiting doctors from their own background even when those doctors lack sufficient diagnostic skills. Several ethnic participants in this study stated that they did not sue the doctors for misdiagnosis due to their limited English skills, unfamiliarity with the legal procedure and not wanting to waste time and money in a bureaucratic process.

In Australia, foreign-trained doctors who have medical qualifications not recognised in this country must gain eligibility by passing the Australian Medical Council Computer Adaptive Test Multiple Choice Question (AMC CAT MCQ) clinical examinations. They are then required to work as an intern in any Australian accredited hospital, completing a year of supervised training approved by the relevant State Medical Board. Afterwards, they can obtain their general registration as a medical practitioner in Australia. However, it seems that these policies cannot guarantee the technical skills of doctors and that greater efforts should be made to improve physicians' medical knowledge and increase diagnostic accuracy.

One possible solution is enhancing investment in domestic student training and encouraging local Australian students to attend medical schools. To secure diversity, medical schools can intake ethnically diverse students who were born or raised in Australia and are also both able to speak their own communities' languages and familiar with their cultural norms. Eventually, Australia could attain an ethnically diverse population of health workers who are trained according to Australia's medical system standards. Moreover, this policy guarantees a high exposure to racial and ethnic diversity in medical school that contributes notably to the cultural competence of future health professionals.

Some studies have found that diagnostic errors, which are more common in primary-care settings, typically result from flawed thinking patterns paired with negligence rather than the rareness or unusualness of the disease (Boodman, 2013). However, doctors often do not know when they have made a diagnostic mistake. Many patients affected by misdiagnosis simply find a new doctor. Unless the mistake results in litigation, the original physician is unlikely to learn that he/she misdiagnosed the patient's problem. While diagnostic errors are a leading cause of malpractice lawsuits, the vast majority do not result in legal actions

(Boodman, 2013). Therefore, contacting patients and seeking their feedback after receiving the service is essential for identifying cases of misdiagnosis. Additionally, an integrated online system that allows patients to share their experiences with other people, their own physicians or the managers of the medical centre at which they have received the service can be beneficial. Moreover, developing a database of diagnostic errors and disseminating the processed information to medical professionals may increase their knowledge about various errors and prevent the re-occurrence of these mistakes to minimise future errors. Thus, regular research should be undertaken to gather patients' experiences about misdiagnoses and malpractice incidences.

In conclusion, raising the quality of health care and offering culturally competent services requires national and organisational commitment and the establishment of policies and provision of resources to promote the responsiveness to cross-cultural issues.

7.4 Limitations of the research

Some limitations should be acknowledged in this study. First, patients who could not speak any English were not included in the qualitative study. Additionally, the interview sample was not inclusive as many major cultural/ethnic groups were not involved in this study (e.g., Jewish patients, Aboriginals, and Central/Southern Africans). Second, the respondents in the quantitative phase were recruited from only six medical centres in one state of Australia, New South Wales, which can limit the generalisability of the results to the entire country. The patient perceptions found herein might not be as diverse as those collected from several states. Third, although the questionnaires were administered in four foreign languages to facilitate the participation of ethnic patients, patients with low English skills who could not speak these languages were not able to participate in this study. Fourth, when the questionnaire was translated from English into other languages, translation distortion might

occur due to differences in the meanings of words, syntactical contexts and the cultural context of the readers or hearers. Fifth, this thesis focused mainly on outpatient care, and perceived service quality was not evaluated regarding the inpatient services, which could yield different results, especially regarding the differences between the perceptions of Caucasian and non-Caucasian patients. Sixth, the respondents of the questionnaire were asked to evaluate their last visit in the previous two months. The assumption behind this procedure was that patients would be able to clearly remember their visit. However, some of them might not have been able to adequately remember what happened during their visits.

7.5 Directions for future research

This study represented a significant step in discovering the issues involved in the operationalisation of health care service quality and identifying the primary dimensions of service quality in the outpatient context. This study was also the first attempt in Australia to explore practical evidence indicating the negative impact of patient-physician cultural distance along with the efficacy of physician cultural competence in the delivery of outpatient care. However, several additional research areas of interest have surfaced. This thesis, examined only patients' perceptions of outpatient care service quality. It did not capture the practitioners' opinions about the dimensions of service quality or their satisfaction level. Professionals play a critical role in the success of the medical care process. Their perceptions and satisfaction level may therefore directly and significantly influence the health care service quality and the technical result. In addition, their perceptions and attitude can affect their communication and interaction with patients. Future studies can address this issue.

Additionally, this thesis adopted formative specification of the health care quality service. However reflective specification of the model can be examined in future studies to show

statistically the differences in fit between reflective versus formative modelling of the dimensions.

Moreover, future studies can manage to recruit enough sample size from specific ethnic groups such as Chinese and Arabs to understand the specific needs of these groups and investigate whether some minority groups are receiving inferior quality care compared to other groups.

Likewise, future studies can measure provider cultural competence using both self- and patient-reporting methods. A comparison between these two ratings will disclose whether any deviation exists between the perceptions of patients and doctors of the physicians' cultural competence. Furthermore, more quantitative and qualitative studies should be directed at examining the hypothesised relationships in the models that were proposed in the present thesis. Applying a mixed methodology that combines qualitative and quantitative approaches may lead to a more in-depth understanding of the constructs and the suggested causal paths.

In addition, as depicted in this thesis, cultural competence and cultural difference are hypothesised to directly affect provider attributes. However, cultural competence can be considered as a moderator between cultural distance and provider attributes meaning the negative association between cultural distance and provider attributes is weakened by increasing levels of cultural competence. Future studies can examine the moderating role of cultural competence.

Meanwhile, the perceptions of inpatient care by the ethnic minorities and majority could be compared to explore whether any inequality in the delivery of care is experienced in that area. Finally, the impact of cultural distance and cultural competence on more objective measures of health care quality can be examined in future studies (e.g., on Glycemic, Lipid, and blood pressure control among patients with diabetes).

The delivery of equal and effective care in multicultural health settings is a complex topic, and more empirical studies are required to identify how cultural barriers affect the patient-provider relationship. To facilitate the infusion of cultural competence in the health sector, more empirical evidence should be found to encourage managers and policy-makers to invest time and money in promoting cultural competence in educational and practical settings.

REFERENCES

- Abbe, A.L., Gulick, M.V. & Herman, J.L. (2007). *Cross-cultural competence in army leaders: A conceptual and empirical foundation*. Arlington, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.
- ABC News. (2010). *Australia second most multicultural country*. Retrieved from <http://www.abc.net.au/news/2010-11-17/australia-second-most-multicultural-country/2339884>. (Accessed 15 May 2012).
- Agency for Healthcare Research and Quality. (2011), *Disparities in healthcare quality among racial and ethnic groups: Agency for healthcare research and quality*, Retrieved from <http://www.ahrq.gov/research/findings/nhqrdr/nhqrdr11/minority.html>. (Accessed 15 June 2014).
- Agus, A., Barker, S. & Kandampully, J. (2007). An exploratory study of service quality in the Malaysian public service sector. *International Journal of Quality and Reliability Management*, 24(2), 177-190.
- Ahmed, R. (2007). *Assessing the role of cultural differences on health care receivers' perceptions of health care providers' cultural competence in health care interaction*. PhD thesis, Ohio University, USA.
- Ajdukovic, M., Crook, M., Angley, C., Stupans, I., Soulsby, N., Doecke, C., . . . Angley, M. (2007). Pharmacist elicited medication histories in the emergency department: Identifying patient groups at risk of medication misadventure. *Pharmacy Practice*, 5(4), 162-168.
- Akter, M.S., Upal, M. & Hani, U. (2008). Service quality perception and satisfaction: A study over sub-urban public hospitals in Bangladesh. *Journal of Services Research*, 8(23), 125-146.

- Alrubaiee, L. & Alkaa'ida, F. (2011). The mediating effect of patient satisfaction in the patients' perceptions of healthcare quality – patient trust relationship. *International Journal of Marketing Studies*, 3(1), 103-127.
- Ambanpola, L., Eisenbruch, M., Wainer, J., Colville, D., Lawless, A. & Weeks, C. (2005). *Achieving gender and cultural competence by Australia's medical workforce*: Centre for Culture and Health, University of NSW.
- AMC Exam. Retrieved from <http://www.amc-exam.com>. (Accessed 15 August 2014)
- American College of Physicians. (2010). *Racial and Ethnic Disparities in Health Care*: American College of Physicians.
- Anand, R. & Lahiri, I. (2004). Intercultural competence in healthcare developing skills for interculturally competent care, in Deardoff D.K (Ed), *The Handbook of Intercultural Competence*, Newbury Park: Sage, 387-402.
- Andaleeb, S.S. (2001). Service quality perceptions and patient satisfaction: A study of hospitals in a developing country. *Social Science and Medicine*, 52(9), 1359-1370.
- Anderson, J.C. & Gerbing, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Andrews, M., Backstrand, J. R., Boyle, J. S., Campinha-Bacote, J., Davidhizar, R. E., Doutrich, D., . . . Zoucha, R. (2010). Chapter 3: Theoretical basis for transcultural care. *Journal of Transcultural Nursing*, 21(4), 53S-136S.
- Ang, S., Van Dyne, L., Koh, C. & Ng, K.Y. (2004). *The measurement of cultural intelligence*. Paper presented at the Cultural Intelligence Symposium at the Academy of Management Meetings, New Orleans, LA.
- Ang, S., Van Dyne, L., Koh, C., Ng, K.Y., Templer, K.J., Tay, C. & Chandrasekar, N.A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision

making, cultural adaptation and task performance. *Management and Organization Review*, 3(3), 335-371.

Aomatsu, M., Abe, H., Abe, K., Yasui, H., Suzuki, T., Sato, J., Ban, N. & Mercer S.W.

(2014). Validity and reliability of the Japanese version of the CARE Measure in a general medicine outpatient setting. *Family Practice*, 31(1), 118-126.

Aplin, G. (2007). Once is sometimes too much. Cultural competence can reduce medical errors, increase patient satisfaction. *MGMA Connex*, 7(1), 21-22.

Arasaratnam, L.A. (2006). Further testing of a new model of intercultural communication competence. *Communication Research Reports*, 23(2), 93-99.

Arasli, H., Ekiz, E., Haktan, K. & Salih, T. (2008). Gearing service quality into public and private hospitals in small islands: Empirical evidence from Cyprus. *International Journal of Health Care Quality Assurance*, 21(1), 8-23.

Arbuckle, J.L. (2012). AMOS (Version 21.0), computer software, SPSS, Chicago, IL.

Ariffin, A.A.M. & Aziz, N.A. (2008). Determining the service quality dimensions and zone of tolerance for hospital services in Malaysia. *The Business Review*, 10(2), 164-169.

Australian Bureau of Statistics. (2006). Retrieved from

<http://www.abs.gov.au/ausstats/abs@.nsf/7d12b0f6763c78caca257061001cc588/5a47791aa683b719ca257306000d536c!OpenDocument>. June 2006. (Accessed 15 May 2012).

Australian Bureau of Statistics. (2006). *Health Literacy, Australia*. Retrieved from

<http://abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/4233.0Main%20Features22006?opendocument&tabname=Summary&prodno=4233.0&issue=2006&num=&view=>. (Accessed 15 June 2014).

Australian Bureau of Statistics. (2006). *2914.0.55.002-Census of Population and Housing. 2011*. Retrieved from

<http://www.abs.gov.au/ausstats/abs@.nsf/7d12b0f6763c78caca257061001cc588/5a47791aa683b719ca257306000d536c!OpenDocument>. (Accessed 15 June 2014).

Australian Doctors Trained Overseas Association (ADTOA). (2011). *Guilty until proven innocent*. Retrieved from http://www.aph.gov.au/About_Parliament/House_of_Representatives. (Accessed 15 June 2014).

Australian English Institute. (2010). *Miscommunication in the medical context*. Retrieved from <http://australiaenglish.com/wordpress/why-should-you-improve-your-communication-skills-with-patients.html>. (Accessed 15 July 2014).

Australian Health Ministers' Advisory Council. (2012). *National Strategic Framework for Rural and Remote Health*. Retrieved from www.ahmac.gov.au. (Accessed 15 July 2014).

Australian Institute of Health and Welfare. (2009). *Health and community services labour force*. Retrieved from <http://www.aihw.gov.au/publication-detail/?id=6442468220>. (Accessed 15 May 2012).

Australian Institute of Health and Welfare. (2013). *Health expenditure Australia 2011-12*. Retrieved from <http://www.aihw.gov.au/publication-detail/?id=60129544658>. (Accessed 10 December 2013).

Australian Medical Council. (2010). *Assessment and accreditation of medical schools: standards and procedures*. Retrieved from <http://www.amc.org.au/index.php/ar/bme>. (Accessed 15 May 2012).

Babakus, E. & Mangold, W.G. (1992). Adapting the SERVQUAL scale to hospital services: An empirical investigation. *Health Service Research*, 26(6), 767-780.

Badri, M.A., Dodeen, H., Al Khaili, M. & Abdulla, M. (2005). Development of the national inpatient satisfaction constructs and items for the United Arab Emirates. *International Journal of Applied Health Studies*, 1(3), 1-22.

Badri, M.A., Attia, S.T. & Ustadi, A.M. (2008). Testing not-so-obvious models of healthcare quality. *International Journal of Health Care Quality Assurance*, 21(2), 159-174.

Balcazar, F.E., Suarez-Balcazar, Y. & Taylor-Ritzler, T. (2009). Cultural competence: Development of a conceptual framework. *Disability and Rehabilitation*, 31(14), 1153-1160.

Baldwin, A. & Sohal, A. (2003). Service quality factors and outcomes in dental care. *Managing Service Quality*, 13(3), 207-216.

Barker, S. & Härtel, C.E.J. (2004). Intercultural service encounters: An exploratory study of customer experiences. *Cross Cultural Management: An International Journal*, 11(1), 3-14.

Betancourt, J.R. & Green, A.R. (2010). Commentary: Linking cultural competence training to improved health outcomes: Perspectives from the field. *Academic Medicine*, 85(4), 583-585.

Betancourt, J.R., Corbett, J. & Bondaryk, M.R. (2014). Addressing disparities and achieving equity cultural competence, ethics, and health-care transformation. *Chest*, 145(1), 143-148.

Betancourt, J.R., Green, A.R., Carrillo, J.E. & Ananeh-Firempong, O. (2003). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports*, 118(4), 293-302.

Betancourt, J.R. (2006). Cultural competency: Providing quality care to diverse populations. *Consultant Pharmacist*, 21(12), 988-995.

Bhui, K., Warfa, N., Edonya, P., McKenzie, K. & Bhugra, D. (2007). Cultural competence in mental health care: a review of model evaluations. *BMC Health Service Research*, 7/15. doi:10.1186/1472-6963-7-15.

Bitner, M.J. & Hubbert A.R. (1994), *Service quality, new directions in theory and practice. Encounter satisfaction versus overall satisfaction versus quality: The customer's voice*, Sage. London, UK.

- Boodman, S. (2013). *Doctors' diagnostic errors are often not mentioned but can take a serious toll*. Retrieved from <http://www.kaiserhealthnews.org/stories/2013/may/07/doctor-errors-misdiagnosis-more-common-than-known-serious-impact.aspx>. (Accessed 15 July 2014).
- Borenstein, M., Hedges L.V., Higgins J.P.T. & Rothstein H.R. (2009). *Introduction to meta-analysis*. New York: John Wiley & Sons.
- Bos, N., Sizmur, S., Graham, C. & van Stel, H.F. (2013). The accident and emergency department questionnaire: A measure for patients' experiences in the accident and emergency department. *BMJ Quality & Safety*, 22(2), 139-146.
- Boudreaux, E. & O'Hea, E. (2004). Patient satisfaction in the Emergency Department: a review of the literature and implications for practice. *Journal of Emergency Medicine*, 26(1), 13-26.
- Brady, M.K. & Robertson, C.J. (2001). Searching for a consensus on the antecedent role of service quality and satisfaction: An exploratory cross-national study. *Journal of Business Research*, 51(1), 53- 60.
- Brady, M. K., Cronin, J.J. & Brand, R.R. (2002). Performance-only measurement of service quality: A replication and extension. *Journal of Business Research*, 55(1), 17-31.
- Brady, M.K. & Cronin, J.J. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *The Journal of Marketing*, 65(3), 34- 49.
- Bull, M. & Fitzgerald, M. (2008). Preparing teacher–scholars to reduce health disparities. *Nursing Education Perspectives*, 29(3), 156-160.
- Burchum, J.L.R. (2002). Cultural competence: An evolutionary perspective. *Nursing Forum*, 37(4), 5-15.

- Burgess, D., van Ryn, M., Dovidio, J. & Saha, S. (2007). Reducing racial bias among health care providers: Lessons from social-cognitive psychology. *Journal of General Internal Medicine*. 22(6), 882-887.
- Burroughs, V.J., Maxey, R.W. & Levy, R.A. (2002). Racial and ethnic differences in response to medicines: Towards individualized pharmaceutical treatment. *Journal of the National Medical Association*, 94(10 Suppl), 1-26.
- Burton-Jones, A. (2009). Minimizing method bias through programmatic research. *Management Information Systems Quarterly*, 33(3), 445- 471.
- Buttle, F. (1996). SERVQUAL: Review, critique, research agenda. *European Journal of Marketing*, 30(1), 8-35.
- Byrne, B.M. (2010). *Structural Equation Modeling with AMOS: Basic concepts, applications and programming* (2nd ed.). New York: Routledge.
- Cali, M., Ellis, K. & te Velde, D.W. (2008). *The contribution of services to development and the role of trade liberalisation and regulation*. Retrieved from <http://www.oecd.org/investment/globalforum/40302909.pdf>. (Accessed 15 August 2012).
- Campinha-Bacote, J. (2002). The process of cultural competence in the delivery of healthcare services: A model of care. *Journal of Transcultural Nursing*, 13(3), 181-184.
- Carlucci, D., Renna, P. & Schiuma, G. (2013). Evaluating service quality dimensions as antecedents to outpatient satisfaction using back propagation neural network. *Health Care Management Science*, 16(1), 37-44.
- Carman, J.M. (2000). Patient perceptions of service quality: Combining the dimensions. *Journal of Services Marketing*, 14(4), 337-352.
- Caro, L.M. & García, J.A.M. (2008). Developing a multidimensional and hierarchical service quality model for the travel agency industry. *Tourism Management*, 29(4), 706-720.

- Caro, L.M. & Roemer, E. (2006). *Developing a multi-dimensional and hierarchical service quality model for the travel and tourism industry* (Working Paper Rep. No. 06/18). Bradford, UK: Bradford University.
- Carrillo, J.E., Green, A.R. & Betancourt, J.R. (1999). Cross-cultural primary care: A patient-based approach. *Annals of Internal Medicine*, 130(10), 829-834.
- Carroll, J., Epstein, R., Fiscella, K., Gipson, T., Volpe, E. & Jean-Pierre, P. (2007). Caring for Somali women: Implications for clinician-patient communication. *Patient Education and Counseling*, 66(3), 337-345.
- Castro, A. & Ruiz, E. (2009). The effects of nurse practitioner cultural competence on Latina patient satisfaction. *Journal of the American Academy of Nurse Practitioners*. 21(5), 278-286.
- Chahal, H. (2008). Predicting patient loyalty and service quality relationship: A case study of civil hospital, Ahmedabad, India. *VISION- The Journal of Business Perspective*, 12(4), 45-55.
- Chakraborty, R. & Majumdar, A. (2011). Measuring consumer satisfaction in health care sector: The applicability of SERVQUAL. *Journal of Arts, Science & Commerce*, 2(4), 149-160.
- Chang, C-S., Chen, S.-Y. & Lan, Y.-T. (2013). Service quality, trust, and patient satisfaction in interpersonal-based medical service encounters. *BMC Health Services Research*, 13(1), 1-11.
- Chen, J.T, LaLopa, J. & Dang, D.K. (2008). Impact of patient empathy modeling on pharmacy students caring for the underserved. *American Journal of Pharmaceutical Education*, 72(2):40.

- Chen, P.-T. & Hu, H.-H.S. (2012). The mediating role of relational benefit between service quality and customer loyalty in airline industry. *Total Quality Management & Business Excellence*, 24(9-10), 1084-1095.
- Chen, V. (2008). *Correlation of providers' cultural competency and elderly Chinese participants' satisfaction with adult day health care*. PhD thesis, University of Phoenix, Phoenix, USA.
- Chenowethm, L., Jeon, Y.H., Goff, M. & Burke, C. (2006). Cultural competency and nursing care: an Australian perspective. *International Nursing Review*, 53(1), 34-40.
- Cho, W.H., Lee, H., Kim, C., Lee, S. & Kui-Son Choi, S. (2004). Patient assessments the impact of visit frequency on the relationship between service quality and outpatient satisfaction: A South Korean study. *Health Services Research*, 39(1), 13-34.
- Choi, K.-S., Lee, H., Kim, C. & Lee, S. (2005). The service quality dimensions and patient satisfaction relationships in South Korea: Comparisons across gender, age and types of service. *Journal of Services Marketing*, 19(3), 140-149.
- Chrisman, N.J. (2007). Extending cultural competence through systems change: Academic, hospital, and community partnerships. *Journal of Transcultural Nursing*, 18(1 suppl), 68S-76S.
- Ciftci, A. (2012). Mental health stigma in the Muslim community. *Illinois Institute of Technology*, 7(1), 17-32.
- Clark, L., Colbert, A. & Flaskerud, J.H. (2010). Chapter 6: Culturally based healing and care modalities. *Journal of Transcultural Nursing*. 21(4 suppl), 236S-306S.
- Clark, P. & Vercler, L. (2007). Hearing all patients' voices: Practical applications in cultural competence. *Satisfaction Snapshot*, 6(11), 1-10.

- Clemes, M., Ozanne, L. & Laurensen, W. (2001). Patients' perceptions of service quality dimensions: An empirical examination of health care in New Zealand. *Health Marketing Quarterly*, 19(1), 3-22.
- Clemes, M.D., Gan, C.E.C. & Kao, T.H. (2007). University student satisfaction: An empirical analysis. *Journal of Marketing for Higher Education*, 17(2), 292-325.
- Clinical Negligence Australia. Retrieved from <http://www.medneg.com.au/truth.html>. (Accessed July 2014).
- Cohen, J., Cohen, P., West S.G. & Aiken, L.S. (2003). *Applied multiple regression/correlation: Analysis for the behavioural sciences*. Lawrence Erlbaum, Hillsdale, NJ.
- Cole, P.D., Hatef, D.A. & Taylor, S. (2009). Skin care in ethnic populations. *Seminars in Plastic Surgery*, 23(3), 168–172.
- Collins, K.S. & Fund, C. (2002). *Diverse communities, common concerns: Assessing health care quality for minority Americans*. New York: Commonwealth Fund.
- Collins, M.J. (2005). *Spectator satisfaction in professional sport: A test of a hierarchical model*. Master's thesis, Lincoln University, New Zealand.
- Coltman, T., Devinney, T.M., Midgley, D.F. & Venaik, S. (2008). Formative versus reflective measurement models: Two applications of formative measurement. *Journal of Business Research*, 61(12), 1250-1262.
- Constantine, M.G. (2002). Predictors of satisfaction with counseling: racial and ethnic minority clients' attitudes toward counseling and ratings of their counselors' general and multicultural counseling competence. *Journal of Counseling Psychology*, 49(2), 255-263.
- Cook, C.T., Kosoko-Lasaki, O. & O'Brien, R. (2005). Satisfaction with and perceived cultural competency of healthcare providers: The minority experience. *Journal of the National Medical Association*, 97(8), 1078-1087.

- Cooper, L.A., Roter, D.L., Johnson, R.L., Ford, D.E., Steinwachs, D.M. & Powe, N.R. (2003). Patient-centered communication, ratings of care, and concordance of patient and physician race. *Annals of Internal Medicine*, 139(11), 907-915.
- Crane, K. (2013). *Dermatologist addresses skin care for African-Americans*, Retrieved from <http://www.gainesville.com/article/20130719/ARTICLES/130719537?tc=ar>. (Accessed 15 May 2012).
- Creswell, J.W. (2003). *Research Design- Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications, Thousand Oaks, CA.
- Creswell, J.W. (2012). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Cronin, J.J. & Taylor, S.A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56(3), 55- 68.
- Cross, T.L., Bazron, B.J., Dennis, K.W. & Isaacs, M.R. (1989). *Towards a culturally competent system of care: A monograph on effective services for minority children who are severely emotionally disturbed*. Washington, DC: CASSP Technical Assistance Center, Georgetown University.
- Cui, X. (2012). *Problematic Chinese-Australian social interactions at work*. PhD thesis. The University of Melbourne, Australia.
- Culture, Ethnicity and Health, (2013). Retrieved from at: http://www.ceh.org.au/our-programs/our_programs_mhss/health_information/what_is_hiv_aids. (Accessed 15 December, 2013).
- Dabholkar, P.A., Shepherd, D.C. & Thorpe, D.I. (2000). A comprehensive framework for service quality: An investigation of critical conceptual and measurement issues through a longitudinal study. *Journal of Retailing*, 76(2), 139-173.

- Dagger, T.S., Sweeney, J.C. & Johnson, L.W. (2007). A hierarchical model of health service quality: Scale development and investigation of an integrated model. *Journal of Service Research*. 10(2), 123-142.
- Damashek, A., Bard, D. & Hecht, D. (2012). Provider cultural competency, client satisfaction, and engagement in home-based programs to treat child abuse and neglect. *Child Maltreatment*, 17(1), 56-66.
- Dang, B.N., Westbrook, R.A., Black, W.C., Rodriguez-Barradas, M.C. & Giordano, T.P. (2013). Examining the link between patient satisfaction and adherence to HIV care: a structural equation model. *Public Library of Science*. 8(1), e54729, doi: 10.1371/journal.pone.0054729.
- Davidson, P.M., Macdonald, P., Moser, D.K., Ang, E., Paull, G., Choucair, S., . . . Dracup, K. (2007). Cultural diversity in heart failure management: Findings from the Discover study (Part 2). *Contemporary Nurse*, 25(1/2), 50-62.
- De Man, S., Gemmel, P., Vlerick, P., Van Rijk, P. & Dierckx, R. (2002). Patients' and personnel's perceptions of service quality and patient satisfaction in nuclear medicine. *European. Journal of Nuclear Medicine & Molecular Imaging*, 29(9), 1109-1117.
- Deardorff, D.K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*. 10(3), 241-266.
- Dedeke, A. (2003). Service quality: A fulfilment-oriented and interactions-centered approach. *Managing Service Quality*, 13(4), 276-289.
- Delgado, D.A., Ness, S., Ferguson, K., Engstrom, P.L., Gannon, T.M. & Gillett, C. (2013). Cultural competence training for clinical staff: measuring the effect of a one-hour class on cultural competence. *Journal of Transcultural Nursing*, 24(2), 204-213.

- de Ruyter, K. & Wetzels, M. (1998). On the complex nature of patient evaluations of general practice service. *Journal of Economic Psychology*, 19(5), 565-590.
- Diamantopoulos, A. (2006). The error term in formative measurement models: Interpretation and modelling implications. *Journal of Modelling in Management*, 1(1), 1-17.
- Donabedian, A. (1988). The quality of care. How can it be assessed?. *Journal of the American Medical Association*, 260(12), 1743-1748.
- Donabedian, A. (1992). Quality assurance in health care: Consumers' role. *Quality in Health Care*, 1(4), 247-251.
- Doorenbos, A.Z. & Schim, S.M. (2004). Cultural competence in hospice. *American Journal of Hospice and Palliative Medicine*, 21(1), 28-32.
- Dosen, D.O., Skare, V. & Skare, T. (2010). Measuring health care service quality by using SERVQUAL, *Revija Za Socijalnu Politiku*, 17(1), 27-44.
- Duggirala, M., Rajendran, C. & Anantharaman, R.N. (2008). Patient-perceived dimensions of total quality service in healthcare. *Benchmarking: An International Journal*, 15(5), 560-583.
- Earley, P.C. (2002). Redefining interactions across cultures and organizations: moving forward with cultural intelligence, in Staw B.M. & Kramer R.M. (Eds) *Research in Organizational Behavior*, Oxford, UK: Elsevier, 271-299.
- Edwards, J.R. (2001). Multidimensional constructs in organizational behavior research: Towards an integrative and analytical framework. *Organizational Research Methods*, 4(2), 144-192.
- Edwards, K. (2003). Increasing cultural competence and decreasing disparities in health. *Journal of Cultural Diversity*, 10(4), 111-112.

- Elkin K, Spittal, M. & Studdert, D. (2012). Risks of complaints and adverse disciplinary findings against international medical graduates in Victoria and Western Australia. *Medical Journal of Australia*, 197(8), 448-452.
- Fallowfield, L. & Jenkins, V. (1999). Effective communication skills are the key to good cancer care. *European Journal of Cancer*, 35(11), 1592-1597.
- Fantini, A.E. (2006). *Exploring and Assessing Intercultural Competence*. St. Louis, Missouri: Washington University.
- Fassnacht, M. & Koese, I. (2006). Quality of electronic services: Conceptualising and testing a hierarchical model. *Journal of Service Research*, 9(1), 19-37.
- Federation of Ethnic Communities' Councils of Australia. (2010). *Patient safety in primary health care: A CALD perspective*. Retrieved from http://www.fecca.org.au/images/stories/documents/Submissions/2010/submissions_2010040.pdf. (Accessed 10 October 2012)
- Fejzic, B.J. & Tett, S.E. (2004). Medication management reviews for people from the former Yugoslavia now resident in Australia. *Pharmacy World & Science*, 26(5), 271-276
- Ferguson, R.J., Paulin, M. & Leiriao, E. (2006). Loyalty and positive word-of-mouth: Patients and hospital personnel as advocates of a customer-centric health care organization. *Health Marketing Quarterly*, 23(3), 59-77.
- Fisher, T.L., Burnet, D.L., Huang, E.S., Chin, M.H. & Cagney, K.A. (2007). Cultural leverage: Interventions using culture to narrow racial disparities in health care. *Medical Care Research and Review*, 64(5), 243S-282S.
- Flaskerud, J.H. (2007). Cultural competence: what effect on reducing health disparities? *Issues in Mental Health Nursing*, 28(4), 431-434.
- Fortin, A.H. (2002). Communication skills to improve patient satisfaction and quality of care. *Ethnicity and Disease*. 12(4), 58-61.

- Fotiadis, A.K. & Vassiliadis, C.A. (2013). The effects of a transfer to new premises on patients' perceptions of service quality in a general hospital in Greece. *Total Quality Management & Business Excellence*, 24(9-10), 1022-1034.
- Fuertes, J.N., Stracuzzi, T.I., Bennett, J., Scheinholtz, J., Mislouack, A., Hersh, M. & Cheng, D. (2006). Therapist multicultural competency: A study of therapy dyads. *Psychotherapy: Theory, Research, Practice, Training*, 43(4), 480-490.
- Furrer, O., Liu, B. & Sudharshan, D. (2000), The relationships between culture and service quality perceptions. *Journal of Service Research*, 2(4), 355-371.
- Galanti, G. (2000). An introduction to cultural differences. *Western Journal of Medicine*, 172(5), 335-336.
- Galanti, G. (1991). *Caring for patients from different cultures: Case studies from American hospitals*, Philadelphia, PA: Sage.
- Galperin, B.L. & Lituchy, T.R. (2014). Human resource development in service firms across cultures. *Human Resource Development Review*, 13(3), 336-368.
- Gasquet, I., Villeminot, S., Estaquio, C., Durieux, P., Ravaud, P. & Falissard, B. (2004). Construction of a questionnaire measuring outpatients' opinion of quality of hospital consultation departments. *Health and Quality of Life Outcomes*, 2: 43.
- Gathani, T., Ali, R., Balkwill, A., Green, J., Reeves, G., Beral, V. & Moser, K.A. (2014). Ethnic differences in breast cancer incidence in England are due to differences in known risk factors for the disease: prospective study. *British Journal of Cancer*, 110, 224-229.
- Gaur, S.S., Xu, Y., Quazi, A. & Nandi, S. (2011). Relational impact of service providers' interaction behavior in healthcare. *Managing Service Quality*, 21(1), 67-87.
- Genao I., Bussey-Jones J., Brady D., Branch W.T.J. & Corbie-Smith, G. (2003). Building the case for cultural competence. *American Journal of the Medical Sciences*, 326(3), 136-140.

- Gibson, D. & Zhong M. (2005). Intercultural communication competence in the healthcare context. *International Journal of Intercultural Relations*, 29(5), 621-634.
- Gilbert, G.R. & Veloutsou, C. (2006). A cross-industry comparison of customer satisfaction. *The Journal of Services Marketing*, 20(5), 298-307.
- Gill, L. & White, L. (2009). A critical review of patient satisfaction. *Leadership in Health Services*, 22(1), 8-19.
- Girgis, C.M., Gunton, J.E. & Cheung, N.W. (2012). The influence of ethnicity on the development of type 2 diabetes mellitus in women with gestational diabetes: A prospective study and review of the literature. *ISRN Endocrinology*. doi: 10.5402/2012/341638
- Glenn. (2011). Immigration in the past 5 years - focus on NSW. Retrieved from <http://blog.id.com.au/2011/population/australian-demographic-trends/immigration-nsw/>. (Accessed 15 July 2014).
- Goulston, K. & Oates, K. (2007). *Review of the University of Sydney Medical Program*: University of Sydney.
- Graber, M. (2013). *The hidden problem of medical misdiagnosis-and how to fix it*. Retrieved from <http://theconversation.com/the-hidden-problem-of-medical-misdiagnosis-and-how-to-fix-it-14662>. (Accessed 15 July 2013).
- Grogan, S., Conner, M., Norman, P., Willits, D. & Porter, I. (2000). Validation of a questionnaire measuring patient satisfaction with general practitioner services. *Quality in Health Care*, 9(4), 210-215.
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.
- Grönroos, C. (2007). *Service management and marketing: Customer management in service competition*. Chichester, UK, John Wiley & Sons.

- Haddad, S., Potvin, L., Roberge, D., Pineault, R. & Remondin, M. (2000). Patient perception of quality following a visit to a doctor in a primary care unit. *Family Practice*, 17(1), 21-29.
- Hair, J.F.Jr., Black, W.C., Babin, B.J., Anderson, R.E. & Tatham, R.L. (2006). *Multivariate data analysis* (6th ed.). New Jersey: Prentice Hall.
- Hall, J.A. & Dornan, M.C. (1988). What patients like about their medical care and how often they are asked: A meta-analysis of the satisfaction literature. *Social Science and Medicine*, 27(9), 935-939.
- Hammoud, M.M., White, C.B. & Feters, M.D. (2005). Opening cultural doors: Providing culturally sensitive healthcare to Arab American and American Muslim patients. *American Journal of Obstetrics and Gynecology*, 193(4), 1307–1311.
- Han, G.S. & Humphreys, J.S. (2005). Overseas-trained doctors in Australia: Community integration and their intention to stay in a rural community. *Australian Journal of Rural Health*, 13(4), 236-241.
- Harris, G.L.A. (2010). Cultural competence: its promise for reducing healthcare disparities. *Journal of Health and Human Services Administration*, 33(1), 2-52.
- Hasin, M.A.A., Seeluangsawat, R. & Shareef, M.A. (2001). Statistical measures of customer satisfaction for health care quality assurance: A case study. *International Journal of Health Care Quality Assurance*, 14(1), 6-14.
- Hawthorne, L. (2012). International medical migration: what is the future for Australia?. *Medical Journal of Australia*, 1(3), 18-21.
- Hayes-Bautista, D.E. (2003). Research on culturally competent healthcare systems: Less sensitivity, more statistics. *American journal of preventive medicine*, 24(3), 8-9.

- Health at a Glance (2013). *OECD Indicators 2013*. Retrieved from <http://www.oecd.org/health/health-systems/health-at-a-glance.htm>. (Accessed 15 September, 2013).
- Heidegger, T., Saal, D. & Nuebling, M. (2006). Patient satisfaction with anesthesia care: what is patient satisfaction, how should it be measured, and what is the evidence for assuring high patient satisfaction?. *Best Practice and Research, Clinical Anesthesiology*, 20(2), 331-346.
- Henderson, S., Kendall, E. & See, L. (2011). The effectiveness of culturally appropriate interventions to manage or prevent chronic disease in culturally and linguistically diverse communities: a systematic literature review. *Health and Social Care in the Community*, 19(3), 225-249
- Henoch, I., Lovgren, M., Wilde-Larsson, B. & Tishelman, C. (2012). Perception of quality of care: Comparison of the views of patients' with lung cancer and their family members. *Journal of Clinical Nursing*, 21(3-4), 585-594.
- Hernandez, M., Nesman, T., Mowery, D., Acevedo-Polakovich, I. D. & Callejas, L.M. (2009). Cultural Competence: A Literature Review and Conceptual Model for Mental Health Services. *Psychiatric Services*, 60(8), 1046-1050.
- Heskett, J.L. & Sasser, W.E. (2010). *The Service Profit Chain: From Satisfaction to Ownership*. Handbook of Service Science: Springer, US.
- Hiidenhovi, H., Laippala, P. & Nojonen, K. (2001). Development of a patient-oriented instrument to measure service quality in outpatient departments. *Journal of Advanced Nursing*. 34(5), 696-705.
- Hiidenhovi, H., Nojonen, K. & Laippala, P. (2002). Measurement of outpatients' views of service quality in a Finnish university hospital. *Journal of Advanced Nursing*, 38(1), 59-67.

- Hoelter, J.W. (1983). The analysis of covariance structures. *Sociological Methods & Research*, 11(3), 325-344.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage Publications.
- Hu, L-T & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Huang, S.-H., Chen, P.-L., Yang, M.-C., Chang, W.-Y. & Lee, H.-J. (2004). Using a Balanced Scorecard to improve the performance of an emergency department. *Nursing Economic\$, 22(3)*, 140-146.
- Huang, K.Y., Calzada, E., Cheng, S. & Brotman, L.M. (2012). Physical and mental health disparities among young children of Asian immigrants. *Journal of Pediatrics*, 160(2), 331-382.
- Hutchison, B., Ostbye, T., Barnsley, J., Stewart, M., Mathews, M., Campbell, M. K., . . . Tyrrell, C. (2003). Patient satisfaction and quality of care in walk-in clinics, family practices and emergency departments: the Ontario walk-in clinic study. *Canadian Medical Association Journal*, 168(8), 977-983.
- Imel, Z.E., Baldwin, S., Atkins, D.C., Owen, J., Baardseth, T. & Wampold, B.E. (2011). Racial/ethnic disparities in therapist effectiveness: a conceptualization and initial study of cultural competence. *Journal of Counseling Psychology*, 58(3), 290-298.
- Ishikawa, H. & Yamazaki, Y. (2005). How applicable are Western models of patient-physician relationship in Asia?: Changing patient-physician relationship in contemporary Japan. *International Journal of Japanese Sociology*, 14(1), 84-93.
- Jain, S. K. & Gupta, G. (2004). Measuring service quality: SERVQUAL vs. SERVPERF scales. *Vikalpa*, 29(2), 25-37.

- Jarvis, C.B., MacKenzie, S.B. & Podsakoff, P.M. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research*, 30(2), 199-218.
- Jirwe, M., Gerrish, K., Keeney, S. & Emami, A. (2009). Identifying the core components of cultural competence: findings from a Delphi study. *Journal of Clinical Nursing*, 18(18), 2622-2634.
- John, J., Yatim, F.M. & Mani, S.A. (2011). Measuring service quality of public dental health care facilities in Kelantan, Malaysia. *Asia-Pacific Journal of Public Health*, 23(5), 742-753.
- Johnson, J.P., Lenartowicz, T. & Apud, S. (2006). Cross-cultural competence in international business: Toward a definition and a model. *Journal of International Business Studies*, 37(4), 525-543.
- Johnston, M.J. & Kanitsaki, O. (2005). *Cultural safety and cultural competence in health care and nursing: An Australian study*. Melbourne: RMIT University
- Johnstone, M.-J. & Kanitsaki, O. (2007). An Exploration of the Notion and Nature of the Construct of Cultural Safety and Its Applicability to the Australian Health Care Context. *Journal of Transcultural Nursing*, 18(3), 247-256.
- Johnstone, M.J. & Kanitsaki, O. (2007). Health care provider and consumer understandings of cultural safety and cultural competency in health care: An Australian study. *Journal of Cultural Diversity*, 14 (2), 96-105.
- Jones, E.T. (2005). *The importance of communication quality in services*. Master's thesis, Florida State University, Tallahassee.
- Kang, G.-D. & James, J. (2004). Service quality dimensions: An examination of Gronroos's service quality model. *Managing Service Quality*, 14(4), 266-277.

- Kagawa-Singer, M. & Kassim-Lakha, S. (2003). A strategy to reduce cross-cultural miscommunication and increase the likelihood of improving health outcomes. *Academic Medicine*, 78(6), 577-587.
- Kagawa-Singer, M., Valdez Dadia, A., Yu, M.C. & Surbone, A. (2010). Cancer, culture, and health disparities: time to chart a new course? *CA: A Cancer Journal for Clinicians*, 60(1), 12-39.
- Kakai, H., Maskarinec, G., Shumay, D.M., Tatsumura, Y. & Tasaki, K. (2003). Ethnic differences in choices of health information by cancer patients using complementary and alternative medicine: An exploratory study with correspondence analysis. *Social Science and Medicine*, 56(4), 851-862.
- Kale, E. & Kumar, B.N. (2012). Challenges in healthcare in multi-ethnic societies: communication as a barrier to achieving health equity. In J. Maddock (Ed.), *Public Health - Social and Behavioral Health*. Retrieved from: <http://www.intechopen.com/books/public-health-social-and-behavioral-health/communication-and-dialog-in-a-multiethnic-population>. (Accessed 15 July 2014).
- Kaplan, R.S. & Norton, D.P. (1993). Putting the balanced scorecard to work. *Harvard Business Review*, 71(5), 134-147.
- Karmali, K., Grobovsky, L., Levy, J. & Keatings, M. (2011). Enhancing cultural competence for improved access to quality care. *Healthcare Quarterly*, 14(3), 52-57.
- Kerfeld, C.I., Hoffman, J.M., Ciol, M.A. & Kartin, D. (2011). Delayed or forgone care and dissatisfaction with care for children with special health care needs: the role of perceived cultural competency of health care providers. *Maternal and Child Health Journal*, 15(4), 487-496.
- Kersnik, J. (2000). An evaluation of patient satisfaction with family care in Slovenia. *International Journal for Quality in Health Care*, 12(2), 143-147.

- Kesuma, I.A.W., Hadiwidjojo, D., Wiagustini, N.L.P. & Rohman, F. (2013). Service quality influence on patient loyalty: Customer relationship management as mediation variable. *International Journal of Business and Commerce*, 2(12), 1-14.
- Khanchitpol, Y. & William, C.J. (2013). Measuring hospital out-patient service quality in Thailand. *Leadership in Health Services*, 26(4), 338 - 355.
- Kilbourne, W.E., Duffy, J.A., Duffy, M. & Giarchi, G. (2004). The applicability of SERVQUAL in cross-national measurements of health-care quality. *Journal of Services Marketing*, 18(7), 524-533.
- Kim, J. (2003). *A multi-dimensional and hierarchical model of integrated service quality for the internet golf stores*. PhD thesis, Florida State University, Tallahassee.
- Kim, K. (2008). *An investigation of the relationship between cultural competence and expatriate job performance*. PhD thesis. Texas A&M University, USA.
- Kim-Godwin, Y.S., Clarke P.N. & Barton, L. (2001). A model for the delivery of culturally competent community care. *Journal of Advanced Nursing*, 35(6), 918-925.
- Kiropoulos, L.A., Klimidis, S. & Minas, H. (2004). Depression and anxiety: A comparison of older-aged Greek-born immigrants and Anglo-Australians. *Australian and New Zealand Journal of Psychiatry*, 38(9), 714-724.
- Kleinsorge, I.K. & Koenig, H.F. (1991). The silent customers: measuring customer satisfaction in nursing homes. *Journal of Health Care Marketing*, 11(4), 2-13.
- Ko, Y.J. & Pastore, D.L. (2005). A hierarchical model of service quality for the recreational sport industry. *Sport Marketing Quarterly*. 14(2), 84-97.
- Kobayashi, H., Takemura, Y. & Kanda, K. (2010). Patient perception of nursing service quality; an applied model of Donabedian's structure-process-outcome approach theory. *Scandinavian Journal of Caring Sciences*, 25(3), 419-425.

- Kogut, B. & Singh, H. (1988). The effect of culture on foreign entry mode. *Journal of International Business Studies*, 19(3), 411-432.
- Kui-Son, C., Hanjoon, L., Chankon, K. & Sunhee, L. (2005). The service quality dimensions and patient satisfaction relationships in South Korea: Comparisons across gender, age and types of service. *Journal of Services Marketing*, 19(3), 140-149.
- Kupka, B. & Everett, A. (2007). The rainbow model of intercultural communication competence: A review and extension of existing research. *Intercultural Communication Studies*, 16(2), 20-25.
- Ladhari, R. (2009). A review of twenty years of SERVQUAL research. *International Journal of Quality and Service Sciences*, 1(2), 172-198.
- Landrum, H., Prybutok, V., Zhang, X. & Peak, D. (2009). Measuring IS system service quality with SERVQUAL: Users' perceptions of relative importance of the five SERVPERF dimensions. *Informing Science: the International Journal of an Emerging Transdiscipline*, 12, 17-35.
- Lee, M.A. & Yom Y.H. (2007). A comparative study of patients' and nurses' perceptions of the quality of nursing services, satisfaction and intent to revisit the hospital: A questionnaire survey. *International Journal of Nursing Studies*, 44(4), 545-555.
- Leininger, M. (1978). *Transcultural nursing: Concepts, theories, research and practices* (2nd ed.), New York: McGraw Hill.
- Leonard, T. (2006). Exploring diversity in nursing education: Research findings. *Journal of Cultural Diversity*, 13(2), 87-96.
- Leong, F.T.L & Lee, S-H. (2006). A cultural accommodation model for cross-cultural psychotherapy: Illustrated with the case of Asian Americans. *Psychotherapy: Theory, Research, Practice, Training*, 43(4), 410-423.

- Levine, C.S. & Ambady, N. (2013). The role of non-verbal behaviour in racial disparities in health care: implications and solutions. *Medical Education*, 47(9), 867–876.
- Lie, D.A., Lee-Rey, E., Gomez, A., Berekenyei, S. & Braddock, C.H. (2011). Does cultural competency training of health professionals improve patient outcomes? A systematic review and proposed algorithm for future research. *Journal of General Internal Medicine*, 26(3), 317-325.
- Limberger, A.A. (2010). *Impact of repeated participation in computer-based cultural competency review training on cultural competence of healthcare providers and satisfaction outcomes among their patients*. PhD thesis. TUI University, USA.
- Lin, X. & Guan, J. (2002). Patient satisfaction and referral intention: Effect of patient-physician match on ethnic origin and cultural similarity. *Health Marketing Quarterly*, 20(2), 49-68.
- Lin, H.C., Xirasagar, S. & Laditka, J.N. (2004). Patient perceptions of service quality in group versus solo practice clinics. *International Journal for Quality in Health Care*, 16(6), 437-445.
- Lin, D.J., Sheu, I.C., Pai, J.Y., Bair, A., Hung, C.Y., Yeh, Y.H. & Chou, M.J. (2009). Measuring patient's expectation and the perception of quality in LASIK services. *Health and Quality of Life Outcomes*, 7(63), 1-8.
- Lindström, N.B. (2008). *Intercultural communication in health care - Non-Swedish physicians in Sweden*. PhD thesis, University of Gothenburg.
- Lis, C.G., Rodeghier, M. & Gupta, D. (2011). The relationship between perceived service quality and patient willingness to recommend at a national oncology hospital network. *BMC Health Services Research*, 11(1), 46-54.
- Liu, H.C. (2013), A theoretical framework for holistic hospital management in the Japanese healthcare context. *Health Policy*, 113(1/2), 160-169.

- Lorden, A., Coustasse, A. & Singh, K.P. (2008). The balanced scorecard framework - A case study of patient and employee satisfaction: What happens when it does not work as planned?, *Health Care Management Review*, 33(2), 145-155.
- Lau, M.M., Cheung, R., Lam, A.Y.C. & Chu, Y.T. (2013). Measuring service quality in the banking industry: A Hong Kong based study. *Contemporary Management Research*, 9(3), 263-282.
- Leung, K., Ang, S., & Tan, M.L. (2014). Intercultural Competence. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 489-519.
- Lucas, T., Michalopoulou, G., Falzarano, P., Menon, S. & Cunningham, W. (2008). Healthcare provider cultural competency: Development and initial validation of a patient report measure. *Health Psychology*, 27(2), 185-193.
- Macinnes, D., Beer, D., Keeble, P., Rees, D. & Reid, L. (2010). The development of a tool to measure service user satisfaction with in-patient forensic services: The forensic satisfaction scale. *Journal of Mental Health*, 19(3), 272-281.
- Malhotra, N.K., Ulgado, F.M., Agarwal, J., Shainesh, G. & Wu, L. (2005). Dimensions of service quality in developed and developing economies: multi-country cross-cultural comparisons. *International Marketing Review*, 22(3), 256-278.
- Margaritis, E., Katharaki, M. & Katharakis, G. (2012). Exceeding parents' expectations in Ear-Nose-Throat outpatient facilities: The development and analysis of a questionnaire. *Evaluation and Program Planning*, 35(2), 246-255.
- Margolis, S., Al-Marzouqi, S., Revel, T. & Reed, R. (2003). Patient satisfaction with primary health care services in the United Arab Emirates. *International Journal for Quality in Health Care*, 15 (3), 241-249.

- Marti'nez, L. & Marti'nez, J.A. (2008). Developing a multidimensional and hierarchical service quality model for the travel agencies industry. *Tourism Management*, 29(4), 706-720.
- Marti'nez, L. & Marti'nez, J.A. (2010). Rethinking perceived service quality: An alternative to hierarchical and multidimensional models. *Total Quality Management and Business Excellence*, 21(1), 93-118.
- McGinnis, S.L., Brush, B.L. & Moore, J. (2010). Cultural similarity, cultural competence, and nurse workforce diversity. *Western Journal of Nursing Research*, 32(7), 894-909.
- Mead, N. & Roland, M. (2009). Understanding why some ethnic minority patients evaluate medical care more negatively than white patients: a cross sectional analysis of a routine patient survey in English general practices. *British Medical Journal*, 339, doi:10.1136/bmj.b3450.
- Mehta, S. (2011). Service quality as predicator of patient satisfaction: A study of the health care sector. *Journal of Health Management*, 13(2), 211-229.
- Mete, C. & Dönmez, S. (2013). *A model to measure and evaluate the quality of service of healthcare systems in a gynecological clinic- A case study*. Bachelor's thesis, Linnaeus University, Sweden.
- Michalopoulou, G., Falzarano, P., Arfken, C. & Rosenberg, D. (2009). Physicians' cultural competency as perceived by African American patients. *Journal of the National Medical Association*, 101(9), 893-899.
- Michalopoulou, G., Falzarano, P., Arfken, C. & Rosenberg, D. (2010). Implementing Ask Me 3 to improve African American patient satisfaction and perceptions of physician cultural competency. *Journal of Cultural Diversity*, 17(2), 62-67.
- Miller, J.S., Mhalu, A., Chalamilla, G., Siril, H., Kaaya, S., Tito, J., Aris, E. & Hirschhorn, L.R. (2014). Patient satisfaction with HIV/AIDS care at private clinics in Dar es Salaam,

- Tanzania. *Aids Care-Psychological and Socio-Medical Aspects of Aids/HIV*, 26(9), 1150-1154.
- Moleiro, C., Marques, S. & Pacheco, P. (2011). Cultural diversity competencies in child and youth care services in Portugal: Development of two measures and a brief training program. *Children and Youth Services Review*, 33(5), 767-773.
- Muntlin, Å., Gunningberg, L. & Carlsson, M. (2006). Patients' perceptions of quality of care at an emergency department and identification of areas for quality improvement. *Journal of Clinical Nursing*, 15(8), 1045-1056.
- Murray, S.B. & Skull, S.A. (2005). Hurdles to health: Immigrant and refugee health care in Australia. *Australian Health Review*, 29(1), 25-29.
- Murti, A., Deshpande, A. & Srivastava, N. (2013). Patient satisfaction and consumer behavioural intentions: an outcome of service quality in health care services. *Journal of Health Management*, 15(4), 549-577.
- Naidu, A. (2009). Factors affecting patient satisfaction and healthcare quality. *International Journal of Health Care Quality Assurance*, 22(4), 366-381.
- Narayan, M.C. (2010). Culture's effects on pain assessment and management American *Journal of Nursing*, 110(4), 38-47.
- Neumann, M., Edelhäuser, F., Tauschel, D., Fischer, M., Wirtz, M., Woopen, C., . . . Scheffer, C. (2011). Empathy decline and its reasons: a systematic review of studies with medical students and residents. *Academic Medicine*, 86(8), 996-1009.
- Ng, S.I., Lee, J.A. & Soutar, G.N. (2007). Tourists' intention to visit a country: The impact of cultural distance. *Tourism Management*, 28(6), 1497-1506.
- Ngo-Metzger, M., Telfair, J., Sorkin, D.H., Weidmer, B., Weech-Maldonado, R., Hurtado, M. & Hays, R.D. (2006). *Cultural competency and quality of care: obtaining the patient's perspective*. The Commonwealth Fund.

- NHMRC. (2005). *Cultural competency in health- A guide for policy, partnerships and participation*, Retrieved from <https://www.nhmrc.gov.au/guidelines/publications/hp19-hp26>. (Accessed 15 April 2011).
- NPS Medicinewise. (2008). *NPS Annual Consumer Surveys: Findings about complementary medicines use*. Retrieved from <http://www.nps.org.au/about-us/what-we-do/our-research/complementary-medicines/nps-consumer-survey-cms-use-findings>. (Accessed 15 April 2012).
- NSW Department of Health. (2010). *The health of the people of New South Wales*. Retrieved from <http://www.health.nsw.gov.au/publichealth/chorep>. (Accessed 15 April 2012).
- Oliver, R.L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.
- Oliver, R.L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York: Irwin/ McGraw-Hill.
- Orsi, J.M., Margellos-Anast, H. & Whitman, S. (2010). Black–White health disparities in the united states and Chicago: A 15-year progress analysis. *American Journal of Public Health*, 100(2), 349-356.
- Otani, K. & Kurz, S. (2004). The impact of nursing care and other healthcare attributes on hospitalized patient satisfaction and behavioral intentions. *Journal of Healthcare Management*, 49(3), 181–197.
- Overall, P.M. (2009). Cultural competence: A conceptual framework for library and information science professionals. *Library Quarterly*, 79(2), 175-204.
- Owusu-Frimpong, N., Nwankwo, S. & Dason, B. (2010). Measuring service quality and patient satisfaction with access to public and private healthcare delivery. *International Journal of Public Sector Management*, 23(3), 203-220.

- Padela, A.I. & Punekar, I.R.A. (2009). Emergency medical practice: Advancing cultural competence and reducing health care disparities. *Academic Emergency Medicine*, 16(1), 69-75.
- Padma, P., Rajendran, C. & Sai, L.P. (2010). Service quality and its impact on customer satisfaction in Indian hospitals: Perspectives of patients and their attendants. *Benchmarking: An International Journal*, 17(6), 807 - 841.
- Paez, K.A., Allen, J.K., Beach, M.C., Carson, K.A. & Cooper, L.A. (2009). Physician cultural competence and patient ratings of the patient-physician relationship. *Journal of General Internal Medicine*, 24(4), 495-498.
- Pakdil, F. & Harwood, T.N. (2005). Patient satisfaction in a preoperative assessment clinic: An analysis using SERVQUAL dimensions. *Total Quality Management and Business Excellence*, 16(1), 15-30.
- Panvelkar, P., Saini, B. & Armour, C. (2009). Measurement of patient satisfaction with community pharmacy services: a review. *Pharmacy World and Science*, 31(5), 525-537.
- Papadopoulos, I., Tilki, M. & Lees, S. (2004). Promoting cultural competence in healthcare through a research-based intervention in the UK. *Diversity in Health and Social Care*, 1(2), 107-116.
- Papanikolaou, V. & Zygiaris, S. (2014). Service quality perceptions in primary health care centres in Greece. *Health Expectations*, 17(2), 197-207.
- Parasuraman, A., Zeithaml, V. & Berry, L. (1988). SERVQUAL: A multiple item scale for measuring customer perception of service quality. *Journal of Retailing*, 64(1), 12- 37.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml, V.A. & Malhotra, A. (2005), E-S-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213-233.

- Pearce D.G. (2012). *Frameworks for Tourism Research*. Wallingford, CABI.
- Perloff, R.M., Bonder, B., Ray, G.B., Ray, E.B. & Siminoff, L.A. (2006). Doctor-patient communication, cultural competence, and minority health. *American Behavioral Scientist*, 49(6), 835-852.
- Pfeiffer, A., Noden, B., Walker, Z., Aarts, R. & Ferro, J. (2011). General population and medical student perceptions of good and bad doctors in Mozambique. *Education for Health*, 24(1), 387.
- Podsakoff, P.M., MacKenzie, S.B., Lee J.Y. & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879- 903.
- Pollack, B.L. (2009). Linking the hierarchical service quality model to customer satisfaction and loyalty. *Journal of Services Marketing*, 23(1), 42-50.
- Preston, S.D., Hofelich, A.J. & Stansfield, R.B. (2013). The ethology of empathy: A taxonomy of real-world targets of need and their effect on observers. *Frontiers in Human Neuroscience*, 7(488), 1-13.
- Priporas, C.V., Laspa, C. & Kamenidou, I. (2008). Patient satisfaction measurement for in-hospital services: A pilot study in Greece. *Journal of Medical Marketing*, 8(4), 325-340.
- Pumariega, A.J., Rothe, E. & Rogers, K. (2009). Cultural competence in child psychiatric practice. *Journal of the American Academy of Child & Adolescent Psychiatry*, 48(4), 362-366.
- Qin, H. (2009). *Links among perceived service quality, patient satisfaction and behavioral intentions in the urgent care industry: Empirical evidence from college students*. PhD thesis, University of North Texas, USA.

- Ramez, W.S. (2012). Patients' perception of health care quality, satisfaction and behavioral intention: An empirical study in Bahrain. *International Journal of Business and Social Science*, 13(18), 131-141.
- Ramsaran-Fowdar, R.R. (2008). The relative importance of service dimensions in a healthcare setting. *International Journal of Health Care Quality Assurance*, 21(1), 104-124.
- Ramsaran-Fowdar, R.R. (2007). Developing a service quality questionnaire for the hotel industry in Mauritius, *Journal of Vacation Marketing*, 13(1), 19-27.
- Rao, K.D., Peters D.H. & Bandeen-Roche, K. (2006). Towards patient-centered health services in India-a scale to measure patient perceptions of quality. *International Journal for Quality in Health Care*, 18(6), 414-421.
- Räsänen, E. (2011). *An intercultural approach to Japanese tourist satisfaction with Finnish service encounters*. Master's thesis, University of Jyväskylä, Finland.
- Rashid, W.E.W. & Jusoff, H.J.K. (2009). Service quality in health care setting. *International Journal of Health Care Quality Assurance*, 22(5), 471- 482.
- Ray, S.G. (2011). *Net-savvy patients overrule docs' advice*. Retrieved from <http://www.sakaaltimes.com/Tiny.aspx?K=R1R7x>. (Accessed 15 June 2014).
- Rehman, J. (2012). *Accuracy of medical information on the internet*. Retrieved from <http://blogs.scientificamerican.com/guest-blog/2012/08/02/accuracy-of-medical-information-on-the-internet/>. (Accessed 15 June 2014).
- Reimann, M., Lünemann, U.F. & Chase, R.B. (2008). Uncertainty avoidance as a moderator of the relationship between perceived service quality and customer satisfaction. *Journal of Service Research*, 11(1), 63-73.
- Riess, H., Kelley, J.M., Bailey, R.W., Dunn, E.J. & Phillips, M. (2012). Empathy training for resident physicians: a randomized controlled trial of a neuroscience-informed curriculum. *Journal of General Internal Medicine*, 27(10), 1280–1286.

- Rohini, R. & Mahadevappa, B. (2006). Service quality in Bangalore hospitals: An empirical study. *Journal of Services Research*, 6(1), 59-84.
- Rossiter, J.R. (2002). The C-OAR-SE procedure for scale development in marketing. *International Journal of Research in Marketing*, 19(4), 305-335.
- Rull, G. (2011). *Ethnic Matters*. Retrieved from <http://www.patient.co.uk/doctor/ethnic-matters>. (Accessed 15 March 2013).
- Rust, R.T. & Oliver, R. (1994). *Service quality: insights and managerial implications from the frontier*. Sage Publications, Thousand Oaks, CA.
- Saha, S., Korthuis, P.T., Cohn, J.A., Sharp, V.L., Moore, R.D. & Beach, M.C. (2013). Primary care provider cultural competence and racial disparities in HIV care and outcomes. *Journal of General Internal Medicine*, 28(5), 622-629.
- Saha, S., Sanders, D.S., Korthuis, P.T., Cohn, J.A., Sharp, V.L., Haidet, P., Moore, R.D. & Beach, M. (2011). The role of cultural distance between patient and provider in explaining racial/ethnic disparities in HIV care. *Patient Education and Counseling*, 85(3), e278-e284.
- Sánchez-Hernández, R.M., Martínez-Tur, V., Peiró, J.M. & Ramos, J. (2009). Testing a hierarchical and integrated model of quality in the service sector: functional, relational, and tangible dimensions. *Total Quality Management and Business Excellence*, 20(11), 1173-1188.
- Saravanan, R. & Rao, K.S.P. (2007). Measurement of service quality from the customer's perspective - An empirical study. *Total Quality Management and Business Excellence*, 18(4), 435-449.
- Schmitt, N.W. & Stults, D.M. (1985). Factors defined by negatively keyed items: The results of careless respondents?. *Applied Psychological Measurement*, 9(4), 367-373.

- Schröder, A., Larsson, B.W. & Ahlström, G. (2007). Quality in psychiatric care: an instrument evaluating patients' expectations and experiences. *International Journal of Health Care Quality Assurance*, 20(2), 141-160.
- Selvarajah, C. (2006). Dimensions that relate to cross-cultural counselling: Perceptions of mental health professionals in Auckland, New Zealand. *Cross Cultural Management: An International Journal*, 13(1), 54-68.
- Seth, N., Deshmukh, S.G. & Vrat P. (2005). Service quality models: A review. *International Journal of Quality and Reliability Management*, 22(9), 913-949.
- Sharma, P., Tam, J.L.M. & Kim, N. (2009). Demystifying intercultural service encounters: Toward a comprehensive conceptual framework. *Journal of Service Research*, 12(2), 227-242.
- Shen, Z. (2004). Cultural competence models in nursing: A selected annotated bibliography. *Journal of Transcultural Nursing*, 15(4), 317-322.
- Shibre, T., Negash, A., Kullgren, G., Kebede, D., Alem, A., Fekadu, A. & Jacobsson, L. (2001). Perception of stigma among family members of individuals with schizophrenia and major affective disorders in rural Ethiopia. *Social Psychiatry and Psychiatric Epidemiology*, 36(6), 299-303.
- Shonk, D.J. (2006). *Perceptions of service quality, satisfaction and the intent to return among tourists attending a sporting event*. PhD thesis, Ohio State University, USA.
- Sizoo, S., Plank, R., Iskat, W. & Serrie, H. (2005). The effect of intercultural sensitivity on employee performance in cross-cultural service encounters. *Journal of Services Marketing*, 19(4), 245- 255.
- Smedley, B.D., Stith A.Y. & Nelson, A.R. (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care*. Washington DC: National Academy Press.

- Sohail, M.S. (2003). Service quality in hospitals: More favourable than you might think. *Managing Service Quality*, 13(3), 197-206.
- Solomon L.S., Hays R.D., Zaslavsky, A.M., Ding, L. & Cleary, P.D. (2005). Psychometric properties of a group-level consumer assessment of health plans study (CAHPS) instrument. *Medical Care*, 43(1), 53-60.
- Sousa, C.M.P. & Bradley, F. (2006). Cultural distance and psychic distance: Two peas in a pod?. *Journal of International Marketing*. 14(1), 49-70.
- Sower, V., Duffy, J., Kilbourne, W., Kohers, G. & Jones, P. (2001). The dimensions of service quality for hospitals: development and use of the KQCAH scale. *Health Care Management Review*, 26(2), 47-59.
- Spitzberg, B.H. & Changnon, G. (2009). Conceptualizing intercultural competence. In D.K. Deardoff (Ed), *The Handbook of Intercultural Competence*. Newbury Park: Sage. 2-52.
- Spitzberg, B.H. (1989). Issues in the development of a theory of interpersonal competence in the intercultural context. *International Journal of Intercultural Relations*, 13(3), 241-268.
- SPSS Statistics for Windows. (2012). Version 21.0, computer software, IBM Corp., Armonk, NY.
- Squires, J.E., Estabrooks, C.A., Gustavsson, P. & Wallin, L. (2011). Individual determinants of research utilization by nurses: a systematic review update. *Implementation Science*, 6(1). doi: doi:10.1186/1748-5908-6-1.
- Stauss, B. & Mang, P. (1999). Culture shocks in inter-cultural service encounters. *Journal of Services Marketing*, 13(4/5), 329-346.
- Stewart, A.L., Napoles-Springer, A.M., Gregorich, S.E. & Santoyo-Olsson, J. (2007). Interpersonal processes of care survey: Patient-reported measures for diverse groups. *Health Services Research*, 42(3), 1235–1256.
- Stewart, S. (2006). *Cultural competence in health care*. Sydney: Diversity Health Institute.

- Strauss A.L. (1987). *Qualitative analysis for social scientists*. Cambridge University Press.
- Street, R.L., O'Malley, K.J., Cooper, L.A. & Haidet, P. (2008). Understanding concordance in patient-physician relationships: Personal and ethnic dimensions of shared identity. *Annals of Family Medicine*, 6(3), 198-205.
- Suarez-Balcazar, Y., Balcazar, F., Taylor-Ritzler, T., Portillo, N., Rodakowsk, J., Garcia-Ramirez, M. & Willis, C. (2011). Development and validation of the cultural competence assessment instrument: A factorial analysis. *Journal of Rehabilitation*, 77(1), 4-13.
- Sue, D.W. (2001). Multidimensional facets of cultural competence. *The Counseling Psychologist*, 29(6), 790-821.
- Suh, E.E. (2004). The model of cultural competence through an evolutionary concept analysis. *Journal of Transcultural Nursing*, 15(2), 93-102.
- Suki, N., Lian, J. & Suki, N. (2011). Do patients' perceptions exceed their expectations in private healthcare settings?. *International Journal of Health Care Quality Assurance*, 24(1), 42-56.
- Sullivan, L.M., Stein, M.D., Savetsky, J.B. & Samet, J.H. (2000). The doctor-patient relationship and HIV-infected patients' satisfaction with primary care physicians. *Journal of General Internal Medicine*, 15(7), 462-469.
- Supraner, L. (2010). Getting angry at work: Affective and neutral cultures. Retrieved from <http://www.callearning.com/blog/2010/06/getting-angry-at-work-affective-and-neutral-cultures/>. (Accessed 15 July 2014).
- Sureshchandar, G.S., Rajendran, C. & Kamalanabhan, T.J. (2001). Customer perceptions of service quality: A critique. *Total Quality Management*, 12(1), 111-124.
- Tabachnick, B.G. & Fidell, L.S. (2007). *Using multivariate statistics*. Boston, Pearson: Allyn & Bacon.

- Tam, J.L.M. (2007). Linking quality improvement with patient satisfaction: A study of a health service centre. *Marketing Intelligence & Planning*, 25(7), 732-745.
- Teal, C.R. & Street R.L. (2009). Critical elements of culturally competent communication in the medical encounter: A review and model. *Social Science and Medicine*, 68(3), 533-543.
- Teas, R. (1993). Expectations, performance evaluation and customer's perceptions of quality. *Journal of Marketing*, 57(4), 18-34.
- Thom, D.H. & Tirado, M.D. (2006). Development and validation of a patient-reported measure of physician cultural competency. *Medical Care Research and Review*. 63(5), 636-655.
- Thomas, D.C., Elron, E., Stahl, G., Ekelund, B.Z., Ravlin, E.C., Cerdin, J.-L., . . . Lazarova, M.B. (2008). Cultural intelligence. *International Journal of Cross Cultural Management*, 8(2), 123-143.
- Thomas, S.B., Fine, M.J. & Ibrahim, S.A. (2004). Health disparities: The importance of culture and health communication. *American Journal of Public Health*, 94(12), 2050.
- Thornton, R.L J., Powe, N.R., Roter, D. & Cooper, L.A. (2011). Patient–physician social concordance, medical visit communication and patients' perceptions of health care quality. *Patient Education and Counseling*, 85(3), e201-e208.
- Thow, A.M. & Waters, A.M. (2005). *Diabetes in culturally and linguistically diverse Australians: Identification of communities at high risk*. Canberra: Australian Institute of Health and Welfare.
- Torres, E.N. (2014). Deconstructing service quality and customer satisfaction: Challenges and directions for future research. *Journal of Hospitality Marketing and Management*, 23(6), 652-677.

- Torres, M.B. & Rao, N. (2007). Disclosure and truth in physician-patient communication an exploratory analysis in Argentina, Brazil, India and the United States. *Journal of Creative Communications*, 2(3), 279-305.
- Trompenaars, F. & Hampden-Turner, C. (1997). *Riding the waves of culture: understanding diversity in global business*. McGraw-Hill.
- Truong, M., Paradies, Y. & Priest, N. (2014). Interventions to improve cultural competency in healthcare: A systematic review of reviews. *BMC Health Services Research*, 14(1), 1-31
- Tucker, J.L. & Adams, S.R. (2001). Incorporating patients' assessments of satisfaction and quality: An integrative model of patients' evaluations of their care. *Managing Service Quality: An International Journal*, 11(4), 272-287.
- Ueltschy, L.C., Laroche, M., Tamlia, R.D. & Yannopoulos, P. (2004). Cross-cultural invariance of measures of satisfaction and service quality. *Journal of Business Research*, 57(8), 901-912.
- Vahey, D.C. (2000). *Relationships between nurses job satisfaction, patient satisfaction, and patient adherence to care provider recommendations after discharge from a veterans' administration hospital*. PhD thesis, The University of Wisconsin, USA.
- van de Vijver, F.J.R. & Leung, K. (1997a). *Methods and data analysis for cross-cultural research*. Thousand Oaks, CA: Sage.
- Vanservellen, G. (1997). *Communication skills for health care professional: Concepts and techniques*. CA: Aspen.
- Villani, J. & Mortensen, K. (2014). Decomposing the gap in satisfaction with provider communication between English- and Spanish-speaking Hispanic patients. *Journal of Immigrant and Minority Health*, 16(2), 195-203.
- Vinagre, M. & Neves, J. (2008). The influence of service quality and patients' emotions on satisfaction. *International Journal of Health Care Quality Assurance*, 21(1), 87-103.

- Vissandjee, B., Denetto, S., Migliardi, P. & Proctor, J. (2014). Female genital cutting (FGC) and the ethics of care: community engagement and cultural sensitivity at the interface of migration experiences. *BMC International Health and Human Rights*, 14. doi: 10.1186/1472-698X-14-13.
- Wallace, E.A. & Duffy, F.D. (2010). Cultural competency training and performance measures to reduce racial disparities in health care quality. *Annals of Internal Medicine*, 152(10), 685-687.
- Wang, S.S. (2013). *U.S. Health spending: one of these things not like others*. Retrieved from <http://blogs.wsj.com/economics/2013/07/23/u-s-health-spending-one-of-these-things-not-like-others/>. (Accessed 15 June 2014).
- Weber, R. (1990). *Basic of content analysis* (2nd ed.). SAGE Publications, Thousand Oaks, CA.
- Weerasinghe, S. (2012). Inequities in visible minority immigrant women's healthcare accessibility. *Ethnicity and Inequalities in Health and Social Care*, 5(1), 18-28.
- Wendler, D., Kington, R., Madans, J., Van Wye, G., Christ-Schmidt, H., Pratt, L. A., . . . Emanuel, E. (2005). Are racial and ethnic minorities less willing to participate in health research?. *PLoS medicine*, 3(2), 202-210.
- Whitley, R. (2012). Religious competence as cultural competence. *Transcultural Psychiatry*, 1-16.
- Wicks, A.M. & Chin, W.W. (2008). Measuring the three process segments of a customer's service experience for an out-patient surgery center. *International Journal of Health Care Quality Assurance*, 21(1), 24-38.
- Wikberg, A. & Bondas, T. (2010). A patient perspective in research on intercultural caring in maternity care: A meta-ethnography. *International Journal of Qualitative Studies on Health Well-being*, 5(1). doi: 10.3402/qhw.v5i1.4648.

- Williams, C. & Buswell, J. (2003). *Service quality in leisure and tourism*. Wallingford, UK: CABI Publishing.
- Williamson, M., Tudball, J., Toms, M., Garden, F. & Grunseit, A. (2008). *Information use and needs of complementary medicines users*. Sydney: National Prescribing Service.
- Wilson-Stronks, A. & Mutha, S. (2010). From the perspective of CEOs: What motivates hospitals to embrace cultural competence?. *Journal of Healthcare Management*, 55(5), 339-351.
- Wong, J.C.H. (2002). Service quality measurement in a medical imaging department. *International Journal of Health Care Quality Assurance*, 15(5), 206-212.
- Wongrukmit, P. & Thawesaengskulthai, N. (2014). Hospital service quality preferences among culture diversity. *Total Quality Management and Business Excellence*, 25(7-8), 908-922.
- World Health Organization. (1978). *Declaration of Alma-Ata international conference on primary health care, Alma-Ata*. Retrieved from http://www2.paho.org/hq/dmdocuments/2010/PHC_Alma_Atta-Declaration-1978.pdf. (Accessed 15 June 2012).
- Wu, H.L., Liu, C.Y. & Hsu, W.H. (2008). An integrative model of customers' perceptions of health care services in Taiwan. *Service Industries Journal*, 28(9), 1307-1319.
- Xu, Y. (2010). Communication patterns and styles about serious health conditions: Cultural differences between Asians and Americans. *Home Health Care Management and Practice*, 22(4), 299-300.
- Yang-Kyun, K., Chul-Ho, C., Seo-Kyu, A., In-Ho, G. & Han-Joong, K. (2008). A study on medical services quality and its influence upon value of care and patient satisfaction - Focusing upon outpatients in a large-sized hospital. *Total Quality Management and Business Excellence*, 19(11), 1155-1171.

- Yasuda, S., Zhang, L. & Huang, S.-M. (2008). The role of ethnicity in variability in response to drugs: Focus on clinical pharmacology studies. *Clinical Pharmacology and Therapeutics*, 84(3), 417–423.
- Yavas, U., Benkenstein, M. & Holtz, M. (2008). Service provider-customer similarities and disparities: A German study. *Cross Cultural Management: An International Journal*, 15(3), 275-284.
- Yesilada, F. & Direktor, E. (2010). Health care service quality: A comparison of public and private hospitals. *African Journal of Business Management*, 4(6), 962-971.
- Yin, R.K. (2002). *Case study research: Design and methods*. (3rd ed), Sage, Thousand Oaks, CA.
- Youssef, J. & Deane, F.P. (2006). Factors influencing mental-health help-seeking in Arabic-speaking communities in Sydney, Australia. *Mental Health, Religion and Culture*, 9(1), 43-66.
- Yunus, N.K.Y, Ismail, A., Juga, Z.R. & Ishak, S. (2009). Service quality dimensions, perceive value and customer satisfaction: ABC relationship model testing. *International Business Education Journal*, 2(1), 66-78.
- Zarei, A., Arab, M., Froushani, A.R., Rashidian, A. & Tabatabaei, S.M.G. (2012). Service quality of private hospitals: The Iranian Patients' perspective. *BMC Health Services Research*, 12(31), 1-7.
- Zhou, L. (2004). A dimension-specific analysis of performance only measurement of service quality and satisfaction in China's retail banking. *Journal of Services Marketing*, 18(7), 534-546.
- Zineldin, M. (2006). The quality of health care and patient satisfaction: An exploratory investigation of the 5Qs model at some Egyptian and Jordanian medical clinics. *International Journal of Health Care Quality Assurance*, 19(1), 60-92.

APPENDIX

Appendix 1

The patients' own words and phrases from (interviews largely made up the questionnaire items. Eight key themes were found for quality dimensions.

Table 19 Codebook

Research variables	Examples of key codes derived from literature
Empathy	Giving personal attention Understanding patients' requirements Providing individualised consideration Paying attention to patients' concerns Being friendly and polite
Tangibles	Visually attractive and comfortable physical facilities Professional appearance of professionals Up-to-date medical equipment Convenience of using amenities Clear guide board (e.g., floor sign, building's layout, lab, etc.) Pleasant surrounding (e.g., lighting, temperature, etc.) Appealing atmosphere. Cleanliness
Interaction	Involving patient in making decisions Providing adequate information about the illness/treatments Explaining treatments in the way patients can understand Being willing to answer patients' questions Treating the patient as an individual and not just a number Giving personalised attention Asking questions of patients
Knowledge and expertise	Being well-trained and qualified Carrying out their tasks competently Being skilful and competent Feeling safe during examination and treatment Being highly skilled Providing correct diagnosis
Operation	Ease of scheduling appointment Providing clear directions for getting care Opening hours
Communication	Having good interpersonal skills, including good listener and communicate well Providing information on clinical status, progress, and prognosis and processes of care Explaining possible side effects or adverse reactions
Treatment outcome	feeling hopeful as a result of having treatment Increased chances of improving health Feeling encouraged about the treatment Receiving the best possible results Improvement in the future health

Research variables	Examples of key codes derived from literature
Waiting Time	Time spent waiting to see the clinician Waiting time for the physician's examination
Reliability	Giving a prompt service Performing the service right the first time Error-free records
Assurance	Instilling confidence in patients Understanding patients' specific needs Possessing a fine professional training
Relationship	Talking about the things that are happening in life, and not just about the medical condition. Building close relationships
Medical care	Giving the best possible examinations

Table 20 Outpatient service quality dimensions

Main theme/ Sub-categories	Frequency
Doctor empathy	143
The doctor paid attention to my concerns	22
The doctor tried to put me at ease (e.g. talked to me about things other than my medical condition to relax me.)	25
The doctor was courteous and respectful	30
The doctor was nice and caring	66
Doctor expertise	147
The doctor made a correct diagnosis	36
The doctor was highly experienced	14
The doctor was well-trained and knowledgeable	97
Doctor professionalism	162
The doctor asked me enough questions to find out my problem	25
The doctor did a thorough examination	29
The doctor explained things in a simple way that I could understand	12
The doctor gave me adequate information about my illness and treatment process	49
The doctor involved me(or family) in making decisions about my treatment	13
The doctor listened carefully to what I said	34
Operation	13
Registration procedure was simple and easy	6
The clinic had convenient operating hours	3
The clinic's records and documentation were error free (e.g., billing, patient's medical record)	4

Main theme/ Sub-categories	Frequency
Outcome	75
I am(was) motivated to follow the treatment the doctor prescribed	19
I believe my health will improve (improved) as a result of attending the clinic	50
I believe the results of my treatment will be(were) the best they can be	6
Staff Concern	77
The staff explained things very well	4
The staff gave me prompt service	4
The staff were carrying out their tasks competently	13
The staff were courteous and respectful	19
The staff were nice and friendly	27
The staff were willing to help me	10
Tangibles	59
The clinic had a pleasant environment (building layout, waiting room, lighting, smelling, noise)	21
The clinic had comfortable furniture	10
The clinic was clean	21
The doctor and staff had neat appearance	5
The forms, signs, and brochures were clear	2
Timeliness	40
Appointments at the clinic run on time.	3
Waiting time was acceptable	37

Figure 8 Coding by node-1

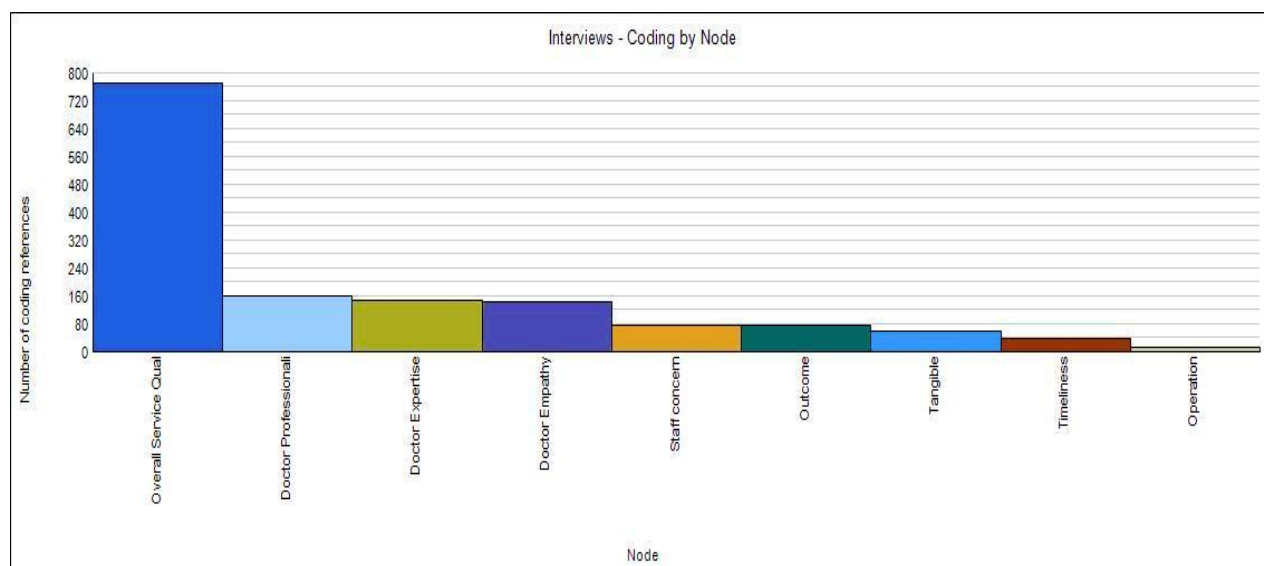
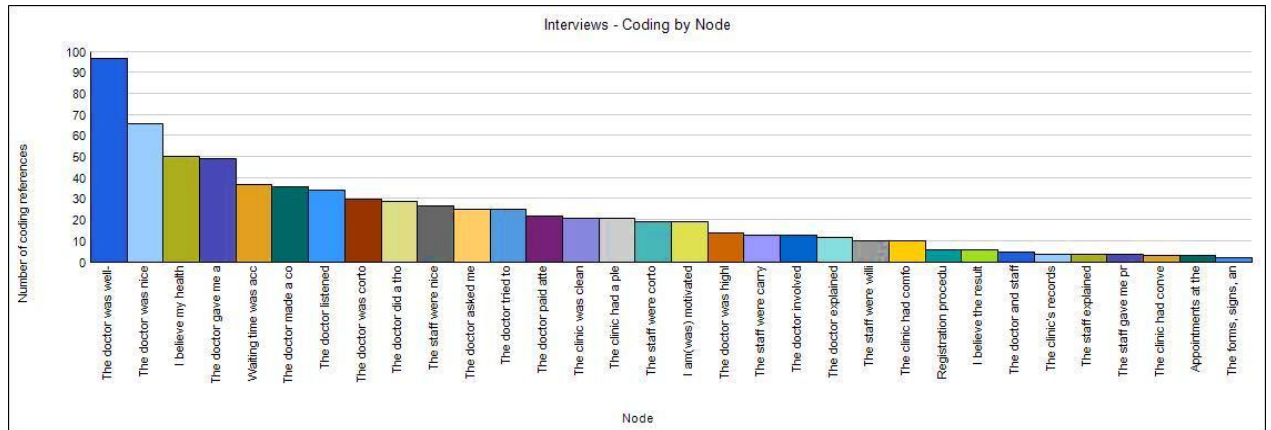


Figure 9 Coding by node-2



Appendix 2

Each unit of analysis was given a code based on their demographic characteristics including, ethnicity, religion, gender, education, age, and years living in Australia. Ethnicity was coded as: Afghan (AFG), Anglo Saxon (ANG), Arab (ARA), Chinese (CHI), Indian (IND), Indonesian (IDO), Iranian (IRA), Islander (ISL), Malaysian (MAL), Serb (SER), and Vietnamese (VIE). Religion was coded as: Christian (CHR), Muslim (MUS), Hindu (HIN), Baha'i (BAH), and No-religion (NOR). Gender was coded as: Male (M), and Female (F). Education was coded as: Illiterate (IL), High school graduate (HI), Tafe (TA), Bachelor's degree (BA), Master's degree (MA), and PhD (PH). Age was coded as: 21-25 (1), 26-30 (2), 31-35 (3), 36-40 (4), 41-45 (5), 46-50 (6), 51-55 (7), and 56-60 (8). Years living in Australia was coded as: 1-3 (1), 4-6 (2), 7-9 (3), 10-12 (4), 13-15 (5), and >15 (6). For example, the code AFG-MUS-M-IL-8-3 refers to an Afghan, Muslim, male, illiterate, age of 56-60, who is living for 7-9 years in Australia.

Table 21 Codes of interviewees

#	Ethnicity	Religion	Gender	Education	Age	Years living in Australia	Codes (based on demographics)
1	Afghan	Islam	Male	Illiterate	56-60	7	AFG-MUS-M-IL-8-3
2	Anglo-Saxon	Christianity	Female	Bachelor's degree	36-40	>15	ANG-CHR-F-BA-4-6
3	Anglo-Saxon	Christianity	Female	High school graduate	31-35	>15	ANG-CHR-F-HI-3-6
4	Anglo-Saxon	Christianity	Male	Bachelor's degree	46-50	>15	ANG-CHR-M-BA-6-6
5	Anglo-Saxon	Christianity	Male	Bachelor's degree	36-40	>15	ANG-CHR-M-BA-4-6
6	Anglo-Saxon	No religion	Female	Bachelor's degree	36-40	>15	ANG-NOR-F-BA-4-6
7	Anglo-Saxon	Christianity	Male	High school graduate	36-40	>15	ANG-CHR-M-HI-4-6
8	Anglo-Saxon	No religion	Male	High school graduate	51-55	>15	ANG-NOR-M-HI-7-6
9	Anglo-Saxon	No religion	Female	Bachelor's degree	31-35	>15	ANG-NOR-F-BA-3-6
10	Anglo-Saxon	Christianity	Female	Bachelor's degree	31-35	>15	ANG-CHR-F-BA-3-6
11	Arab	Islam	Female	High school graduate	36-40	7	ARA-MUS-F-HI-4-3
12	Arab	Christianity	Female	High school graduate	26-30	12	ARA-CHR-F-HI-2-4
13	Arab	Islam	Female	Master's degree	31-35	4	ARA-MUS-F-MA-3-2
14	Arab	Islam	Female	High school graduate	26-30	4	ARA-MUS-F-HI-2-2
15	Arab	Islam	Male	Tafe	36-40	5	ARA-MUS-M-TA-4-2
16	Chinese	Christianity	Female	Bachelor's degree	21-25	2	CHI-CHR-F-BA-1-1
17	Chinese	No religion	Male	Bachelor's degree	36-40	4	CHI-NOR-M-BA-4-2
18	Chinese	No religion	Male	Master's degree	26-30	4	CHI-NOR-M-MA-2-2
19	Chinese	Christianity	Female	Master's degree	26-30	3	CHI-CHR-F-MA-2-1
20	Chinese	No religion	Female	Master's degree	26-30	5	CHI-NOR-F-MA-2-2
21	Indian	Hinduism	Female	High school graduate	36-40	8	IND-HIN-F-HI-4-3

#	Ethnicity	Religion	Gender	Education	Age	Years living in Australia	Codes (based on demographics)
22	Indian	Hinduism	Female	Bachelor's degree	41-45	>15	IND-HIN-F-BA-5-6
23	Indian	Hinduism	Female	PhD	46-50	>15	IND-HIN-F-PH-6-6
24	Indonesian	Christianity	Male	Master's degree	36-40	5	IDO-CHR-M-MA-4-2
25	Indonesian	Christianity	Male	Master's degree	36-40	2	IDO-CHR-M-MA-4-1
26	Iranian	Islam	Female	High school graduate	36-40	4	IRA-MUS-F-HI-4-2
27	Iranian	Islam	Female	Master's degree	31-35	5	IRA-MUS-F-MA-3-2
28	Iranian	No-religion	Female	Master's degree	26-30	3	IRA-NOR-F-MA-2-1
29	Iranian	Islam	Female	Bachelor's degree	36-40	8	IRA-MUS-F-BA-4-3
30	Iranian	Baha'i	Male	Bachelor's degree	36-40	6	IRA-BAH-M-BA-4-2
31	Iranian	Christian	Female	High school graduate	46-50	13	IRA-CHR-F-HI-6-5
32	Islander	Christian	Male	Bachelor's degree	41-45	4	ISL-CHR-M-BA-5-2
33	Islander	Christian	Female	High school graduate	46-50	>15	ISL-CHR-F-HI-6-6
34	Malaysian	Islam	Female	Bachelor's degree	31-35	6	MAL-MUS-F-BA-3-2
35	Malaysian	Islam	Female	Master's degree	26-30	3	MAL-MUS-F-MA-2-1
36	Serbia	No-religion	Female	Bachelor's degree	31-35	12	SER-NOR-F-BA-3-4
37	Vietnamese	No-religion	Female	Bachelor's degree	36-40	6	VIE-NOR-F-BA-4-2
38	Vietnamese	No-religion	Male	Master's degree	41-45	10	VIE-NOR-M-MA-5-4
39	Vietnamese	No-religion	Male	Master's degree	36-40	5	VIE-NOR-M-MA-4-2
40	Vietnamese	Christianity	Female	High school graduate	51-55	>15	VIE-CHR-F-HI-7-6

Appendix 3

Service quality questionnaire-English version

General Questions

1. Gender: Male ☐ Female ☐

2. Marital status:

Never Married ☐ Married ☐ Divorced ☐ Separated ☐ Widowed ☐ De facto ☐

3. Age:

18-25 ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ More than 66 ☐

4. Current employment status: Full-time ☐ Part-time ☐ Unemployed ☐

5. Highest level of education:

Never attended school ☐ Some Primary school ☐ Completed Primary School ☐ Some High School ☐
Completed High School ☐ TAFE or Trade Certificate or Diploma ☐ Bachelor (BA, BS, BM,...) ☐
Postgraduate (MA, MS, MD, PhD,...) ☐ Other (Please Specify).....

6. Annual gross income of your household (before tax)(AUD):

Less than \$20,000 ☐ \$20,001 – \$40,000 ☐ \$40,001 – \$60,000 ☐ \$60,001 - \$80,000 ☐ \$80,001 – \$100,000 ☐
\$100,001 and over ☐

7. Race/ethnicity:

African/Black ☐ Aboriginal/Torres ☐ Asian (Far East Asia) ☐ White/Caucasian ☐
Indian/Srilankan/Bangladesh ☐ Middle Eastern/ North African ☐ Other ☐

8. Country of birth:

9. Religion:

Protestant ☐ Catholic ☐ Other Christianity (Orthodox, Coptic, etc.) ☐ Native Australian ☐ Buddhism ☐
Islam ☐ Hinduism ☐ Judaism ☐ No religion ☐ Other ☐

10. Is English your first (mother) language? Yes ☐ No ☐
If No or Sometimes what is your first language?

11. Do you usually speak English at home? Yes ☐ No ☐

12. How well do you speak English? Very Well ☐ Well ☐ Not Well ☐ Not at all ☐

13. How long have you been living in Australia?

Less than 1 year ☐ 1-4 years ☐ 5-8 years ☐ 9-12 years ☐ More than 12 years ☐

*** Please recall your last visit with a doctor in a hospital or a medical centre in Australia and answer the following questions based on that visit. This visit should have been in the past 2 months.**

1. For what health condition did you visit the doctor?

Allergies ☐ Cardiovascular/Heart attack ☐ Cancer ☐ Eye Disease ☐ Dental ☐ Diabetes ☐
Maternity/Women health ☐ Orthopaedic ☐ Other (Please Specify).....

2. What was the race/ethnicity of the doctor?

African/Black ☐ Aboriginal/Torres ☐ Asian (Far East Asia) ☐ White/Caucasian ☐
Indian/Pakistani/Bangladesh ☐ Middle East/ North African ☐ Other ☐ I Don't Know ☐

3. What was the gender of the doctor? Male ☐ Female ☐

4. If your first language is **not** English:

Could the doctor speak in **your** first language? Yes ☐ No ☐ I Don't Know ☐

5. How many times have you visited that doctor in the past year?

One ☐ Two ☐ Three ☐ More than 3 times ☐

	1. Strongly Disagree	2. Disagree	3. Somewhat Disagree	4. Not Sure	5. Somewhat Agree	6. Agree	7. Strongly Agree
The quality of care I received from the clinic was very good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of service I received from the clinic was of a high standard in every way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, the quality of the service provided by the clinic was excellent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor listened carefully to what I said	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor asked me enough questions to find out my problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor did a thorough examination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor involved me(or family) in making decisions about my treatment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor gave me adequate information about my illness and treatment process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor explained things in a simple way that I could understand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor was nice and caring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor was courteous and respectful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor paid attention to my concerns	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor tried to put me at ease (e.g. talked to me about things other than my medical condition to relax me.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor was well-trained and knowledgeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor made a correct diagnosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor was highly experienced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The staff were nice and friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The staff were courteous and respectful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The staff were willing to help me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The staff gave me prompt service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The staff explained things very well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The staff were carrying out their tasks competently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appointments at the clinic run on time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waiting time was acceptable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The clinic had convenient operating hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The clinic's records and documentation were error free (e.g., billing, patient's medical record)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Registration procedure was simple and easy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The clinic was clean	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The clinic had a pleasant environment (building layout, waiting room, lighting, smelling, noise)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The forms, signs, and brochures were clear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The clinic had comfortable furniture (chairs, examination tables, coffee table, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor and staff had neat appearance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe my health will improve(improved) as a result of attending the clinic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe the results of my treatment will be(were) the best they can be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1. Strongly Disagree	2. Disagree	3. Somewhat Disagree	4. Not Sure	5. Somewhat Agree	6. Agree	7. Strongly Agree
I am(was) motivated to follow the treatment the doctor prescribed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My feelings towards the clinic are very positive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good about coming to this clinic for my treatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I am satisfied with the clinic and the service it provided	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Service quality questionnaire-Chinese version sample

	1. 非常不同意	2. 不同意	3. 有些不同意	4. 不确定	5. 有些同意	6. 同意	7. 非常同意
诊所提供的护理质量非常好。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
诊所提供的服务质量在各方面的水平都很高。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
总的来说，诊所提供的服务质量非常好。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生非常认真地聆听我的话	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生详细询问我的病情	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生给我做了全面检查	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生在决定治疗方案时征询了我和我家人的意见	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生充分告知我的病情以及治疗进程	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生解释问题简单易懂	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生人很好，有爱心	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生懂礼貌，尊重人	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生关注我的担忧	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生努力让我放松（比如谈论一些除了病情之外的其他事情让我放松）	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生受过良好训练，专业知识过硬	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生做出了正确的诊断	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生非常有经验	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Service quality questionnaire-Vietnamese version sample

	1. Rất không đồng ý	2. Không đồng ý	3. Không đồng ý một chút	4. Không chắc	5. Đồng ý một chút	6. Đồng ý	7. Rất đồng ý
<u>Bác sĩ đó nghe tôi nói một cách cẩn thận</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Bác sĩ đó hỏi tôi đủ câu hỏi để tìm ra bệnh cho tôi</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Bác sĩ đã khám rất kỹ lưỡng</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Bác sĩ đó cho tôi tham gia quyết định hướng điều trị</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Bác sĩ đó cung cấp đủ thông tin cho tôi về bệnh tình và quá trình điều trị</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Bác sĩ đó nói chuyên theo cách mà tôi có thể hiểu được</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Bác sĩ đã rất ân cần và tận tâm</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Bác sĩ đã lịch sự và tôn trọng tôi</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Bác sĩ đó quan tâm đến những lo lắng của tôi</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Bác sĩ đã cố gắng giúp tôi cảm thấy thoải mái (ví dụ như nói chuyện với tôi về những điều khác hơn là tình trạng sức khỏe của tôi để thư giãn tôi.)</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Service quality questionnaire-Persian version sample

7. کاملاً موافقم	6. موافقم	5. تا حدودی موافقم	4. تظری ندارم	3. تا حدودی مخالقم	2. مخالقم	1. کاملاً مخالقم	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	یزشک معالج به دقت به حرفهای من گوش داد
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	یزشک معالج از من به اندازه کافی برای تشخیص بیماری ام سوال پرسید
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	یزشک معالج به دقت مرا معاینه کرد
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	یزشک معالج نظر من (یا خانواده ام) را جهت تصمیم گیری نهایی برای نحوه درمان جویا شد
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	یزشک معالج اطلاعات کافی در مورد بیماری ام و نحوه درمان آن در اختیار من قرار داد
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	یزشک معالج مطالب را به زبان ساده توضیح داد بطوریکه کاملاً متوجه میشدم
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	یزشک معالج خوش برخورد و مهربان بود
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	یزشک معالج مودب بود و با احترام با من رفتار میکرد
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	یزشک معالج به نگرانیهای من اهمیت میداد
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	یزشک معالج تلاش میکرد تا من احساس آرامش نمایم (مثلاً در مورد چیزهایی غیر از بیماری ام با من صحبت کرد تا من احساس بهتری داشته باشم)

Service quality questionnaire-Arabic version sample

7. موافق بشدة	6. موافق	5. موافق جزئياً	4. غير متأكد	3. غير موافق جزئياً	2. غير موافق	1. غير موافق بشدة	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	الطبيب استمع بعناية لما قلته له
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	سألني الطبيب أسئلة كافية لمعرفة مشكلتي
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	قام الطبيب بإجراء فحص شامل
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	أشركني الطبيب في اتخاذ القرارات لمعالجتي
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	قدم لي الطبيب معلومات وافية عن حالتي المرضية وعملية العلاج
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	كان الطبيب يتحدث بطريقة أستطيع فهمها
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	كان الطبيب ودود ويظهر الاهتمام
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	كان الطبيب مهذب ومحترم
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	تنبه الطبيب إلى مخاوفي
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	حاول الطبيب تهدئتي (على سبيل المثال تحدث لي عن أشياء أخرى غير حالتي الطبية حتى (استرخي)

Cultural distance and cultural competence questionnaire-English version

Ethnic distance	1. Totally Similar	2. Moderately Similar	3. Slightly Similar	4. Not Sure	5. Slightly Different	6. Moderately Different	7. Totally Different
The doctor and I had racial/ethnic backgrounds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor and I had cultural backgrounds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor and I were in terms of skin colour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Cultural distance	1. Totally Similar	2. Moderately Similar	3. Slightly Similar	4. Not Sure	5. Slightly Different	6. Moderately Different	7. Totally Different
The way the doctor and I speak was....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The way the doctor and I reason about problems was....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor and I had styles of communication....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor and I have general values in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Cultural competence

Cultural knowledge	1. Strongly Disagree	2. Disagree	3. Somewhat Disagree	4. Not Sure	5. Somewhat Agree	6. Agree	7. Strongly Agree
The doctor seemed knowledgeable about my culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor seemed informed about my culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor seemed able to understand my culture's specific characteristics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cultural awareness	1. Strongly Disagree	2. Disagree	3. Somewhat Disagree	4. Not Sure	5. Somewhat Agree	6. Agree	7. Strongly Agree
The doctor was aware of cultural differences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor was making an effort to understand cultural differences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor seemed aware of views he/she might have towards specific cultural/ethnic groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cultural skills	1. Strongly Disagree	2. Disagree	3. Somewhat Disagree	4. Not Sure	5. Somewhat Agree	6. Agree	7. Strongly Agree
The doctor was well trained to treat patients of my ethnic/cultural background	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The doctor possessed the skills that are needed to treat a patient from your cultural or ethnic background	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will recommend the doctor to people from my cultural/ethnic background	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Preference for same-race doctor questionnaire-English version

- Do you usually prefer to visit a doctor who has the same ethnic/cultural background as you?

Yes ☐ I don't care about doctor's background ☐

If your answer is **YES** Please explain why below (you can tick more than 1 choice)

- 1) Feel more comfortable with the doctor being from the similar culture ☐
- 2) Receive more attention and respect ☐
- 3) Can communicate and understand better by having the same language ☐
- 4) Have more trust in the knowledge and expertise of the doctor being from the similar culture ☐
- 5) Other reasons(Please explain below) ☐

.....

Cultural distance and cultural competence questionnaire-Chinese version sample

	1. 完全相似	2. 大致相似	3. 基本相似	4. 不确定	5. 有些不同	6. 大致不同	7. 完全不同
我和医生有.....种族背景	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我和医生有.....文化背景	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我和医生肤色.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1. 完全相似	2. 大致相似	3. 基本相似	4. 不确定	5. 有些不同	6. 大致不同	7. 完全不同
我和医生的说话方式.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我和医生推断问题的方式.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我和医生的交流风格.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我和医生有.....生活价值观	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1. 非常不同意	2. 不同意	3. 稍微不同意	4. 不确定	5. 稍微同意	6. 同意	7. 非常同意
医生似乎熟悉我的文化	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生似乎了解我的文化	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生似乎能够理解我的文化特点	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生能够意识到文化差异	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生努力理解文化差异	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生似乎能意识到他对特定文化/种族群体的态度	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生在对待不同文化/种族背景的患者方面受过良好的训练	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
医生有足够的技巧来对待不同文化/种族背景的患者	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我会把给我看病的医生推荐给与我有相同文化/种族背景的人	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 4

Information sheet



Department of Marketing and Management
Faculty of Business and Economics
Macquarie University, NSW, 2109

Phone: +61 (2) 9850-9026
Fax: +61 (2) 9850-6065
Email: somayeh.alizadeh@mq.edu.au

Information Sheet

Name of Research: Exploring the efficacy of cultural competence in Australia's healthcare system.

This research is being conducted by Somayeh Alizadeh (Co-investigator) from the Department of Marketing and Management, (Tel: (02) 9850 9026, Email: somayeh.alizadeh@mq.edu.au) to meet the requirements for her PhD degree under the supervision of Dr. Meena Chavan (Chief-investigator), (Tel: (02) 9850 9026, Email: meena.chavan@mq.edu.au) from the Department of Marketing and Management. This research has been funded by the Macquarie University-Faculty of Business and Economics.

What is the purpose of this research?

This research is designed to determine how ethnically/culturally diverse patients evaluate the quality of health care services and identify any differences in their perceptions. The secondary aim of this research is to explore doctors' communication skills and cultural knowledge with the intention of identifying its efficacy on patients' perceptions of the service.

Who can participate in this research?

Anyone between 18 and 80 years of age, who has visited a doctor in a hospital or a medical centre within the **past 2 months** in **Australia** can participate and share his/her experience with us by completing our questionnaire.

How can I participate in this research?

If you volunteer to participate:

- ❖ Please complete the attached questionnaire. Completion of the questionnaire will take about 20 minutes. **There is no wrong or right answer**, we only need to know your feelings and opinions on each item.
- ❖ After returning the completed questionnaire to the reception you can collect one \$15 gift card.

Your participation is completely voluntary and you can withdraw at any time without having to give a reason and without adverse consequence.

If you would like to be informed about the research findings, you can include your email on the last page of the questionnaire and we will send you a summary of the results after the completion of the project.

Confidentiality

All information you provide in the questionnaire will remain confidential and only the chief-investigator and co-investigator will have access to it. The returned questionnaires will be held securely at Macquarie University-Faculty of Business and Economics. Results will be published aggregately without mentioning any individual information of participants or the names of any hospital or clinic. The Publications will be in the format of a journal article and PhD thesis.

Who should I contact if I have concerns about the conduct of this research?

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (Tel: (02) 9850 7854; email: ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Consent form



Department of Marketing and Management
Faculty of Business and Economics
Macquarie University, NSW, 2109

Phone: +61 (2) 9850-9026
Fax: +61 (2) 9850-6065
Email: somayeh.alizadeh@mq.edu.au

Interview Consent Form

Name of Research: Exploring the efficacy of cultural competence in Australia's healthcare system.

This research is being conducted by Somayeh Alizadeh (Co-investigator) from the Department of Marketing and Management, (Tel: (02) 9850 9026, Email: somayeh.alizadeh@mq.edu.au) to meet the requirements for her PhD degree under the supervision of Dr. Meena Chavan (Chief-investigator), (Tel: (02) 9850 9026, Email: meena.chavan@mq.edu.au) from the Department of Marketing and Management. This research has been funded by the Macquarie University-Faculty of Business and Economics.

What is the purpose of this research?

This research is designed to determine how ethnically/culturally diverse patients evaluate the quality of health care services and identify any differences in their perceptions. The secondary aim of this research is to explore doctors' communication skills and cultural knowledge with the intention of identifying its efficacy on patients' perceptions of the service.

Who can participate in this research?

Anyone between 18 and 80 years of age, who has at least four experiences of visiting a doctor in a hospital or a medical centre and receiving medical service in Australia over the previous two years can participate.

How can I participate in this research?

If you decide to volunteer, you will be asked to partake in an interview of about 45 minutes in length. With your consent, this interview will be tape recorded. You will be paid \$40 for your participation. Your participation is completely voluntary and you can withdraw at any time without having to give a reason and without adverse consequence. The interview will be held at any place that suits you. You will be asked several questions about the quality of medical services and ethnic/cultural differences between patients and health practitioners. You will not be asked to state your name or any individual information on the recording.

Confidentiality

Your responses to the interview questions will be kept confidential. The transcripts with no name and the recordings will be kept securely at Macquarie University. The recording will be erased as soon as it is transcribed. The only individuals with access to data collected will be the co-investigator, Somayeh Alizadeh, and chief-investigator Dr. Meena Chavan. No individual will be identified in any publications of the results.

Who should I contact if I have concerns about the conduct of this research?

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Agreement:

The nature and purpose of this research have been sufficiently explained and I agree to participate in this study. Any questions that I asked about the purpose and nature of the interview have been answered to my satisfaction. I agree that the interview may be electronically recorded. I understand that I am free to withdraw at any time without incurring any penalty.

Participant Name: _____ Date: _____

Participant Signature: _____

* If you would like to be informed about the results, you can include your email address below:

Email: _____

Investigator Name: _____ Date: _____

Investigator Signature: _____

(INVESTIGATOR'S [OR PARTICIPANT'S] COPY)

Ethics letter



Mrs Yanru Ouyang <yanru.ouyang@mq.edu.au>

to Dr, me ▾

Dear Dr Chavan,

Re: 'Exploring the efficacy of cultural competence in Australia's health care system.'

Reference No.: 5201200550

Thank you for your recent correspondence. Your response has addressed the issues raised by the Faculty of Business & Economics Human Research Ethics Sub Committee. Approval of the above application is granted, effective 4 September 2012 and you may now commence your research.

This research meets the requirements of the National Statement on Ethical Conduct in Human Research (2007). The National Statement is available at the following web site:

http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/e72.pdf.

The following personnel are authorised to conduct this research:

Dr Meena Chavan
Ms Somayeh Alizadeh

NB. STUDENTS: IT IS YOUR RESPONSIBILITY TO KEEP A COPY OF THIS APPROVAL EMAIL TO SUBMIT WITH YOUR THESIS.

Please note the following standard requirements of approval:

1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).
2. Approval will be for a period of five (5) years subject to the provision of annual reports.

Progress Report 1 Due: 4th Sept 2013
Progress Report 2 Due: 4th Sept 2014
Progress Report 3 Due: 4th Sept 2015
Progress Report 4 Due: 4th Sept 2016
Final Report Due: 4th Sept 2017

NB. If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. If the project has been discontinued or not commenced for any reason, you are also required to submit a Final Report for the project.

Progress reports and Final Reports are available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

3. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).
4. All amendments to the project must be reviewed and approved by the Committee before implementation. Please complete and submit a Request for Amendment Form available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms
5. Please notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the continued ethical acceptability of the project.
6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:

<http://www.mq.edu.au/policy/>
http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have final approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

If you need to provide a hard copy letter of Final Approval to an external organisation as evidence that you have Final Approval, please do not hesitate to contact the FBE Ethics Committee Secretariat, via fbe-ethics@mq.edu.au or 9850 4826.

Please retain a copy of this email as this is your official notification of final ethics approval.

Yours sincerely
Alan Kilgore
Chair, Faculty of Business and Economics Ethics Sub-Committee

Appendix 5

Table 22 Preference for a same-race doctor

	Total sample (447)	Caucasian (195)	Non-Caucasian (252)
Prefer same race doctor			
Yes	150 (33.6%)	59(30.3%)	91(36.1%)
No difference	297 (66.4%)	136(69.7%)	161(63.9%)
Reasons for preferring the same race doctor			
Speaking the same language	111(74%)	40(67.8%)	71(78%)
Feel more comfortable	83(55.3%)	26 (44%)	57(62%)
Receive more attention and respect	27(18%)	7(11.9%)	20(22%)
More trust in doctors' knowledge and expertise	51(34%)	36(61%)	15(16.5%)

Note: respondents could choose more than one option

Appendix 6

Acceptance letter

International Journal of Quality & Reliability Management - Decision on Manuscript ID IJQRM-05-2014-0062.R1



Inbox x

awiele@rsm.nl via manuscriptcentral.com
to me, meena.chavan, hamin.hamin

7:53 AM (2 hours ago)



15-Dec-2014

Dear Ms. Alizadeh:

It is a pleasure to accept your manuscript entitled "Quality of care and patient satisfaction amongst Caucasian and non-Caucasian patients: a mixed-method study in Australia" in its current form for publication in International Journal of Quality & Reliability Management. The comments of the reviewer(s) who reviewed your manuscript are included at the foot of this letter.

By publishing in this journal, your work will benefit from Emerald EarlyCite. This is a pre-publication service which allows your paper to be published online earlier, and so read by users and, potentially, cited earlier. Please note, EarlyCite is not a proofing service. Emerald operates a 'right first time' policy, which means that the final version of the article which has been accepted by the Editor will be the published version. We cannot allow further changes to the article once it has been accepted.

Please go to your Author Centre at <https://mc.manuscriptcentral.com/ijqrm> (Manuscripts with Decisions for the submitting author or Manuscripts I have co-authored for all listed co-authors) to complete the copyright assignment form. We cannot publish your paper without this. All authors are requested to complete the form and to input their full contact details. If any of the contact information is incorrect you can update it by clicking on your name at the top right of the screen. Please note that this must be done prior to you submitting your copyright form.

If you would like more information about Emerald's copyright policy please visit the Information & Forms section in the Resources section of your Author Centre.

Thank you for your contribution. On behalf of the Editors of International Journal of Quality & Reliability Management, we look forward to your continued contributions to the Journal.

Sincerely,
Asst. Prof. Ton van der Wiele
Editor, International Journal of Quality & Reliability Management
awiele@rsm.nl