# **Title Page**

A Discursive Analysis Of Contemporary Literature Examining Qualitative Research Findings In Evidence-Based Health Care

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## **Abstract**

The systematic review has become the "gold standard" of evidence. Historically the systematic review has focused on effectiveness and as such the aggregation of results from randomised controlled trials. However health care questions are often complex requiring different research approaches to yield appropriate answers.

It is acknowledged that not all research questions are amenable to the results of RCTS and as such there is now a shift towards understanding the need to incorporate research findings that acknowledge social and cultural concerns. This shift has resulted in an increased use of qualitative research findings as evidence and more specifically the systematic review of qualitative research findings.

While still a relatively new area of research, the methods surrounding qualitative systematic review are fast developing. To date there are many views and debates on how this type of research should be performed. In order to gain a deeper level of understanding of these positions a discursive analysis informed by Foucault was undertaken on contemporary literature.

Incorporating Foucault's archaeological and genealogical aspects to analysis three distinct discursive formations related to the incorporation of qualitative systematic review into evidence-based practice is revealed. History of the present: a voice silenced examines the discourses surrounding the evidence-based revolution lack of reference to incorporating qualitative research findings. Rise of the silenced voice examines the discourses around positioning qualitative research findings into evidence-based practice. The final formation, Building Blocks to systematic review examines all the discourses surrounding the elements of conducting a qualitative systematic review.

Finally the researcher concludes that all approaches to synthesising qualitative research are useful and have a place within health care but only reviews that follow the Five Stages of Systematic Review can be given the label of being a "systematic review". Only those methods that detail an explicit, well defined question, perform a comprehensive search for research, critically assess the quality of research papers, extract and aggregate the findings of the included research papers can be given the label of being a qualitative systematic review.

### **Student Declaration**

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution to Kylie Porritt and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the university Library, being made available for loan and photocopying, subject to the provisions of the Copyright Act 1968.

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**Kylie Porritt** 

18 February 2011

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#### Epigraph

The critical ontology of ourselves has to be considered not, certainly, as a theory, a doctrine, nor even as a permanent body of knowledge that is accumulating; it has to be conceived as an attitude, an ethos, a philosophical life in which the critique of what we are is at one and the same time the historical analysis of the limits that are imposed on us and an experiment with the possibility of going beyond them.

Michel Foucault, "What is Enlightenment?"

# Part I: The Research Project

# **Chapter 1 - Introduction**

# **Synopsis**

The first chapter in presenting a piece of research provides the foundation upon which the research will be conducted. It aims to position and locate the researcher within the project by providing insight into how this particular piece of research evolved and stipulates why this particular piece of research is relevant to the field today. The chapter progresses by detailing the evolution of knowledge and its relevance and applicability to understanding the meaning and value placed on evidence within healthcare. An overview of the thesis is provided to create a clear picture on how the research progresses and to provide clarity to the chapters that follow. The chapter concludes by detailing key concepts and terms that are imperative to understanding this particular field of interest.

## Introduction

Evidence for practice has increasingly influenced and contributed to the improvement of care over the past few decades. While evidence for practice appears to be an integral component to decision making in health care practice, it has historically been dominated by the results of quantitative research. All other forms of research, specifically qualitative research, have, it can be argued, been marginalised.

This study aims to review the degree to which qualitative research, specifically qualitative systematic review, is valued within the domain of evidence-based practice?

The purpose of the study is to examine and explore contemporary debates on the nature of evidence and, more specifically, the place of qualitative research findings in evidence based health care. The intention is to discursively analyse contemporary discourses surrounding the topic (as presented in the extant literature) to uncover competing discourses and the interests they represent; and to develop and clarify the nature, relevance and validity of qualitative research findings in relation to their use as a basis for evidence based practice.

# Positioning of self within the thesis

As with any piece of research it is necessary to be upfront and transparent about how I, the researcher, position myself within this research. So I begin by providing a bit of history on myself and about how I came about conducting this type of research.

I am a mother, wife, sister, daughter, nurse and an academic. All of my experiences throughout both my professional and personal life have played a significant role in the person I am today and how I view and understand the world around me.

I have always had an interest in "quality improvement" and "best practice" however such terms were not of my vocabulary until commencing my professional life. As a child and young adult I strived to achieve my best in all activities. Throughout my professional life I was fortunate enough to be surrounded by work colleagues who also had an interest in performing at their best and in improving practice to improve outcomes. As part of a post-graduate diploma in cardiac nursing program I circulated

through different cardiac wards (cardiovascular intensive care unit, coronary care unit). It was during this time that I saw first hand how research affects practice. In the coronary care unit the management of a myocardial infarction was based on the results of large clinical trials, demonstrating vast improvement in the severity of the infarction.

During my studies for the Master of Nursing Science degree my appreciation and understanding of research grew further. I wanted to help "change the world", making the wards a better place for the patient as well as the nurse. I noticed a conflict in nursing practice on one of our wards. While on the wards, clinical practice in the management of central venous catheter removal changed, however there was no research on which this practice change was based. I undertook a randomised controlled trial comparing the two different practices. Undertaking this process allowed me to gain an appreciation for quantitative evidence, however I always felt that there needed to be something else to capture the patient"s experience.

It wasn't until my time at the Joanna Briggs Institute that I was provided with opportunities to explore the benefits of qualitative research. The world of "evidence – based practice" opened up and I realised that there was a lot to be gained through the conduct of both quantitative and qualitative research.

I must declare that my personal experience and knowledge of qualitative systematic review has been gained through my time working at the Joanna Briggs Institute. I have been involved in a number of projects (locally and internationally) conducting qualitative systematic review. The qualitative systematic reviews I have undertaken have been based on the approach developed and adopted by the Joanna Briggs Institute, grounded in the meta-aggregation methodology using a program developed by the Joanna Briggs Institute - the Qualitative Assessment Review Instrument (QARI).

Although The Joanna Briggs Institute has adopted a firm position on the superiority of meta-aggregation as a method of synthesising evidence in systematic reviews, and in the use of the QARI software, I have been exposed to, and participated in, vigorous ongoing debate regarding all forms of qualitative synthesis. The beliefs of the institute do not dictate my personal views and opinions on qualitative systematic review in that I do not have an affinity towards a particular approach to qualitative systematic review. I believe my experience therefore places me in a unique position to undertake a study such as this. I am able to bring to it some of depth knowledge and experience on the topic under examination while maintaining openness to the discourses surrounding qualitative systematic review as a whole.

# Relevance of study

Qualitative research findings within evidence-based health care are in a state of quandary. Currently there are a number of approaches being used to systematically review qualitative research findings and views on how qualitative research findings should be incorporated into the realm of evidence-based practice. To date there has been no detailed examination into how qualitative research findings and their uses within evidence-based healthcare (with specific reference to qualitative systematic reviews) has evolved. By developing an extensive and thorough understanding on this topic, the field of research can progress and move forward with clear vision.

Considering the current situation of qualitative systematic review, this is therefore a timely and relevant study. In a short period of time qualitative research has progressed from being absent in the evidence-based practice world to its current state where qualitative systematic review is becoming a formidable component. As this occurs there is a danger as Dixon-Woods (2005) declares

"...that in seeking methodological developments, existing methods will be overlooked, and there will be a proliferation of methods that risk reinventing the wheel" (p45).

This study is a necessary component to move forward the field of qualitative systematic review.

It is anticipated that the outcome of this study will provide some clarity to the current state of the systematic review of qualitative research, helping to direct future methodological advancements in this field.

# The pursuit of knowledge

Before undertaking a study that centres around issues concerning the concept of evidence in health and in order to completely comprehend the meaning of evidence and how it fits within today's health care setting, I first examine how knowledge is understood and derived.

The word "science" is derived from the Latin word "scientia" meaning "knowledge". However a more precise definition would be "systematic knowledge" (Rutty 1998). Science is also referred to as any systematic field of study or the knowledge gained from such study. In its broadest sense science refers to, but not exclusively to, any knowledge attained by verifiable means. It has been described as a "rigorous, systematic, critical inquiry, based on carefully collected evidence which supports, demonstrates, "proves" generalised conclusions" (Anonymous 1980, p16).

It is generally conceived that science, as it remains commonly understood today, evolved during the 17<sup>th</sup> century when philosophers began questioning thinking towards the natural world. Though the actual use of the term "scientist" was not in wide spread use until the 19<sup>th</sup> century, until then science was discussed in philosophical terms.

Throughout the Middle Ages it was popularly believed that faith overpowered reason with man's place in society referenced to God. During this time the teachings of the Church and the approved writings of classical scholars (approved by the Church) dictated and influenced peoples" beliefs about why and how things occurred. These teachings, the word of God, became the principal authority of knowledge. The power of reason was seen as subordinate to the power of revelation (Murphy et al, 1998).

The transition through the Middle Ages to the modern period saw this view being challenged with fundamental changes occurring in understanding and attitudes towards the natural world. The noteable scholars of this era began to question how it was that we came to know anything; expressed more succinently by Montaigne, Que sais-je? (What do I know as a fact?). While many of these scholars maintained their faith they questioned how it was that knowledge came to be generated. This period, often refered to as the "Enlightment," marks the time when knowledge became separated from religion.

One of the most noteable philosophers during the period was influential Renaissance philosopher Rene Descartes (1596-1650) and his notion of Dualism. Dualism assumes the existence of two distinct principals of being in the universe. Descartes was the first to clearly identify the mind with consciousness and self-awareness and to distinguish this from the brain. This new thought towards being, as one where mind and body are separate laid the foundations to what is now referred to as "scientific method".

English philosopher, Francis Bacon, was one of the earlier writers on scientific method. In 1620 he proposed, through his writings in *New Organon*, a new system of logic. He described the process of induction as the logic of scientific discovery and deduction as the logic of scientific argument. Bacon called for new scientific methods to be based on inductive generalisation from careful observation and experiment.

Bacon's theories were substantially different to that of Descartes. Where Descartes believed that truth could be obtained through logical reasoning alone, Bacon believed that the mind should be emptied of all preconceptions prior to observations being made. It was no longer considered reasonable to "think it"; one must be able to "see it". It wasn't until 1637 that a framework for scientific method was developed through Descartes" works in *Discourse on Method*. These writings are considered critical in the historical development of the scientific method.

Scientific method refers to the techniques used to acquire new knowledge of the natural world (including the correction and incorporation of previous knowledge). To be termed scientific, a method of inquiry must be based on gathering observable, empirical and measurable evidence subject to specific rules of reasoning. Essentially, scientific method consists of the collection of data through observation and experimentation and the formulation and testing of hypotheses. The scientific method attempts to minimize the influence of a scientist's bias on the outcome of an experiment by basing the investigation on observable, empirical measures, subject to laws of reasoning.

This traditional scientific approach (aligned to a positivist paradigm) to obtaining new knowledge has dominanted the Western world. However this view towards what constitutes systematic knowledge is broadening.

There have been philosophical changes in belief on how truth and knowledge can be constructed. This change has seen a move away from an empirical, positivist perspective to a growing acceptance towards the use of knowledge gained through alternative approaches such as those with a focus towards social and cultural issues (Upshur 2001; Jack 2006). This is reflected in the increasing amount of research being conducted outside of the empirico-positivist paradigm.

The term *paradigm* has been described as a "mechanism to bridge a discipline"s requirements for knowledge and its systems for producing that knowledge" (Weaver & Olson 2006, p460). In more specific terms a paradigm is the categorisation of research methods by the philosophical aspects in which the research is underpinned. Clark (1998) claims that the concept is appropriately applied when "a high level of professional consensus is recognised to exist within particular communities of scientists, regarding aspects of philosophical beliefs, theories, standards for research and exemplary findings" (Clark 1998, p1243). Therefore the paradigm essentially provides the framework for an inquiry. The framework encompasses the theories, principles, presuppositions and values providing direction for the examination (Weaver & Olson 2006).

In healthcare there are essentially three dominant research paradigms, emipiricoanalytical, interpretive and critical. These three paradigms essentially represent three different ways of looking at the world.

Evidence-based practice, and health science generally, has been dominated by the empiric-analytical paradigm. Cutcliffe (2002) succinctly describes this way of knowing as one where "our minds interpret the world through our sense, and because the world is subject to the laws of science, events outside the mind can be observed, described, explained and predicted" (Cutcliffe & McKenna 2002, p612). This philosophical view, known as 'positivism' reflects that truth will be unveiled, no matter the social, religious, political, cultural background of the scientist, through objective, measurable methods and techniques. The generation of knowledge within this paradigm is not arrived at speculatively; it is firmly grounded in something that is "posited", a given. It is based on logic, measurement, absolute principles and prediction (Weaver & Olson 2006). Ultimately, that which is posited is what is observed and this observation is carried out using scientific methods; the outcome to

discover meaning in objects. Positivism therefore embraces the epistemology of objectivism, where objects in the world have meaning prior to, and independently of, any consciousness (Crotty 1998). With strong support for science alone to give access to the truth, Western culture in reference to the nature of science increasingly accepted positivism as the most certain and rigorous kind of knowledge.

It wasn't until the 1960s that positivism came under intense criticism. The notion of independence between objects was challenged and the **post-positivist** paradigm emerged. While still situated under the umbrella of the emipirico-analytical paradigm, a post-positivist perspective believes that the very act of observation alters the object therefore challenging the concept that the observer and observed are independent (Crotty, 1998). Post-positivism surfaced "in response to the realisation that reality can never be completely known and that attempts to measure it are limited to human comprehension" (Weaver & Olson 2006, p460).

The change towards what is considered true and the accumulation of knowledge also gave rise to other scientific paradigms – notably the interpretive and the critical - which essentially inform and represent the qualitative research methodologies.

The **interpretive** paradigm emphasises understanding of meaning in relation to individual actions and the reactions of others (Weaver & Olson 2006). Researchers conducting research within this paradigm attempt to understand phenomena through the meaning that people assign to them. Through gaining an understanding of the phenomena the researcher also seeks for an explanation for social and cultural events based upon the perspectives and experiences of the people being studied. Within this paradigm multiple, socially constructed realities exist.

The **Critical** paradigm concerns itself with "the study of social institutions, issues of power and alienation and envisioning new opportunities" (Weaver & Olson 2006, p460). This particular paradigm aims to bring forth awareness to how our thinking is

socially and historically constructed and how this limits our actions "in order to challenge these learned restrictions" (Fossey et al 2002, p720). The main task of critical research is one of social critique, whereby the restrictive and alienating conditions of the status quo are brought to light. Knowledge within the critical paradigm is acquired through critical discourses and debate as opposed to objective inquiry. Methodologies located with the critical paradigm aim to foster "self-reflection, mutual learning, participation and empowerment, rather than acceptance of discoveries" (Fossey et al 2002, p720).

Traditional science has been challenged and various other approaches have emerged to offer a different perspective. The differences in thought can be connected to the various schools of thought as outlined above (positivism, post-positivism, interpretive and critical). For many disciplines the positivist perspective has been viewed in a hierarchical sense as being the *supreme* view. Even throughout the development of nursing as a discipline it has been implied that this view be conformed to or run the risk of losing professional or disciplinary status (Schumacher & Gortner 1992). It has been only in more recent years that alternative perspectives have been recognised and encouraged and multiple modes of inquiry accepted (Upshur 2001; Jack 2006).

Evidence is therefore increasingly being seen as not merely the logically, measured observations from a positivist stance but as the outcome of any research that has been conducted systematically and adds to the body of knowledge. This growing acceptance towards what constitutes evidence, and the need to have answers to questions not related to effect has seen the growing use of qualitative findings within health care research.

Quite distinct from the above mentioned research paradigms (where knowledge has traditionally been rooted) a relatively new approach to obtaining knowledge is

emerging. Lay knowledge has been described as having a "vitally important role to play in public health research" (Popay & Williams 1996, p760). The expert body of knowledge gained is acquired through checking the experiences of the lay person against life events, circumstances and history (Popay & Williams 1996). An advocate for the incorporation of lay knowledge into health research, Jennie Popay, describes three dimensions of lay knowledge that are particular useful to public health research and practice: lay understandings of the relationship between individual behaviour and life circumstances; lay theories about aetiology and the predictive power of lay knowledge (Popay & Williams 1996).

Lay knowledge is increasingly being seen as another form of "evidence". This is evident through the increased incorporation of lay knowledge into evidence-based health care through consumer panels and consumer involvement.

## Knowledge and evidence in healthcare

Evidence in healthcare is essentially knowledge to inform health care delivery (Jack 2006). There are a variety of sources of knowledge on which health care decisions are based. Pearson (2004) highlights that in conjunction with research evidence other influencing factors can include personal experience as well as the nature of the setting and culture in which health care is being delivered (Pearson 2004). Rycroftmalone (2004) claims that knowledge is derived from four different evidence-bases including (1) research (2) local data and information (3) professional knowledge or clinical experience (4) patient experiences (Rycroft-Malone et al 2004). She proposes that "evidence" in evidence-based practice should be considered to be "knowledge derived from a variety of sources that has been subjected to testing and has been found to be credible" (Rycroft-Malone et al 2004, p83). A similar view is

purported by Gilgun (2006) as she describes how different types of evidence come into play at different points in the process of practice (Gilgun 2006). According to Sackett et al, evidence based health care involves the integration of "individual clinical expertise with the best available external clinical evidence from systematic research" (Sackett et al 1996, p71).

The focus towards incorporating research evidence in decision-making has been heightened by the EBP movement. Evidence within the EBP framework predominantly refers to "primary research findings or "research knowledge"(French 2002). Since the movement began the term evidence has been afforded evergrowing status within the health care setting, so much so that it is now one of the most commonly used terms within the healthcare arena. Rycroft-Malone and colleagues (2004) note that it can be associated with nearly every aspect of healthcare from "evidence-based" practice, "evidence-based" guidelines, "evidence-based" decision-making, "evidence-based" policy making and evidence-informed patient choice (Rycroft-Malone, Seers et al. 2004). The objective of embracing evidence in healthcare, as proclaimed by Dale (2006), is to move decision-making away from the intuitive and subjective towards the scientific and objective (Dale 2006).

#### Overview of thesis

This thesis is presented in seven chapters that can essentially be divided into three parts; part one introduces the study and outlines the theoretical and methodological component; part two presents the research account; and part three presents a discussion and a conclusion.

## Part I: The Research Project

The first chapter is an essential component to the thesis as it provides the foundation upon which the study was undertaken and upon which the following chapters are built. The purpose is to develop an understanding of where I, the researcher, place myself throughout the study, as well as to develop an understanding of how the study came about; why this piece of research is necessary; and an overview of to how the study is presented.

Chapter two introduces the famous French philosopher Michel Foucault. After discussion on how his ideas have been applied to post structural health scholarship I discuss the influence Foucault has had on the design of this study. His work has been inspirational in providing a unique perspective to health care (an example being his work on madness and civilization) with particular emphasis on power and knowledge. Making it clear that this is not a strict Foucauldian archaeological or genealogical analysis, I detail how his notions of the enonce (the statement), discourse, discursive formation, power and knowledge have influenced this analysis providing new and potentially powerful possibilities for the field of qualitative synthesis.

### Part II: The Research Account

With the theory discussed and the method outlined, chapter three, four and five submit the research account. I present the discourses surrounding qualitative findings as evidence as they exist within the public domain. The purpose of these chapters is to impart an insightful critique on the history of qualitative evidence in order to gain understanding and context on the current views on qualitative systematic review.

An examination of the role and position of qualitative research within evidence-based healthcare requires the investigation to begin by tracing back the history of qualitative research within the domain of evidence-based practice. By conducting a historical, detailed examination it is possible to bring to light the events that have placed impact on the field of knowledge surrounding qualitative synthesis. One of the key questions of interest when exploring through the history is "how is today different from yesterday?" How is the world of evidence-based practice different today from when it began?

#### Part III: Discussion / Conclusion

Part three of the thesis provides detailed and in depth discussion with the final chapter revisiting the study as a whole. I argue that systematic review has its own methodology and guiding principles for practice and as such is amendable to the systematic review of both quantitative and qualitative research. I detail five stages to systemisation that are essential to assess whether or not a review is in fact a systematic review and after providing a comparison and examination of different approaches to review advocate for the process of meta-aggregation.

# Key concepts for understanding

Vital to understanding any field of research is a knowledge and understanding of frequently cited terms and phrases specific to the particular field of research. Detailed below are some frequently cited and commonly used terms and phrases specific to the field of evidence-based practice and specifically to the field of qualitative systematic reviews.

Qualitative research: As defined by Dixon-Woods is the "non-numerical analysis of data gathered by distinctive methods such as in-depth interviews, focus groups and participant observations" (Dixon-Woods et al. 2001, p126).

Qualitative evidence: this refers to the findings resulting from the conduct of qualitative research

Feasibility: refers to the practicality and utility of an intervention or activity and can examine why people behave the way they do.

Appropriateness: is considered to be the extent to which the delivery of care is perceived to meet the needs of those whom to care is being offered.

Meta-synthesis: this term is frequently used within the literature and is used interchangeably with the term systematic review. However throughout this thesis the term meta-synthesis will refer to the methodology used to understand or describe key themes on a given topic.

Quantitative research: refers to research that follows a stated methodology and collects and analyses numerical data

Qualitative research: refers to research that follows a stated methodology and collects and analyses textual data

Systematic review: this term will be used to describe the secondary analysis of research conducted using a systematic approach.

## Conclusion

Evidence based practice has become an integral component of practice to assist with the delivery of health care. Traditionally the evidence based practice movement focused on the effectiveness of health care interventions and this saw the results of randomised controlled trails being assigned a higher level of recognition than all other forms of research. However, due to the complex nature of healthcare there has been increasing recognition of a need to extend the boundaries ascribed to the admissibility of various types of research that may contribute to evidence based practice (Barbour 2000). A wider, broader definition of research evidence is being accepted, making way for qualitative research to cement a place within the realm of evidence-based practice. This slow but progressive movement is seeing qualitative research being included in systematic reviews. However the process used to incorporate qualitative research into systematic review is still the subject of a great deal of discussion with some controversial views and opinions proffered.

Part I: The Research Project

**Chapter 2 - Methodology and methods** 

**Synopsis** 

While the first chapter focuses on establishing the importance of conducting this particular piece of research (essentially why this research should be conducted), this chapter that follows focuses on how the research was conducted. Establishing and

defining a theoretical framework is an essential component to any methodological

piece of research, and the work from Foucault has greatly influenced the direction of

this discursive analysis. How Foucault's work has provided a frame of reference is

described but as with any piece of research the practicalities of actually conducting

the research require additional explanation. A discursive analysis model was

developed, and is detailed below, to assist with this process. It is envisaged that

application of this model to the included text will produce a higher level of knowledge

and a deeper level of understanding to the topic of qualitative systematic reviews.

Introduction

Methodology is an important aspect to any form of research. Detail and transparency

to the methods used throughout the research is also as important. The purpose of

this chapter is to detail the underpinning methodology of this study and to outline the

methods utilised. The aim is to provide complete transparency to the process

undertaken and to the decision making process throughout the conduct of the study.

The term "methodology" is derived from the Greek *methodos*, meaning pursuit of knowledge or orderly mode of investigation. In modern usage methodology refers to the rationale and philosophical assumptions that underlie a particular study. The methodology forms the theoretical framework upon which the method chosen for the study can be explained. The methods used within the study detail how systematically the search for knowledge was conducted.

# **Purpose of study**

In the past few decades there has been a focus on clinical practice being supported by the best available evidence in order to produce the best possible outcomes. This focus gave rise to the amalgamation of "good" quality" research, commonly referred to as the systematic review, and has become the foundation on which to base clinical practice. Predominantly the evidence based practice movement has concentrated its efforts around effectiveness and therefore the synthesis of quantitative research. However, in recent years there has been considerable interest in extending the focus solely from effectiveness to other areas of practice such as appropriateness, meaningfulness and feasibility and this has resulted in an increased interest surrounding the methods used to synthesise alternative forms of research (such as the findings of qualitative research). The increased awareness in this area has also lead to substantial scholarly debate surrounding each component of qualitative systematic review (e.g. searching, appraisal, extraction etc). Globally, a number of key organisations have directed their work towards developing and establishing methods for the systematic review of qualitative research. However, to date there is no agreement on methods with each organisation advocating a different process to systematically review qualitative research.

It is here, through discursive analysis informed by the work of Foucault, that this study proposes to bring to light and clarify the debates surrounding qualitative systematic review. The overall purpose of this study is to identify the various positions on the systematic review of qualitative research findings and the interests they represent. It is not to provide an absolute answer on which method of systematic review is more appropriate in a particular set of circumstances than another.

# **Research question**

This study sets out to identity the substance of contemporary debate related to the systematic review of findings of qualitative research.

More specifically, it seeks to establish:

- The contemporary arguments for and against the use of qualitative research findings as evidence in health care practice discourses
- The contemporary discourses relating to the scope and purpose of qualitative systematic review
- 3) The contemporary discourses related to searching for the evidence when conducting qualitative systematic review
- 4) The contemporary discourses related to the appraisal of the validity of qualitative evidence when conducting qualitative systematic review
- 5) The contemporary discourses related to extracting and synthesising findings.

## **Theoretical Framework**

In choosing a research approach, such as discourse analysis, it is of particular importance that the theoretical underpinnings of the approach are both understood and explicitly explained (Nixon & Power 2007). Discourse, at its most general, can be described as the "study of talk and text" (Traynor 2006, p63) or as a "system of signs, whether spoken, written or otherwise" (Traynor 2004, p4). A more detailed definition by Stevenson (2004) describes discourse as "a loose network of terms of reference which construct a particular version of events and which positions subjects in relation to these events" (p18). These are just a few of the many definitions available to describe discourse analysis; the diversity of all the definitions is often the cause of confusion among researchers.

One of the contributing factors to the ambiguity surrounding discourse analysis is its use among multiple academic disciplines. Buus (2005) describes discourse as a "congested concept" suggesting that the difficulty to clearly conceptualise discourse is related to the varying theoretical approaches among a wide range of academic disciplines (Buus 2005). This view is supported by Traynor (2006) who describes the theoretical aspects of discourse as complex suggesting that while the application of discourse analysis may appear to be similar among different disciplines the underpinning theoretical assumptions upon which the analysis is based are quite different (Traynor 2006). When searching for a definition of discourse it is evident that discourse has been separated into two quite distinct but not unconnected patterns of analysis. One pattern describes discourse as a structure and process while another describes discourse in relation to social interactions (Traynor 2004). For example, social scientists have tended to link their analysis of language to social interactions while linguists have maintained their focus of analysis to aspects of effective communication (Traynor 2004). While discourses have been analysed under these

two distinct umbrellas, Traynor (2004) suggests that a combination of both features of analysis makes discourse analysis a "potentially powerful approach" (Traynor 2004).

In health science research, discourse analysis has largely been informed by the work of Foucault and his analysis of discourse towards institutions re-creation of power. A discourse analysis informed by the work of Foucault provides a higher awareness of the politics and unveils any hidden motivations within all the socially dominant as well as all other discourses that exist surrounding the topic. It essentially brings to light all discourses surrounding the topic and looks at why certain discourses have been privileged, at a particular time, over other discourses. Discursive analysis focuses on the ways in which language constructs objects, subjects and experiences, including subjectivity and a sense of self (Stevenson 2004). As Foucault (1972) succinctly explains:

"The questions posed by language analysis of some discursive fact or other is always: according to what rules has a particular statement been made? The description of the events of discourse poses quite a different question: how is it that one particular statement appeared rather than another?" (p30).

Language is not analysed in a reflective or representative manner, instead language is conceptualised as tantamount to experience (Stevenson 2004).

Discourse analysis does not provide a tangible answer to a problem based on scientific research but it does enable access to ontological and epistemological assumptions behind a statement (a project, a method). It enables understanding of the conditions behind a specific "problem" or area and through this process allows us to realise that the very essence of the problem and resolution to the problem lie in the very existence of the assumptions that enable the problem to exist.

The quality of practice can improve when an in depth understanding is achieved (Crowe 2005). Discursive analysis provides the framework to conduct an insightful

critique of a specific area so to generate breadth of knowledge and depth of understanding. More explicitly the purpose of discursive analysis is to expand our horizons, realise our own shortcomings and reveal agendas and motivations. This is achieved by analysing the language beyond the sentence; this process is described in more detail later in this chapter.

The application of Foucaldian inspired discursive analysis in this study attempts to reveal what is being said, thought and done around the topic of qualitative evidence and more specifically qualitative synthesis. This area of research is rapidly developing, and so a discursive analysis is timely at this stage to ensure that future advancements of qualitative synthesis remain relevant.

### Introduction to Foucauldian Discourse Analysis

The French philosopher, Michel Foucault (1926-1984), has exerted considerable influence in the humanities and social sciences with his work on knowledge and power and discourse. Throughout his career Foucault produced a number of influential pieces of work starting off with the notable *Madness and Civilisation*, first published in 1961, followed by *The Birth of the Clinic* (1963) and *Discipline and Punish* (1975). The final aspects of his career were dedicated to the volumes on *The History of Sexuality*. When looking at Foucault's work individually, his initial piece of work (*Madness and Civilisation*) has been described as "floating". However Foucault argues that each piece of his work constitutes a level (of which he describes three) that collectively makes up a historically concrete human experience (Hoy 1986). Foucault assets that one requires a field of knowledge (archaeology), a normative collection of rules (genealogy) and a mode of relation to oneself (ethics) in order to critically analyse human experience (Hoy 1986). While these three levels can be

found in any of his works, the work on the asylum specifically focuses on the first level, the prison the second and sexuality the third.

Rejecting any alignment to post-modernism or post-structuralism, Foucauldian discourse analysis is committed to a critical understanding of how truth, meaning and value are constituted in language and non-verbal texts. Foucauldian discourse analysis is grounded in the belief that everything we are familiar with in our world is formed and reformed through discourses (Stevenson 2004).

Through his work Foucault aimed to discover the relations of specific scientific disciplines and particular social practices and achieved this by studying the different discourses that exist. Text is divided into discourses and the discourses examined for how they position the speakers and how they reproduce the relations of power (Stevenson 2004). Words and phrases are seen to have meaning that are organised into systems and institutions; Foucault termed this "discursive practices". In general terms Foucault aimed to discover the point at which these practices became "coherent reflective techniques with definite goals" and to discover the point at which a particular discourse emerged and came to be seen as true (Rabinow 1984). For Foucault, "the "regime of truth" cannot be represented without tracing, among other things, the positions and function of the intellectual "politically in his specific relation to a local form of power" (Deleuze 1988, pxv).

Applying the work of Foucault to inform this discursive analysis identifies the relationships between knowledge and power in the area of qualitative research as evidence.

## Language defined

As discursive analysis is an in depth critique and examination on language, this study set out to review the language representing each discourse related to qualitative research findings as evidence, or any or all components relating to qualitative systematic review. Predominantly locating the discourses related to the study topic were achieved through a search of both public and professional literature. A more detailed description of the search strategy is provided later in the chapter.

# **Analysis**

Before commencing the analysis of any text or language guided by the principles of Foucault's discourse analysis it is first necessary to have an understanding of the key concepts and principles of Foucauldian discourse analysis. This includes the terms frequently referred to such as archaeology, genealogy, discourse, statements and discursive formations.

Foucault's archaeology of knowledge can essentially be described as a process that aims to bring to light the history of the rules that regulate particular discourses (Alvesson & Karreman 2000). Similarly to that of anthropologists, where the goals of archaeology are to document, understand and explain the origins and development of human culture, an archaeology of knowledge attempts to "mark out" the principles of ordering, transformation and exclusion of discursive formations (Danaher et al. 2000; Alvesson & Karreman 2000). An archaeologist of knowledge is one who analyses by asking what has made possible the different knowledges and what are the rules governing the different discursive formations?

Genealogy on the other hand specifically concentrates on the relations of power connected to discursive practices. It focuses on uncovering the historical relationships between truth, knowledge and power (Danaher et al. 2000; Dreyfus & Rabinow 1983). It is not a separate analysis to archaeology but extends and widens the existing analysis being pursued (Alvesson & Karreman 2000). Genealogy pays particular attention to that which conditions, limits, and institutionalises discursive formations (Dreyfus & Rabinow 1983). Foucault describes the complementing and supportive nature of combining an archaeological and genealogical approach as:

"The critical side of analysis deals with the system's enveloping discourse; attempting to mark out and distinguish the principles of ordering, exclusion and rarity in discourse...The genealogical side of analysis, by way of contrast, deals with series of effective formation of discourse; it attempts to grasp it in its power of affirmation...the power of constituting a domain of objects, in relation to which one can affirm or deny true of false proposition" (cited in Dreyfus & Rabinow 1983, p105).

Both archaeology and genealogy concern themselves with, and focus on, discourse. Discourse is the foundation to discourse analysis. Discourse analysis takes discourse as its object of analysis. Concisely described by Frohman (1994) "its data is talk; not what the talk is referring to but, the talk itself" (Frohmann 1994, p120). Discourse can be understood as a series of events, a means through which the field "speaks" of itself to itself (Danaher et al. 2000, p33). It is often referred to as a type of language, of ideas, statements that allow us to make sense of and "see" things (Danaher et al. 2000). It is these groups of statements that belong to the same discursive formation that form a discourse (Foucault 1972).

It can therefore be seen that the basic unit of discourse is the statement. A discourse is made up of statements and a relationship exists between statements with other statements in that they share and establish context (Danaher et al. 2000). Understanding the context of statements is pivotal to understanding the statement. The same sentence with the same meaning can be different statements. These

statements have different "truth conditions" depending upon the set of statements in which they appear (Dreyfus & Rabinow 1983).

According to Foucault all statements belong to a discursive formation; and as the name suggests, discursive formations are essentially forms of discourse also referred to as "orders of discourse". Discursive formations work to make speech possible, they organise ideas, concepts and produce "objects of knowledge" (Danaher et al. 2000). Discursive formations and statements are closely connected. Foucault describes how the mapping of discursive formations can reveal the specific level of the statement, but also describes how the description of the statement can lead to the individualisation of the discursive formation (Foucault 1972). That being said, discursive formations are also beyond the statement as it is necessary to look within as well as beyond the discourse (Danaher et al. 2000).

## Recognising a statement

At the very centre of archaeology as a method for discourse analysis lies the notion of the *énoncé* or "statement". Foucault privileges the statement as "the simple inscription of what is said" (Deleuze 1988). He describes the statement as "neither hidden nor visible" within the text and allows the statement to be analysed by objectifying the statement, analysing it as an event (Deleuze 1988;Foucault 1972). Each statement therefore is given meaning and is seen as separate to the "unities or frames" to which it has been bundled (such as books, disciplines) (Deleuze 1988). The statement serves as a function that assigns meaning to a series of signs and under what condition the signs make sense. As Foucault explains:

The statement is not therefore a structure; it is a function of existence that properly belongs to signs and on the basis of which one may then decide, through analysis or intuition, whether or not they "make sense", according

to what rule they follow one another or are juxtaposed, of what they are the sign, and what sort of act is carried out by their formulation" (Foucault 1972 p86-87).

The statement is the basic element of knowledge that make propositions, utterances or speech acts meaningful (Deleuze 1988). Statements therefore are not words, phrases or propositions, but "rather formations thrown up by the corpus in question only when the subject of the phrase, the objects of the proposition and the signifiers of words *change* in *nature*: they then occupy the place of the "One speaks" and become dispersed throughout the opacity of language" (Deleuze 1988, p18). It is therefore possible for the same sentence, with the same meaning to have different statements, that is different "truth conditions" (Danaher et al. 2000). The truth condition of the statement is dependent upon the set of statements in which it appears. In essence it is the context in which the statement is made.

### Laws behind the language of the statement

In order to develop a deeper understanding of "behind the statement" Foucault suggests analysing the laws behind the statements, to consider how these statements were made possible. To achieve this, the meaning of each piece of text is examined by:

1. Establishing *who is speaking* – In the words of Foucault, "Who, among the totality of speaking individuals, is accorded the right to use this sort of language? Who is qualified to do so? Who derives from it his own special quality, his prestige, and from whom, in return, does he receive if not the assurance, at least the presumption that what he says is true? What is the status of the individuals who – alone – have the right, sanctioned by law or tradition, judiciously defined or spontaneously accepted, to proffer such a discourse?" (Foucault 1972, p50)

- What are the *institutional sites* from which the person/group speaking make their discourse, from which the discourse derives its legitimate source and point of application? (Foucault 1972)
- What are the positions of the subject? That is, what situation makes it
  possible for the person/group speaking to do so in relation to the discourse
  being investigated (Foucault 1972)
- 4. Establishing what is being said? At this stage the focus placed on the text is directed at the "performative properties of language". This notion of performative refers to the literary use of the notion of performative, "to pose questions about how to think about the constitutive force of language, and the nature of discursive events and literature as an act" (Culler 2000 cited in Graham 2005, p503). In other words the text will be examined for how the use of the words evoke images, telling a story rather then merely reporting (Graham 2005).
- 5. Identify **whose interests are being served?** This involves examining what group or person benefits from what is being said.

# Defining a discourse

The basic unit of discourse is the statement. Any discourse is made up of a group of statements in that they belong to the same discursive formation. Between these groups of statements relationships are forged. The purpose is to critique and understand these relationships.

In defining a discourse Foucault seeks to not only understand how the relationships between statements are forged but also to understand how certain statements and discourses are distributed in the history of the discursive formation. Questions such as "are these discourses grouped together out of necessity, chance or are there regularities between them that define a common system of formation need to be considered?" As Foucault states

"the problem is not therefore to ask one-self how and why it was able to emerge and become embodied at this point in time; it is, from beginning to end, historical — a fragment of history, a unity and discontinuity in history itself...(Foucault 1972, p131).

In defining discourses Foucault further claims that all discourses already exist.

"...all manifest discourse is secretly based on an "already-said"; and that this "already-said" is not merely a phrase that has already been spoken, or a text that has already been written, but a "never-said", an incorporeal discourse, a voice as silent as a breath, a writing that is merely a hollow of its own mark." (Foucault 1972, pp27-28).

However it is only once it has been acknowledged that it is given status within the practice. Using the analysis of shipping records, Danaher (2000) illustrates this point. During a study of shipping records it is acknowledged that acts of piracy begin to arise, or enter the discourse. Piracy may have occurred previously but it is not until it has entered the discourse of the shipping records that it is given status (Danaher et al. 2000).

It is the questioning and challenging of statements within a discourse that can bring about changes to different discursive formations (Danaher et al. 2000).

"...the problem is no longer one of tradition, of tracing a line, but one of division, of limits; it is no longer one of lasting foundations, but one of transformations that serve as new foundations, the rebuilding of foundations." (Foucault 1972, p6).

#### Formation of concepts / themes / strategies

Instead of searching for homogeneity in a discursive entity, Foucault looks at ruptures, breaks, mutations, and transformations, including marginal or forgotten

discourses to understand the production of meaning and knowledge. The following points need to be considered when analysing a body of discourse:

- Determine the "possible points of diffraction of a discourse" (Foucault 1972).
   That is, identify any points of incompatibility. There may be two or more points of incompatibility within the one discourse formation.
- Points of equivalence Rather than position the identified incompatible concepts in a hierarchical level these points are positioned side-by-side offering an alternative view or account.
- Link points of systematisation The identified equivalent yet incompatible
  concepts form discursive sub-groups. This process aims to identify the
  common components that link these incompatible concepts.
- 4. Acknowledge that all possible alternatives have not been realised. As Foucault highlights "there are a good many partial groups, regional compatibilities, and coherent architectures that might have emerged, yet did not do so" (Foucault 1972, p66).

## **Revealing Discursive Formations**

A discursive formation is identified when there is a certain regularity or unity between statements, objects and concepts. "Perhaps, then, what unifies the field of study are the transcendental conditions defining the objectivity of the discourse, and thus governing the production of transcendent objects" (Dreyfus & Rabinow 1983, p61).

### Formations of objects

In order to construct a discursive formation it is necessary to group together the serious "speech acts" that refer to a common object (Dreyfus & Rabinow 1983). This was achieved by:

- 1. Mapping the first surface of emergence where did a change in view begin? What brought about this change?
- 2. Describing **authorities of delimitation** Who are the groups claiming authority on the subject?
- 3. Analyse **grids of specification** That is, link the systems that divide, contrast, regroup and classify one another as objects.

## Power relations (genealogy)

Michel Foucault's concept of genealogy deals with analysing the formation of discourses on a subject by way of examining the power relations connected to it. Foucault's interest lies in the relations of power and knowledge and how this influences the perception of what is true. He describes genealogy as "the union of erudite knowledge and local memories which allows us to establish a historical knowledge of struggles and to make use of this knowledge tactically today" (Foucault 1980 cited in During 1992). Foucault argues that knowledge and truth are produced out of power struggles and are used to authorise and legitimate the working of power (Danaher et al. 2000). Power is described as not something that belongs to someone; power belongs to no one. It functions out of the relations between different fields, institutions or other groups. Power is not something that remains concrete but is forever moving from one group or area to another, depending on circumstances or changing alliances.

While there is no distinct separation in Foucault's work between archaeology and genealogy, the combination of these two processes is described as one that alternates, supports and complements each other (Dreyfus & Rabinow 1983). It is however, through his latter work (*Discipline and Punish* and *The History of Sexuality*) that his focus shifts more towards that of genealogy.

Foucault describes genealogy as being involved in "the historical origins of powerful institutions and discourses which claim to be universal and eternal" (Foucault 1972, p25). The role of genealogists is that of a diagnostician concentrating on the relations of power, knowledge and the body in modern society (Dreyfus & Rabinow 1983). The genealogical process is concerned with deconstructing what is considered to be true, revealing these relations of power. This approach places the different knowledges alongside each other in order to deconstruct a knowledge hierarchy in which specific versions are privileged (Stevenson 2004). During (1992) describes this process as allowing the "unvoiced to find a voice".

The purpose of the genealogical process is not to "attempt to understand the past from the point of view of the present, but rather to disturb the self-evident present with the past" (Bunton & Peterson 1997, p4). The process aims to seek out the discontinuities and ruptures in thought and look for strategies of domination. It attempts to grasp the power contributing to the formation of discourses. This is achieved by placing the different knowledges alongside each other in order to deconstruct a knowledge hierarchy in which certain versions are privileged.

# **Practicalities of process**

As with any research a grounded understanding of the theoretical orientation of a project benefits by being accompanied with clear and explainable processes on how

the research was conducted. There has been a great deal published on the work of Foucault and his method of discourse analysis. However, those who describe a Foucauldian discourse analysis or researchers who have used his methodology to conduct their research are often rich in the theoretical component of the analysis but often fall short when describing the practicalities of conducting a discursive analysis. This section aims to overcome this by clearly describing and explaining how each stage of the discursive analysis was conducted.

### **Searching for text**

A discursive analysis is dependent upon language or text. Therefore identifying relevant text to be analysed is an important component to conducting a discursive analysis. As described previously both public and professional literature were sought in order to reveal the discourses related to the topic.

A four-phase approach was utilised and involved:

- Conducting a database search utilising the following databases: Medline,
   Cinahl, Psychlnfo, EmBase, PubMed
- Searching government websites in the US, UK and Australia for research reports or policy documents
- Contacting, via website or using available networks and e-mails, key organisations that were identified during the study for information relevant to the topic of investigation
- 4. Conducting a general website search for information that may be posted relevant to the topic of investigation

An initial search of Medline, CINAHLI, ERIC, OT Seeker, Socifile and PubMed was conducted at the beginning of the study in 2006. Initial keywords used were but not limited to:

- qualitative research
- qualitative synthesis
- qualitative systematic review and
- qualitative meta-synthesis

Identified documents were examined to identify additional keywords that could be relevant to the search. Reference lists were also examined and if the title appeared relevant to the topic, the article was retrieved. This process continued until references were found to be repeated and no new references were identified.

The searching process was not conducted as an isolated event and continued throughout the duration of the study. Every few months the researcher conducted the search again, using previous keywords but also any newly identified keywords to locate any new or missed material. An alert system was employed through PubMed using two broad keywords (qualitative research and research design) and any newly published papers were notified via e-mail to the researcher. Relevant papers were also identifed through professional collegues and a Google search was also regularly conducted in order to identify any relevant documents that a database search may not provide.

#### Selection of text

The aim of article selection was to ensure the literature retrieved and examined would be representative of all views / discourses on the topic qualitative research as

evidence and with specific focus on systematic review. Selection of text was therefore based on relevancy to the topic. This process was subjective requiring the researcher to read the paper and make a judgement on whether the paper was pertinent to the topic being studied. The aim was to identify all discourses related to the topic. The majority of literature retrieved was opinion based papers rather than research papers reporting the results of qualitative research. The purpose of discourse analysis is to present all discourses on the topic and therefore the types of papers that were included were papers expressing or detailing opinions or views on qualitative research findings in systematic review.

As all discourses are to be realised, a quality assessment judgement on the papers retrieved was deemed irrelevant.

## Diary / Notes

The researcher kept a diary/notes throughout the project. This was an electronic diary (a word document) where the date and the researchers thought(s) or statement(s) were documented. The purpose of maintaining a diary was to have record of thought processes or a change in thought that may have occurred as well as to justify and record decisions that were made throughout the research process. This was at times difficult to uphold as often thoughts and decisions changed frequently within one sitting. But to overcome some of these issues regular reflection occurred during the whole process.

## **Discursive Analysis Framework**

The theoretical component to the analysis has been described previously however applying this theory to practice poised some interesting challenges of its own. Guidance to the practical process of conducting a discursive analysis is somewhat limited and the researcher felt that a more practical approach to applying and conducting a discursive analysis was required. A model (Figure 1) was developed to assist with this process.

In brief, the framework outlines a three stage process to reveal statements, discourses and discursive formations related to the given topic (archaeology). This three step process is encompassed by the power relations (geneaology) that exist. All of these components (statements, discourses, discoursive formations and power relations) are influenced by context, themes and objects. When the process is followed an indepth critque and understanding of the topic being investigated is revealed.

In more detail the model essentially describes a 3-step analysis to reveal statements, discourses and discursive analysis.

#### **Statements**

The complete texts within the documents retrieved were read prior to statements being extracted. This allowed the researcher to have an overall picture of the document and to have a clearer image of the statements being made within the text. The researcher then re-read the paper and all statements within the document that were related to the topic were extracted. Each extracted statement declared a particular position on what was being said within the discourse and was

accompanied and supported by an illustration from the text (this predominantly consisted of a quote or an example from the text).

At all times throughout the process of extracting statements the researcher questioned who was speaking, the "position" of the subjects, where they were speaking from and the interests being served. In order to manage this information a document separate to the one cataloguing the extracted statements was created. The following information was recorded in this document:

- Author(s) name
- Author(s) title
- Institution author(s) were aligned to
- Country of Author

#### **Discourse**

A discourse is made up of a group of statements. Defining the discourses was achieved by grouping similar or like statements together to form a discourse. The discourses were then examined for points of incompatibility, equivalence and systematisations. That is, points of difference between discourses were highlighted and examined and placed along side each other for an alternative view or account of the situation. For some of the discourses subgroups were identified. These subgroups were essentially competing views related to a common focus. For example the discourse related to the review question had two subgroups, each subgroup taking a different position or stance on how or when the review question should be developed. The final stage involved bringing forth awareness that not all possible alternative discourses may have been realised.

#### **Discursive Formations**

The previous two steps enabled statements to be extracted from the text and then the statements to be grouped into discourses. The third step in defining a discursive formation involves examining the statements and the discourses for areas where a change in view came about and to consider what brought about such a change. This process also involves examining the groups that claim authority on the subject and the influence that they may have had on the forming discourses. This process aims to highlight the power of institutions and the impact on what is considered to be truth. The development of the discursive formation connects or holds together all of the discourses and the statements.

The Porritt's discursive analysis model as detailed above and diagramatically presented below was able to assist and apply some structure to conducting a discursive analysis. The discourses revealed from analysing the literature are presented and described in Part II of the thesis and in the discussion section of Part III of the thesis the research account presented is linked back to the framework utilised.

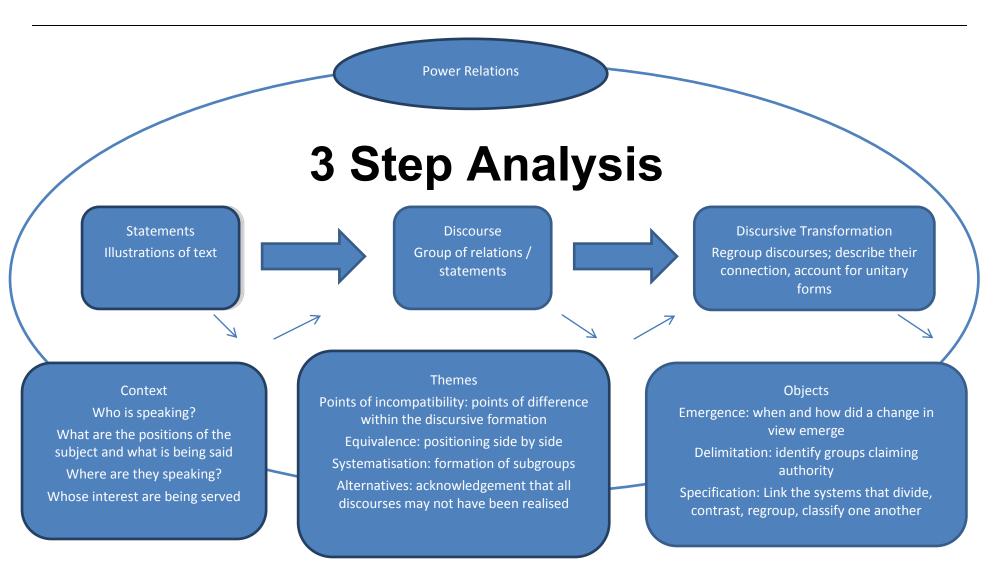


Figure 1 Porritt's Discursive Analysis Model

# **Grounding assumptions**

Nil

### **Ethical considerations**

Nil

# Advantages of this approach

Discursive analysis is a valuable way of understanding alternative views of knowledge (Heartfield 1996). By examining and analysing the text referring to qualitative systematic review, the examination is of the objects produced by the text rather than qualitative systematic review itself. Examining what enables the objects within the text to appear reveals the discourse(s).

The conduct of a discursive analysis on the pertinent topic of qualitative systematic review also facilitated personal growth and understanding in relation to this increasingly utilised area of research.

The outcome of discursive analysis provides a higher level of understanding towards the topic of qualitative systematic review and may lead to fundamental changes in one or all areas of systematically reviewing qualitative research.

### Conclusion

The methodology and methods section are a fundamental and crucial element to conducting research. They provide the framework and guidance in how the research should be carried out. By utilising a discursive analysis framework and informing this framework with Michel Foucault's work on discourse analysis, an in depth understanding of the incorporation of qualitative research findings into systematic review will be achieved. Through examination of statements both said and unsaid a discursive analysis aims to bring to light the discourses and further examination aims to bring to light the formations that these discourses situate within. Reflecting and analysing where qualitative research findings within evidence-based health care have come from and where and how it is situated today will enlighten the future direction of qualitative research findings in evidence based health care.

Part II: The Research Account

Chapter 3 - History of the present: a voice silenced

**Synopsis** 

The findings from the discursive analysis form the second part of this thesis, titled

The Research Account. Presented over three chapters, this chapter reveals the

revolution of evidence into the world of healthcare. With particular reference to the

archaeological aspect of conducting a discursive analysis the evidence based

movement is examined. It is from this point that we are able to gain a deeper

understanding of how qualitative research findings entered into and became a part of

the evidence-based phenomenon.

Introduction

Given the increased demands of the global population for health care; the needs of

governments to contain expenditure on health care; and the complexity and

uncertainty of health care delivery, contemporary health systems are characterised

by their attempts to improve health outcomes whilst containing costs.

The evidence based practice movement represents, in part, a scientific, strategic

approach to increasing the effective use of resources to achieve optimal outcomes

for the users and providers of healthcare services. The evidence based practice

movement has traditionally focused on the results of quantitative, empirical research

and the systematic review of this research and this, it can be claimed, has positively

influenced healthcare practice overall.

Current issues within healthcare however, extend beyond questions solely related to effectiveness. It is within this domain that the conduct and systematic review of alternative forms of research besides quantitative empirical research may be useful. An examination of the role and position of qualitative research within evidence-based healthcare requires an investigation that begins by tracing the history of qualitative research within the domain of evidence-based practice. Conducting a historical, detailed examination generates possibilities to identify the events that have had impact on the field of knowledge surrounding qualitative systematic review. One of the key questions one asks when exploring the history is "how is today different to yesterday?" How is the world of evidence-based practice different today than from when it began?

### **Evidence revolution**

It seems only fitting that inquiry into the role of qualitative research within evidence-based practice begins with an exploration of how and when the revolution began. The end of the late 20<sup>th</sup> century gave rise to a new movement that has contributed significantly to the pursuit of new knowledge, and is now commonly known as the evidence based practice movement. This movement is primarily concerned with ensuring practice is based on the best available evidence and aims to close the gap between research and clinical practice (Dale 2006).

The initial beginnings of this movement came about from a questioning of faith. Traditionally health care was practiced, as Solesbury (2001) succinctly describes, like priesthood, "reliant on the unquestioning faith of their followers" (p6). Many of the medical interventions prescribed had been based on tradition or preference and

unsupported by any evidence that the treatment worked other than the conviction of the administering practitioner" (Lambert 2006, p2634).

This blind acceptance to the delivery of healthcare changed when consumer access and availability to information increased. This exponentially increased with the development of the Internet as patients could access information once only privy to those within the profession. As Sheldon (2005) describes, support for the evidence-based movement was also fuelled by research showing that

"...some health and social interventions which have been commonly applied in the belief that they were doing good are actually harmful, that others are largely ineffective and thus wasteful of public resources and, furthermore, that some effective interventions have been only slowly adopted or largely ignored" (Sheldon 2005, pS1:1).

Health professionals were no longer seen as infallible. Patients were no longer content to blindly "trust what the doctor ordered". This became the catalyst for the evidence-based practice revolution resulting in a shift away from the traditional type of decision-making, one that was intuitive and subjective, to a process that was more scientific and objective (Dale 2006;Rycroft-Malone 2005).

Aware of this unrest and the limiting resources available to healthcare, through his work, Archibald (Archie) Cochrane (1909-1988) gave momentum to the evidence based movement almost forty years ago. His ability to foresee a need to address the problem of increasing demands placed on a resource limited health care system brought about change to the utility and functionality of research results. To address this problem he advocated for the use of resources that were shown to be effective through properly designed evaluations. Specifically, he stressed the importance of using evidence derived from well-designed randomised controlled trails (RCTs) because this type of research would more likely provide information that is much more reliable than other sources of information.

#### What is evidence?

In its most generic sense evidence is defined as a "ground belief; that which tends to prove or disprove something" (Anonymous 2005). However in law the notion of evidence takes on quite a different meaning. Evidence in law takes the form of a testimony of witness, documents or other objects such as photographs, a revolver etc. (Upshur 2001). It is important to note that evidence within the legal system can be interpreted in different ways; the same piece of evidence can either support or refute the matter at hand (Upshur 2001). Evidence is therefore dependent upon context.

Within health care, evidence is conceived in a scientific context. In a broad sense evidence within health care can be described as "data or information used to decide whether or not a claim or view should be trusted" (Pearson, 2004). This can be validated as practitioners often weigh up different forms of information on which to base their actions. A similar definition is offered by Upshur (2001cited in Jack 2006) where evidence is described as "an observation, fact, or organised body of information offered to support or justify inferences or beliefs in the demonstration of some proposition or matter at issue" (p278). According to French (2002) evidence is summarised as truth, knowledge, any relevant information that confirms or refutes a belief, primary research findings as well as meta-analyses and systematic reviews.

It is agreed by many researchers that at the begining of the EBP movement there was a common assumption that the term "evidence" referred only to research evidence, and more specifically research embedded by the results of empirical, quantitative research (Rycroft-Malone et al. 2004;Mulrow et al. 1997). Even Archie Cochrane in his description of what constitutes evidence claimed that it should be evidence specifically derived from well designed randomised controlled trials as this type of information was considered much more reliable than other sources of

information. This belief and view towards evidence has become one of the major tenets of EBHC. More succinctly described at the time by Grypdonck, "in EBHC, what counts as evidence are the results of RCTs, which are at its very core. They are the heart of the matter" (Grypdonck 2006, p1374).

When examining which groups within healthcare was one of the first to enthusiastically adopt the principles of EBP we can see that the medical research community was one of the original groups. During the early stages of evidence-based development scientific traditionalists (those who sought answers from the traditional scientific method) dominated the research community. The views and assumptions within the medical model of care fit easily alongside the principles of evidence based practice (Bondas & Hall 2007). It can then be argued that this is why medicine readily embraced evidence based care, leading and dominating the EBP movement.

What began as a scientific change in medicine soon became a common theme in many of the other health professions. The expansion towards evidence-based healthcare (EBHC) implies that the importance of basing practice on evidence applies to all health professionals and not just to the practice of medicine (Dale 2006). Briefly described EBHC aims to incorporate the best research evidence, clinical expertise, and patient preferences, values and wants into practice (Gilgun 2006). The success of evidence-based practice has been in

"...challenging unjustified variations in clinical practice and (helping). to protect the public by shifting the centre of gravity of clinical decision making to ensure a more explicit consideration of high-quality (usually evaluative) research evidence" (Sheldon 2005, pS1:1).

Critics of the EBP movement denounce EBP as ""cookbook medicine", as a threat to the professional autonomy of clinicians and as a "new type of authoritarianism" (Reynolds 2000, p257). Despite some critical evaluation of basing practice on evidence, EBP appears to be a cemented fixture into all areas of health care.

This change to a more scientific approach to the delivery of healthcare was eventually adopted by a number of sectors that influence or affect the delivery of healthcare. The evidence-based practice approach offers a

"mechanism for pushing maximally effective care and of discarding ineffective practices and techniques, thereby making cost-savings". (Rycroft-Malone 2005, p169).

The adoption of evidence-based practice for cost-saving purposes is often aligned to the managers of health care practices or institutions (Feinstein 1997;Rycroft-Malone 2005). However caution is required as Rycroft-Malone (2005) acknowledges, revealing the effectiveness of interventions may result in an increase demand for them. Feinstein and Horwitz (1997) agree, suggesting that the identification of the most "efficacious intervention…may raise rather than lower cost" (p103).

It is also argued that the evidence-based practice approach offers a means for governments to control and regulate. Turner (1997) describes the health and welfare system as a "complex mixture of risk culture and McDonaldisation of services" (pxvii). McDonaldisation refers to the principles of cheapness, standardisation and reliability to the health industry and suggests that EBP does provide a mechanism for governments to control spending and regulate care, enabling them to allocate money to procedures that result in the highest optimal outcomes.

It has been argued that the adoption of evidence-based practice is a means to controlling the action of health professionals. This argument posits the view that evidence-based practice potentially "relegates clinical experience in favour of standardised, research-based approaches to care. As such, practitioners" decision-making is being directed (or controlled) and arguably their professional practice basis eroded" (Rycroft-Malone 2005, p169).

No matter what the reason is for adopting evidence-based practice principles the movement has become a worldwide phenomenon. There has been considerable

effort, both financially and philosophically, spent on embracing the EBP agenda. Globally this is evident through the development of infrastructure that promotes and supports the use of evidence in practice (Rycroft-Malone et al. 2004). For example there are funded groups and organizations with a specific focus towards evidencebased principles such as in the United Kingdom (UK), the National Institute for Clinical Excellence (NICE); in the USA, the Agency for Health Care Research and Quality; and, in Australia, the National Institute for Clinical Studies. In the late 1990s the UK government incorporated the use of evidence as part of its philosophy and in 1997 the UK labour government claimed the philosophical mantra of "What counts (matters) is what works" (Rycroft-Malone 2005; Solesbury 2001). As Rycroft-Malone (2005) states, the intention of this mantra was to "signal the end of ideological driven politics and the arrival of evidence-based policy making" (p169). In 1999 a white paper on a Modernising Government was produced incorporating the use of evidence as part of its philosophy. This paper was one of the first indications of research evidence being a central component for policy making in health (in the UK) (Solesbury 2001). What followed was an international movement in the delivery of health care.

In describing the evidence-based movement, Mykhaloviskiy and Weir (2004) suggest that it has:

"been met with remarkable enthusiasm on the part of elites in academic medicine. EBM has been formally incorporated into editorial policies, has spawned new journals and approaches to reporting biomedical research, and its now routinely taught throughout medical schools in North America, the UK and parts of Western Europe" (Mykhalovskiy & Weir 2004, p1060).

Feinstein and Horwitz (1997) concur, acknowledging that medicine's eager allegiance with EBP is demonstrated by the fact that

"...within 5 years of the first proposal, "evidence based medicine" (EBM). has received enthusiastic endorsement from editors of prominent medical journals, achieved the publicational outlet of its own journals, and

acquired the kind of sanctity often accorded to motherhood, home and the flag" (Feinstein & Horwitz 1997, p529).

They continue by describing "an almost exclusive concentration on the "gold standard" of randomised trials and meta-analyses" published in journals such as *Evidence-Based Medicine* and *ACP Journal Club* (Feinstein 1997, p530).

The RCT was central to what was considered "evidence" and as a result an influx of RCTs were conducted and published. As an indicator to how many RCTs has been published the Cochrane Central Register of Controlled Trials Database to date stores approximately 500,000 RCTs. The sheer volume of RCTs, a restricted amount of funding for healthcare and the adoption of evidence-based principles gave rise to a major milestone in evidence-based practice. In 1979, Archie Cochrane infamously wrote,

"It is surely a great criticism of our profession that we have not organised a critical summary, by speciality or subspecialty, adapted periodically, of all relevant randomised controlled trials" (Cochrane 1979).

This challenge led to the establishment of the Oxford Database of Perinatal Trials in the 1980. His continued encouragement towards producing a critical summary of evidence in order to deal and cope with the large amounts of research evidence available and to provide an objective, transparent, methodological process led to the incorporation of the systematic review of randomised controlled trials. Cochrane's views were shared by others (both by professional and lay persons) which resulted in the opening of the first Cochrane Centre in Oxford UK in 1992 and the founding of The Cochrane Collaboration in 1993.

#### Cochrane Collaboration

The Cochrane Collaboration is an international, not-for-profit and independent organisation dedicated to providing "relevant and accurate information about the effects of healthcare to the world".(<a href="http://www.cochrane.org/docs/descrip.htm">http://www.cochrane.org/docs/descrip.htm</a>).

Founded in 1993, the Cochrane Collaboration aims to assist people in making informed decision about health care by "preparing, maintaining and ensuring accessibility of systematic literature reviews of the benefits and risks of health care interventions" (Mowatt et al. 2001, p56). The principal outputs of the Collaboration are the systematic literature reviews, published in the The Cochrane Library.

Funded by grants and donations, the activities of the Collaboration are directed by an elected Steering Group and supported by staff and volunteers in the Collaboration's Centers, Review Groups, Methods Groups and Fields around the world.

# Systemisation of evidence

With the wealth of research being produced; the growing need to consolidate isolated research results; and the increasing threat of inadequate time and resources with which to find and evaluate research knowledge to inform clinical decision making; the development of the systematic review approach for health care research evidence emerged rapidly and with a great deal of support (Mulrow et al. 1997). The systematic review is the cornerstone of EBP (Barbour 2000;Evans 2002-2003). With thousands of research reports being published in journals every year many clinicians claimed that there was insufficient time to keep up to date with current research (Reynolds 2000). A mechanism was required to assist the health care worker to keep abreast and up to date with current information.

Prior to the development of systematic reviews *ad hoc* or narrative reviews were conducted. Often these types of reviews failed to utilise "clear and reproducible method(s) for identifying the research, appraising its characteristics and quality, or the ways results were summarised or synthesised" (Sheldon 2005, pS1:1). Failure to use a systematic process then allowed the potential for results of the review to be

flawed and susceptible to reviewer biases. Sheldon (2005) provides an example of this in his paper when he describes how a lack of a systematic process in reviewing the literature leads to inappropriate interventions being recommended (Sheldon 2005). He describes large variances between the results of a systematic review summarising the effectiveness of treatments commonly used for people who had a heart attack and what the experts were recommending. According to the results, experts were often recommending treatments which the evidence at the time did not support and they often "ignored or recommended against the use of highly effective treatments like the "clot buster" streptokinase" (Sheldon 2005 pS1:2). As outlined by Dixon-Woods (2006), traditional literature reviews were flawed because "reviewers tend to focus on a small sub-set of studies but not to describe how they were selected; to be biased by their own perspectives and findings in a particular field; and fail to assess the quality of studies or combine them appropriately" (p29). It is argued that literature reviews were often "subjective, unsound and inefficient" (Dixon-Woods et al. 2006 p29). The systematic review emerged as a way to overcome the increasing credence of the view that "narrative" reviews were flawed.

While efforts to formalise and develop methods for the review and synthesis of evidence have been apparent since at least the 17<sup>th</sup> century it is the "systematic review" that has transformed healthcare practice (Dixon-Woods et al. 2006). The development and acceptance of the systematic review process is based on the fundamental view that "reviews of research are a better basis for informing policy than a single study or expert opinion" (Sheldon 2005 pS1:1). Systematic reviews have become an important tool for facilitating evidence informed policy and practice as they bring together and combine the findings from multiple studies (Oliver et al. 2005). As defined by Pearson (2004) the systematic review is "essentially an analysis of the available literature (that is evidence) and a judgement of the effectiveness or

otherwise of a particular practice" (Pearson 2004 p48). Systematic reviews have been used in an effort to "synthesise findings from discrete primary studies and to increase the generalisability of data about a phenomenon" (Whittemore & Knafl 2005, p547). Mulrow (1997) asserts that systematic reviews "seek to assemble and examine all of the available high quality evidence that bears on the clinical question at hand" (p389). At the early stage of methodological development systematic reviews exclusively focused on and involved the meta-analysis of RCTs with the primary aim of establishing cause and effect relationships.

Conventionally, systematic reviews have been understood to have specific characteristics: a detailed study protocol addressing specifically focused question(s), detailed methods for searching and appraising studies and explicit methods for study inclusion and analysis of studies (whether it be detailed summary or meta-analysis) (Dixon-Woods et al. 2006).

Pearson (2004) outlines seven steps that are commonly incorporated into a systematic review. The initial step of a systematic review is the development of a protocol, followed by the formulation of questions or hypotheses. The third step outlines the criteria that will be used to select the literature followed by a detailed search strategy. The fifth step is the critical appraisal of the studies retrieved, the sixth, data extraction. The final step of a systematic review is the analysis. If and where possible, this refers to statistical analysis but as Pearson (2004) highlights, not all systematic reviews lend themselves to statistical analysis. In such cases, Pearson (2004) states, a narrative summary is common practice.

Similarly, Evans and Kowanko (2000) outline five stages to the systematic review: the review question, which is likely to outline the population of interest, the intervention, a comparison or control and the outcome of interest (Evans & Kowanko 2000). Evan and Kowanko (2000) state the inclusion criteria are developed from

these. A comprehensive search strategy that is sufficiently detailed to enable replication is required. Critical appraisal of the retrieved papers allows for a judgement to be made on the quality of the research. The next stage is data extraction where by a specifically developed form is used to extract the data in order to minimise the risk of error. The final stage outlined is data analysis. The objective of data analysis stated by Evans and Kowanko (2000) is to summarise the results from different studies. Like Pearson (2004), Evans and Kowanko (2000) also describe the importance of developing a protocol. They claim the protocol should outline all of the steps being undertaken throughout the systematic review, claiming the protocol minimises the risk of bias as a result of subjective decisions being made throughout the review process.

The systematic process to review healthcare literature now generally follows the previously described format and at the beginning of the evidence based movement only considered and incorporated quantitative, empirical evidence, specifically the RCT. The dominant view on what type of research evidence should be included into a systematic has favoured the results from quantitative research (Dixon-Woods et al. 2001). The initial function of a systematic review in healthcare did not consider qualitative research. At this stage qualitative research was not viewed as a component of EBP. Health care questions being asked focused primarily on cause and effect and therefore the RCT became the most valued type of research to answer these questions. However, there is a growing amount of literature discussing and addressing the role qualitative research can play in evidence based practice.

# The order of things

Evidence hierarchies provide a way to communicate the value or worth of evidence generated by a range of research methods (Evans 2003). Traditionally EBP typically referred to research conducted within a quantitative, empirical paradigm and as such quantitative research, and specifically randomised controlled trials, were regarded as the highest levels of scientific and objective forms of research. This type of research conjures up notions of irrefutable facts, information that has been proven and established and therefore seen to be scientific and objective (Barbour 2000). Qualitative researchers on the other hand are less likely to present the results of their work as "evidence". Instead the products of their work are presented as "findings" with alternative criteria and terminology used in order to describe the quality (the validity and rigour) of the work (Barbour 2000). With an emphasis on using the best available evidence on which to base health care decisions, a great deal of attention has been given to the scientific merit of research evidence and, with this, recognition that the quality of evidence is not all equal (Evans 2003). The value placed on research evidence is displayed not only through the publication of research but also through ranking systems or levels of evidence hierarchies. Rycroft-Malone (2004) confirms this statement when she states

"...research evidence, and more particularly quantitative research evidence, tends to be more highly valued than other sources in the delivery of health services." (Rycroft-Malone et al. 2004 p83)

Hierarchies were supposedly developed to assist with interpreting and evaluating the quality of research findings. There have been, and remain still, many different versions of a research evidence hierarchy. Grypdonck (2006) notes a number of inconsistencies among these hierarchies. While the premise of the hierarchy is that the higher order supersedes that of the lower order, it is the types of evidence and where the evidence sits in the hierarchy that often varies. In many hierarchies

qualitative research would often not be acknowledged or it would be placed at the lowest level alongside that of expert opinion (Grypdonck 2006).

Initial hierarchies developed placed experimental studies at the highest level with non-experimental studies and expert opinion at the lower levels. The types of questions hypothesized predominantly surrounded the effectiveness of a particular treatment or program and as such required the application of a randomised controlled trial (RCT). The RCT was considered to be the highest level of evidence available to assist healthcare practitioners in their everyday decision-making.

In examining the development of evidence hierarchies (Table 1 and 2) it is clearly evident that the RCT has been given top ranking in these scales. As described by Hicks and Hennessy (1997)

"...qualitative research is frequently dismissed as a soft option, methodological inferior and lacking the scientific and statistical rigor of the experimental method" (Hicks & Hennessy 1997, p598).

Other research approaches or forms of evidence are ranked lower or are absent from most hierarchical scales.

TABLE 1: US Preventative Services Task Force

Level I:	Evidence obtained from at least one properly designed randomised controlled trial.			
Level II-1:	Evidence obtained from well-designed controlled trials without randomisation.			
Level II-2:	Evidence obtained from well-designed cohort or case-control analytic studies, preferably more than one center or research group.			
Level II-3:	Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled trials might also be regarded as this type of evidence.			
Level III:	Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.			

**TABLE 2: UK National Health Service** 

Level A:	Consistent Randomised Controlled Clinical Trials, cohort study, all or none, clinical decision rule validated in different populations.
Level B:	Consistent Retrospective Cohort, Exploratory Cohort, Ecological Study, Outcomes Research, case-controll study; or extrapolations from level A studies.
Level C:	Case-series study or extrapolations from level B studies.
Level D:	Expert opinion without explicit critical appraisal, or based on physiology, bench research or first principles

More recently evidence from systematic reviews and meta-analyses has moved to the top of the hierarchical chain (Table 3) as the outcome of a systematic review is less likely to produce misleading results on the effects of the intervention or program under investigation (Rycroft-Malone, Seers et al. 2004).

TABLE 3: National Health and Medical Research Council

1	Evidence obtained from a systematic review of all relevant randomised controlled trails				
П	Evidence obtained from at least one properly designed randomised controlled trial				
III.1	Evidence obtained from well-designed controlled trials without randomisation				
III.2	Evidence obtained from well-designed cohort or case-control analytic studies preferably from more than one centre or research group				
III.3	Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments.				
IV	Opinion of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees				

All of the early hierarchical levels of evidence fail to recognise qualitative research and what qualitative research has to offer. As Hawker (2002) explains,

"...a limitation of hierarchies of evidence is that qualitative research is usually ranked at the level of expert opinion, the lowest level in the hierarchy. Thus, in addition to underplaying the important contributions qualitative studies can make in health research.... these ranking systems fail to recognise the rigor with which at least some qualitative research is undertaken." (Hawker et al. 2002 p1291).

The lack of reference to qualitative research in any of the level of evidence hierarchies undervalues the importance of qualitative research findings.

However, more recently developed hierarchies reflect a positional change, with the inclusion of alternative forms of evidence other than evidence of effects and the RCT. This change demonstrates a shift in the definition of evidence, expanding and incorporating alternate forms of research evidence and an acceptance of qualitative research in the research community. In 2005 the Joanna Briggs Institute developed a detailed hierarchy of evidence incorporating not only evidence of effect but also

evidence of meaningfulness, feasibility, appropriateness and economic evidence (Table 4).

TABLE 4: JBI level of Evidence 2005-current

		TOLL 4. JOI ICVCI O	Evidence 2005-cui	I	
Level of Evidence	Feasbility F(1-4).	Appropriatness A(1-4).	Meaningfulness M(1-4).	Effectiveness E(1-4).	Economic Evidence EE(1-4).
I	Metasynthesis of research with unequivocal synthesised findings	Metasynthesis of research with unequivocal synthesised findings	Metasynthesis of research with unequivocal synthesised findings	Meta-analysis (with homegenity). of experimental studies (eg RCT with concealed randomisation). OR One or more large experimental studies with narrow confidence intervals	Metasynthesis (with homegenity). of evaulation of important alternat
II	Metasynthesis of research with credible synthesised findings	Metasynthesis of research with credible synthesised findings	Metasynthesis of research with credible synthesised findings	One or more smaller RCTs with wider confidence intervals OR Quasi-experimental studies(without randomisation	Evaluations of important alternative interventions comparing all clinically relevant outcomes against appropriate cost measurement, and including a clinically sensible sensitivity analysis
III	a. Metasynthesis of text/opinion with credible synthesissed findings  b. One or more single research studies of high quality	a. Metasynthesis of text/opinion with credible synthesissed findings  b. One or more single research studies of high quality	a. Metasynthesis of text/opinion with credible synthesissed findings  One or more single research studies of high quality	a. Cohort studies (with control group) b. Case-controlled c.Observational studies(without control group)	Evaluations of important alternative interventions comparing a limited number of appropriate cost measurement, without a clinically sensible sensitivity analysis
IV	Expert Opinion	Expert Opinion	Expert Opinion	Expert opinion, or physiology bench research, or consensus	Expert opinion, or based on economic theory

## Conclusion

The evidence-based movement, and specifically the systematic review, began out of a need to consolidate and summarise vast amounts of research in an objective, transparent approach directing care towards interventions that were known to work. Conventionally based on the systematic reviews of RCTs, the traditional systematic review was only able to provide evidence towards interventions related to effectiveness. With the facets of health care delivery being multi-dimensional it was recognised that alternative forms of research evidence need to be included and the development of qualitative systematic review emerged.

Part II: The Research Account

Chapter 4 – Rise of the silenced voice

**Synopsis** 

With an understanding of the importance placed on evidence within healthcare

established the analysis continues by delving into how qualitative research findings

began to establish a voice with evidence-based practice. The discourses surrounding

how qualitative research claimed and created an identity are explored. While

qualitative research presents a united front in being incorporated into evidence-based

practice, the discourses divide in establishing the specific role and function qualitative

research should take.

Introduction

Throughout the evidence revolution the dominating force of evidence-base practice

has been the RCT and the systematic review of RCTs. This focus towards one

particular type of research has allowed those who conduct quantitative, empirical

research to dominate in the health research field and as such as resulted in this type

of research results having a substantial impact on health in general.

The focus on quantitative, empirical research has placed qualitative research and

qualitative researchers on the "backbench". Qualitative research has been devalued,

seen as having nothing to offer in a world focused on delivering best evidence for

practice. Calls to be seen as a valuable and viable alternative to quantitative

research were muffled by the loud, dominating discourse for "what"s important is what

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works". As described in the previous chapter qualitative research was given little to no value in the beginning period of the EB movement, being placed at the bottom of the hierarchy scale or completely absent altogether. However, over time, slowly but increasingly those involved in qualitative research have been able to influence and change the perceived value of qualitative research.

# Staking Identity

Emerging in the 1980s as it own "distinct domain and mode of inquiry" qualitative research often faced criticism regarding its utility as it was argued that its results were not objective and its findings unable to be generalised (Sandelowski 2004 p1367). This view clearly hindered the way qualitative research findings were viewed and incorporated (or failed to be incorporated) into the rising evidence based phenomenon.

In examining the extant literature it is evident that there was some confusion and misunderstanding over what qualitative research is and what it has to offer. It was vital for qualitative researchers to abolish any misconceptions about qualitative research, to increase awareness and understanding of qualitative research and to raise the profile of qualitative research in order for it to be viewed and considered as an important component to evidence-base practice. As described by Hicks and Hennessy (1997),

"By raising the profile of alternative research approaches in the drive towards an evidence based health care culture, it is conceivable that their particular values and contributions will be recognised, with all the attendant benefits that will bring" (Hicks & Hennessy, 1997, p600).

In an attempt to eliminate any misconceptions about qualitative research and to highlight that qualitative research is in fact a notable form of research, Newman and colleagues (2006) compared the similarities of quantitative and qualitative research claiming that there were far fewer differences between the two types of research than is often claimed. They make the following claims:

- Both types of research are "processes of systematic inquiry rooted in the tradition of empiricism (i.e. knowledge should be based on observation of the world."(p4)
- The data in both types of research provide the basis for reasoning.
   Quantitative data takes the form of numbers while qualitative data takes the form of text.
- Both types of research involves "transforming experience or phenomena from "reality" to a form of representation" (p4), and
- "All reports- whether qualitative or quantitative draw on patterns, trends, themes, association, and difference; validity and reliability of the research are key concerns regardless of the discipline or method" (Newman et al. 2006, p4)

In order for qualitative research to be viewed as an integral component to evidence based practice it was necessary for qualitative researchers to claim their identity by carving a clear path of understanding. Increasing awareness and understanding of qualitative research showcases the benefits qualitative research has to offer. This was achieved essentially in two ways: by defining what qualitative research is and what it is not; and by advocating for the need to broaden the meaning of "evidence" in evidence based practice. This ensured that not only would there be a place for qualitative research in evidence-based practice but that it allowed the right type of research evidence to answer health care questions.

### What it is and what it is not

Qualitative research essentially sets out to explore, describe, understand and explain phenomena of interest (Barbour 2000). The core of qualitative inquiry aims to provide a deeper understanding of knowing to advance knowledge and influence practice (Popay et al. 1998). As described by Greenhalgh (1997) "...good quality qualitative research should touch the core of what is going on rather than just skimming the surface" (Greenhalgh & Taylor 1997, p740). The findings from qualitative inquiry should "provide a rich evocative medium that informs practice through deepening nurses' understandings of clients' perspectives within the experience of health and illness" (Zimmer 2006, p311).

A qualitative approach does not seek to find the "truth" but instead to "acknowledge the existence of and study the interplay of "multiple" views and voices – including importantly lay voices (Dixon-Woods et al. 2006;Barbour 2000). It is able to give voice to the minority. As expressed by Jones (2004a)

"one of the virtues of qualitative research is its inclusionary nature and ability to give the service users a voice...The importance of this kind of research cannot be overemphasised particularly when dealing with the disadvantaged and/or the unheard voice." (Jones 2004a p97).

Popay (1998) adds to this argument by claiming that good qualitative evidence must show an "understanding [to] the basis of lay and professional behaviour and action must privilege subjective meaning or lay knowledge in order to inform practice and policy (Popay et al. 1998, p344). The exploration of patients" and practitioners" perspectives, attitudes and beliefs bridges the gap between statistical evidence and qualitative research (Hawker et al. 2002).

Qualitative research also focuses on social interaction and aims to expand our understanding of communication. As described by Barbour (2000) it is the "...study of social interaction between key players and, with its ability to focus on language and

explanations furnished in situ, qualitative research is well placed to provide an enhanced understanding of communication..." (p157).

While language is extremely important in qualitative research, description and interpretation as well as theory building are also considered important functions of qualitative research. Language is used as a means to explore the processes of communication and patterns of interaction within and between particular social groups...and theory-building looks at discovering patterns and connections in qualitative data" (Fossey et al. 2002 p723). One of the defining features of qualitative research is the ability to transform data to "...produce grounded theories, ethnographies, or otherwise fully integrated explanation of some phenomenon, event or case" (Sandelowski & Barroso 2003a p914). Qualitative research is also suited to the study of process: how outcomes were achieved, the mechanisms involved, how situations or changes unfold in the short and long term and why particular intervention(s) were successful (or not) at being implemented (Dixon-Woods et al. 2006;Barbour 2000).

When conducted well, qualitative research has been described as an art form that is both versatile and sensitive to meaning and context (Sandelowski 1993). Precisely how qualitative research should be defined, though, remains a matter of controversy. Simply described, it is perhaps most usefully understood as the "non-numerical analysis of data gathered by distinctive methods such as in-depth interviews, focus groups and participant observations" (Dixon-Woods et al. 2001 p126). Sandelowski asserts that the use of the term "qualitative research" trivialises significant differences among research practices designed as qualitative (Sandelowski et al. 1997).

Popay and Williams (1998) take a different stance when describing qualitative research by detailing "what it isn't" (p33). First they begin by stating

"it is not the opposite of quantitative research", although the concept of measurement is not absent; measurement does exist but in a literary form. The qualitative approach to measurement involves words and phrases such as ",a lot", ,a little", ,many", ,most"...and themes arising from the research may be described as more or less prominent" (Popay & Williams 1998 p33).

They continue by detailing how neither is qualitative research simply "a set of practical techniques for collecting interesting descriptive data" (Popay & Williams 1998 p33). It is not "devoid of epistemological salience or theoretical foundation" (Popay & Williams 1998 p33). Instead qualitative research has, as others have also pointed out, a deep epistemological and theoretical basis.

The authors continue further by describing how qualitative research is not inevitably small scale and not "non-generalisable", referencing examples of such work that have involved large, labour-intensive observations.

Extensive discussions and discourse surrounding what qualitative research is and what it is not and how qualitative research could contribute to evidence-based practice inevitably led to discussion surrounding the meaning of evidence and a call for a broader meaning to incorporate qualitative research.

## The search for wider meaning

With the initial evidence-based movement focusing on the RCT and the systematic review of RCTs, the central focus became "what works" with little-to-no focus directed on the "how" or "why" something works (this is despite the alternative types of research available to answer these questions). The structure of the evidence based movement and its limited view on what was considered evidence allowed for empirical, quantitative research to dominate the field of healthcare research resulting in all other forms of research being marginalised. However, the early 21<sup>st</sup> century began to see a gradual but strengthening shift in the view of what is considered to be

evidence (Sackett 1996; Green 1998; Rycroft-Malone 2005; Mulrow 1997). This was deemed necessary by some in order for the qualitative paradigm to make a significant contribution to EBP (Barbour 2000).

Where once randomised controlled trials represented the only legitimate form of evidence, qualitative research was beginning to be noticed. No longer were alternative forms of research content to be marginalised. The broadening of understandings of what was considered to be evidence resulted in a move on from a "focus on clinical intervention to encompass both interventions by, and encounters with, other health care professionals (the area of health care) and even the everyday world in which patients experience health and illness" (Barbour 2000 p155). It was increasingly argued that drawing upon different perspectives and methodologies increases our understanding and knowledge. As Fossey (2002) states

"...restricting oneself to any single paradigm or way of knowing can result in a limitation to the range of knowledge and the depth of understanding that can be applied to a given problem situation...Thus research needs to draw on different perspectives, methodologies and techniques to generate breadth of knowledge and depth of understanding" (Fossey et al. 2002 p717).

There was a developing understanding that the RCT could not answer all relevant healthcare inquiries - only those related to effectiveness. This was frequently seen in the concluding comments on many Cochrane systematic reviews - that there is "insufficient evidence". In reality healthcare questions are often complex and the results of an effectiveness systematic review often answer just one component of the question. The broad nature and scope of healthcare has lead to the findings of qualitative research playing a crucial role in determining health status and outcomes (Lambert 2006). As Green and Britten (1998) state "good "evidence" goes further than the results of meta-analysis of randomised controlled trials...We need to be sure that it is the right kind of research to answer the questions posed" (p1232). Sackett (1996) shared this view, as he believed that evidence based medicine "involves tracking"

down the best external evidence with which to answer our clinical questions" (Sackett et al. 1996 p71).

The need to provide evidence to relevant clinical questions is but one of the reasons that led to the acceptance of alternative forms of research. There was a genuine move towards ensuring the right question received the right answer and this meant looking towards other forms of research. Solesbury (2001) acknowledges the importance of this by "urging the field of research to move beyond just what works to consider other important aspects such as "what is going on? What"s the problem? Is it better or worse than ...? What causes it? What might be done about it? At what costs?" (Solesbury 2001 p8). In order for this to be achieved Solesbury (2001) suggests that research needs to be not only evaluative but also descriptive, analytical, diagnostic, theoretical and presecriptive (Solesbury 2001). Green and Britten (1998) support this view as they describe the benefits qualitative research has to offer in increasing our understanding. They detail how the results of qualitative research are able to provide knowledge and understanding on health behaviour in its everyday context, how it can, through interpretation, provide insight into how patients and practitioners make sense of things (such as their symptoms or treatment regimens) and through the assumption that social life is a process where these meanings might change over time (Green & Britten 1998).

## Advancing qualitative systematic review

The development of qualitative systematic review methods has received a great deal of attention from a number of leaders within the field of qualitative research and health and social science organisations across the globe. Leaders and/or organizations and their projects, within the Western world, have predominantly

advanced the field of knowledge of qualitative systematic review. Initiatives have taken place that concurs with inclusion and incorporation of qualitative research, such as the establishment of Working Groups that specifically focus on incorporating qualitative evidence.

### Instrumental agents leading the Way

Qualitative research was initially promoted by describing the capabilities of qualitative research and what it has to offer health science. Discussion then moved towards viewing qualitative research results as a credible and viable form of evidence alongside quantitative research results. These discussions gave strength and momentum to qualitative research. The voice for qualitative research began to be heard.

Certain influential individuals can be identified as being instrumental in bringing qualitative research to the forefront of discussion in evidence-based practice. These same individuals are involved in uniting the field of qualitative research in order to advance qualitative research. Working groups and organisation have been established that have a specific focus on qualitative research and the systematic review of qualitative research.

Glaser and Strauss, the creators of grounded theory, conducted the first international synthesis of qualitative findings. Their work "Status Passage" first published in 1971 (1971) is a synthesis of four studies(Glaser & Strauss, 2010). In nursing, Stern and Harris (1985 cited in Zimmer 2006) were among the first to conduct and report a qualitative systematic review (which they called qualitative meta-analysis). In education, Noblit and Hare describe "meta-ethnography" as a method for synthesis of interpretive research.

With extensive exposure to qualitative research Popay and Roen (2003) published a paper identifying and describing key organizations and individual researchers (such

as Mary Dixon-Woods, Department of Epidemiology and Public Health, University of Leicester and James Banning, School of Education Colorado State University) that were involved in methodological development and conduct of qualitative systematic reviews (Popay & Roen 2003).

Research located at the Evidence for Policy and Practice Information Centre at the University of London, UK have been involved in a number of projects aiming to advance the work in the field of qualitative synthesis. Examples of such projects include: the development of a theory-led approach to qualitative synthesis that focuses on the relevance of evidence to the topic under investigation rather than being concerned with critical appraisal of each study; a classification of different types of evidence; and search strategy for diverse evidence sources (Popay & Roen, 2003).

#### The Cochrane Collaboration

The Cochrane Collaboration has certainly come a long way in broadening its scope since its inception in 1993. The organisation began with a sole focus on quantitative research, concentrating on the RCT and the synthesis of the RCT. Even the Cochrane Collaboration logo is embedded with the notion of quantitative research results. As described on the Cochrane website, the logo (see Figure 2) illustrates both their global objectives and their key scientific processes.



Figure 2 The Cochrane Collaboration Logo

The circle formed by the 'C' of Cochrane and the mirror image 'C' of Collaboration reflects the international collaboration that makes their work relevant globally. The inner part of the logo illustrates results of a systematic review of RCTs. However in addition to such a strong foundation towards quantitative research the Cochrane Collaboration began to broaden its perspective of research evidence with the establishment of The Cochrane Qualitative Research Methods Group.

According to the Cochrane Qualitative Research Methods Group website

The Cochrane Qualitative Research Methods Group (CQRMG) is one of ten international Cochrane Methods Groups. It consists of Co-Convenors, Members and Group Affiliates who have an interest and expertise in qualitative research approaches and in the science of qualitative systematic reviews and who wish to keep abreast of the work of the Group. The central concerns of the group relate to increasing an awareness of the role of qualitative evidence in guiding health care practices; the development of approaches suitable for systematically reviewing qualitative evidence; and the training of reviewers in qualitative meta-synthesis. (<a href="http://www.joannabriggs.edu.au/cqrmg/">http://www.joannabriggs.edu.au/cqrmg/</a>, accessed 6th April 2010)

The central concerns of this group relate to increasing an awareness of the role of qualitative evidence in guiding health care practices; the development of approaches suitable for systematically reviewing qualitative evidence; and the training of reviewers in qualitative systematic review.

### The Joanna Briggs Institute

Established in 1996 the Joanna Briggs Institute is an international, not-for-profit, charitable organisation funded by member subscription and project-specific grants from government departments and research funding bodies. The institute is dedicated to improving the health status of the global population through the delivery of health care that is based on the best available evidence.

The formation of the institute arose out of recognition of a need for a collaborative approach to the evaluation of evidence derived from a diverse range of sources, including experience and expertise. To date, the institute collaborates internationally with nursing, medical and allied health researchers, clinicians, academics, and quality managers across 40 countries in every continent.

The institute facilitates international collaboration between collaborating centres, groups and expert researchers, clinicians and members of the institute through the following ways:

- Developing methods to appraise and synthesise evidence,
- Conducting systematic reviews and analyses of feasibility, applicability, meaningfulness and effectiveness of the research literature;
- Globally disseminating information in diverse formats to inform health systems, health professionals and consumers;
- Facilitating the effective implementation of evidence and the evaluation of its impact on health care practice; and
- Contributing to clinical cost effective health care through the promotion of evidence based health care practice.

As one of the leaders of qualitative synthesis the institute has been instrumental in methodological developments of qualitative research synthesis developing a process to assist in the meta-aggregation of qualitative research known as Qualitative Assessment Review Instrument (QARI). The institute offers assistance through education and training on conducting qualitative research synthesis using QARI and to date there have been over forty (40) publications of qualitative systematic review using the QARI approach.

### Evidence for Policy and Practice Information (EPPI) Centre

Since 1993 the Evidence for Policy and Practice Information and Coordinating Centre (EPPI Centre) has been dedicated to making reliable research findings accessible to the people who need them. The Economic and Social Research Council (ESRC), several government departments and charities and national and international partners fund the work conducted by the Centre.

With a specific focus on social science and public policy the Centre has been conducting systematic reviews and advancing methodological developments for the synthesis of both quantitative and qualitative research findings. The Centre has adapted a model for the conduct of systematic review in order to address a wide range of questions and methodologies relevant to public policy.

### Voice divided

The incorporation and inclusion of qualitative research evidence into the EBP model became seemingly inevitable but not without debate (Lambert 2006). Those aligned to a more positivist approach make strong and persistent arguments that qualitative

research lacks rigor and specificity to be regarded as evidence on which practice should be based.

Even within its own field, there are researchers who are suspicious about the approach towards qualitative synthesis for the purpose of providing a comprehensive understanding or explanatory theory to qualitative findings (Walsh & Downe 2005b). As described by Walsh and Downe (2005b) philosophically interpretivists "endorse constructionist and post-constructionist thought, which emphasise the contingent, meaning-making nature of knowledge production" (p205). The process of synthesising one or more qualitative studies is seen as "...both epistemologically and ethically inappropriate" (Sandelowski et al. 1997, p366). As Sandelowski et al (1997) states:

"To summarise qualitative findings is to destroy the integrity of the individual projects on which summaries are based, to thin out the desired thickness of particulars, to undermine the "function and provenance" of cases, and ultimately to lose the vitality, viscerality, and vicariism of the human experience represented in the original studies" (Sandelowski et al., 1997 p366).

Those grounded in the post-modernist critique of knowledge generation are fundamentally opposed to the systematic review, where a single explanation or one coherent theory is produced (Campbell et al. 2003; Walsh & Downe 2005b; Sandelowski et al. 1997).

There are divided opinions and views regarding whether or not qualitative research should or is able to be synthesised and, within the discourses that promote qualitative systematic review, there is a divided view on its role and function.

## To synthesise or not to synthesise

The conduct of systematic reviews in evidence-based health care has been dominated by a driving force to answers questions around that of effectiveness, or "what works best?" This has resulted in a flourish of systematic review methods

examining quantitative research about effectiveness, and notably including experimental designs. However, as previously discussed to focus solely on effectiveness reduces its ability to answer the often difficult, complex questions that healthcare issues pose. Driven by a need to answer these complex health questions and a need to incorporate qualitative research into the evidence-based paradigm, discussion around the development of systematic review techniques for consolidating qualitative research emerged.

At the centre of this discourse on qualitative systematic review exists the debate of whether or not synthesis of qualitative studies should be undertaken. At the core of this formation exist two discourses; one that claims "yes" qualitative systematic review is possible and the opposing view "no", qualitative systematic review is not possible. This is an oversimplified perspective of a complex topic as both of the discourses have multifactorial influences.

There is a philosophical stance that exists around the discourse opposing the synthesis of qualitative studies. It is argued that meta-synthesis and theoretical development violates the essential aspects of qualitative research. The "idea of bringing together a number of qualitative studies to higher levels of abstraction and theory risks violation of the essential aspects of qualitative inquiry" (Zimmer 2006, p312).

It is argued that the process of meta-synthesis of any study type violates the central tenets of the interpretive paradigm (Sandelowski et al. 1997). It is argued that "the theorising engaged in by the synthesist removes the findings of the constituent from the richness of the primary studies and its intended impact" (Zimmer 2006, p315). Zimmer (2006) goes on to assert that the processes involved in conducting a qualitative systematic review "violate the tenets of the interpretive paradigm within which the constituent studies are philosophically situated" (Zimmer 2006, p315).

Combining interpretations to arrive at a final synthesis, it is argued, loses the uniqueness of the phenomenon (Jensen & Allen 1996, p558). The synthesis destroys the integrity of the individual projects and inhibits the uniqueness of individual study findings (Sandelowski et al. 1997, p366). As Sandelowski et al (1997) explain: "...turning idiographic knowledge into data for synthesis seems to represent an unconscionable loss of the uniqueness of individual projects and departure from the larger pedagogic and emancipatory aims of qualitative research" (p366).

In order to illustrate this point Sandelowski et al (1997) compare qualitative research to that of a poem, a novel or a painting, stating

"as it goes against the nature of poetry to attempt to summarise even one poem about love, so it seems both epistemologically and ethically inappropriate to attempt to summarize findings from one or more qualitative studies about human experiences of health and illness" (p.366).

Alongside the argument claiming it to be philosophically inappropriate to synthesise qualitative research is the argument claiming the diversity of qualitative inquiry practices constrains any attempt to synthesise the findings of the studies. As explained by Sandelowski et al (1997)

"...the sheer diversity of practices within the domain of qualitative inquiry seems to work against efforts to synthesise the findings of qualitative studies...vastly different disciplinary, philosophical, theoretical, social, political, and ethical commitments..." (p.366).

This view is supported by Dixon-Woods et al (2006) as they describe how qualitative research is context specific thus preventing them from being synthesised.

At the opposite end of this formation are those who support the systematic reivew of qualitative studies. For some the move of incorporating qualitative research findings into evidence synthesis is driven by the need to ensure qualitative findings remain useful and user-friendly. While Sandelowski and colleagues (1997) previously claimed that summarising qualitative research destroyed the integrity of qualitative findings she also states that qualitative research appears "endangered by the failure

to sum it up" (p366). A grave concern is that qualitative research work is that it is presented in isolation from other studies(Sandelowski et al. 1997;Estbrooks et al. 1994). Failure to integrate qualitative findings may lead to the demise of its use. Walsh (2005b) highlights that "...qualitative researchers risk further marginalisation from policy makers and clinicians if their work remains isolationist and esoteric and seemingly incapable of influencing either strategy or practice" (p205). There is a call to situate the findings of individual studies into a larger interpretive context while remaining useful and accessible to the "real world" of policy-making and clinical practice (Sandelowski et al. 1997). Qualitative systematic review, it is argued, plays a key role for providing evidence for decision-making (Meadows-Oliver 2009).

The complexity of healthcare produces a wide range of healthcare questions and in order to answer these questions in an evidence based fashion alternative forms (that is, in addition to quantitative research) of evidence need to be considered. This has resulted in the incorporation of a broader approach to the traditional quantitative systematic review and led to the developments of qualitative systematic review. As illustrated by Pearson (2004) "the diverse origins of problems in health care require a broad interpretation of what counts as valid evidence for practice and the utilisation of a diverse range of research methodologies to generate appropriate evidence" (p48).

A common assumption among those who support qualitative systematic review is that qualitative research aims to answer different questions than those addressed in quantitative research (Barbour 2000). As clearly stated by Hawker and colleagues (2002) "different types of research questions require different types of research, and many writers are now arguing that qualitative research findings have much to offer evidence based practice" (p1285).

One of the stated benefits of incorporating qualitative research into a systematic review is that it has the ability to "[capture] the impact of context on the success or

failure of an intervention" (Boaz et al. 2002, p8). Many health care problems do not fit into the experimental model of research and therefore there is a greater openness to incorporating different research methods into the systematic review. It has been argued that "in order for qualitative research 'findings' to make a significant contribution within evidence based medicine and health care... advocates of the qualitative paradigm must demonstrate its ability to address questions of relevance to practice..." (Barbour 2000, p155).

In trying to demonstrate its relevance to practice it is asserted that the incorporation of both quantitative and qualitative research into systematic reviews provides insight into the complexity of interventions and perspectives of users/carers (Boaz et al. 2002, p10). Understanding the complexity of health issues requires knowledge and evidence from sources other than quantitative evidence. As illustrated by Jack (2006): "...given the complex nature of most public health issues (e.g. smoking, violence, obesity) decision makers require a greater depth of understanding of the problem than that supplied by quantitative methodologies (p279). Qualitative metasynthesis can then serve as a model to guide the development of care. Bondas and Hall (2007) support this notion describing how a qualitative meta-synthesis might "serve as a model to guide the development of individualised care interventions with therapeutic outcomes" (p116). Meta-synthesis then becomes a vehicle to ensuring the utilisation of qualitative research findings.

There is an expressed fear that failure to consolidate qualitative research findings will result in the "under-use" of important, relevant pieces of research. As articulated by Sandelowski and Barroso (2002) "qualitative research will remain under-utilised in practice disciplines if no efforts are made to integrate the findings of studies in common topical areas" (p214-215). Likewise Sandelowski and colleagues (1997) expresses the same concern stating

"qualitative research also appears endangered by the failure to sum it up. A recurring concern is that qualitative researchers are engaged in a cottage industry: working in isolation from each other, producing "one-shot research" and, therefore eternally reinventing the wheel" (p366).

Fingeld (2003) also supports the systematic review of qualitative research findings stating "...meta-syntheses are needed to make isolated qualitative findings accessible to health care providers, researchers, and policy makers" (p.901). Conducting a systematic review of qualitative research is seen as an "advancement in making qualitative research findings more useful and in moving them to the centre of the evidence-based process" (Sandelowski 2004, p1370).

Central to systematic reviews of evidence lies the notion that the findings from the included studies can be generalisable. Those advocating for the systematic review of qualitative research findings claim that "...generalisations can and should be made across qualitative studies" (McCormick et al. 2003, p936). Sandelowski, Docherty and Emden (1997) describes how any "efforts to synthesise existing qualitative research studies are seen as essential to reaching higher analytical goals and also to enhancing the generalisability of qualitative research" (p367). It is also argued that a "meta-synthesis can yield more powerful results than any one study of the same topic. Greater generalisability may also be attained, as the meta-synthesis achieves a higher level of abstraction than the individual component studies" (Mowatt et al. 2001, p272). The value of individual pieces of isolated research is likely to be increased when systematically pooled and analysed" (Dixon-Woods et al. 2006, p50).

It is highlighted throughout the literature that a crucial factor to ensure findings can be generalised beyond the setting in which they were generated is to "ensure that the research report is sufficiently detailed for the reader to be able to judge whether or not the findings apply in similar settings (Mays & Pope 2000, p52).

## Qualitative evidence in systematic review

There are three distinct subgroups within this discourse surrounding the role of qualitative research in evidence-based health care – there is no role, a supportive/enhancing role and lastly an independent/difference role.

Initially, when evidence based practice emerged, qualitative research and qualitative research synthesis had no role within evidence based practice. While there are no clear statements actually made by any person or group of persons claiming there is no role for qualitative research in evidence-based healthcare, the discourse exists through the absence of any text on the topic. In other words the discourse exists by examining what has not been said. For example, when evidence based practice emerged into the health care arena the focus was directed at research of effectiveness and the randomised controlled trial. As Rycroft-Malone and colleagues (2004) state

"the focus of attention and investment, politically and thus financially [on evidence based healthcare], has been on understanding and generating research evidence about effectiveness" (p86).

They continue to elaborate by stating that "...the concentration on this kind of professional knowledge, whilst important, has been at the expense of gaining a better understanding of other types of evidence used in the delivery of health care" (Rycroft-Malone et al. 2004, p86). They further develop their point of view by stating the evidence based model for delivery of care is founded on "a concern that care will be delivered neither appropriately nor effectively without the foundation of suitable research because non-scientific information is uncontrolled, anecdotal and subject to bias" (Rycroft-Malone et al. 2004, p87). While the authors here are talking specifically about a broader view of evidence, one beyond the scope of quantitative and qualitative research evidence, that incorporates professional knowledge and patient experience as a form of evidence, it is interesting to note that throughout the

discussion paper qualitative research was not placed under the same banner as scientific, quantitative research evidence. While not necessarily the view of the authors, it is implied that qualitative research is seen by the larger community as inferior to quantitative research.

Those who advocate for evidence to be focused purely on quantitative evidence often view qualitative research as not being worthy for inclusion into evidence based practice. Jack (2006) provides some insight as to why this particular view exists when she stated "...qualitative research, in comparison with quantitative, has been perceived as a process with less rigor and legitimacy that results in findings with little utility and limited generalisability..." (p279). This view is echoed throughout the literature. As Sandelowski (1997) describes, "a nagging concern exists that qualitative research is frivolous, faddish, and devoid of real substance, value and utility in the "real" world of people and their problems" (p125). This perceived lack of relevance and utility provides support to the argument that qualitative research has no place within evidence based health care.

The core of this discourse is essentially formed around what is classified as evidence. A narrowed, positivist view on the definition of what is evidence ostracises qualitative research. As Gilgun (2006) explains

"this form of EBP [a narrowly defined EBP] advocates for the quantification of clinical decision making, considers the results of double-blind randomised clinical trials to be the "gold standard" of research designs, and overlooks other core components of EBP...This type of EBP has a uniformed definition of what counts as relevant research, marginalises qualitative research, and compromises opportunities for funding of research based on qualitative approaches" (p436).

Morse (2006) further demonstrates how qualitative research is marginalised when she describes how

"...our type of evidence, the type that qualitative researchers produce and use, is not considered real evidence. Our evidence is considered soft,

based on perceptions, subjective assessment, opinions and biases. It is considered not valid, not replicable and not acceptable" (p415-6).

Similarly, Rycroft-Malone and colleagues (2004) described how there is a "common assumption that evidence was research evidence and, more specifically, research evidence from the quantitative tradition" (p83). They continue by explaining that quantitative research evidence is more highly valued than other sources in the delivery of health care (Rycroft-Malone et al. 2004). Not only does the exclusion of qualitative research into evidence based health care marginalise and devalue what findings from qualitative research have to offer, the exclusion of evidence-based qualitative research serves to marginalise and silence the patients" voices" (Meadows-Oliver, 2009, p353).

In its supportive role qualitative research is strongly linked to quantitative research. Black has identified three ways in which qualitative methods enhance quantitative research: to improve the accuracy and relevance of quantitative studies, by identifying appropriate variables to be measured and to explain unexpected or unexplained findings in quantitative studies (Black 1994). Popay and Williams (1998) further adapt on this concept by developing two differing models to outline the rationale and standard for qualitative systematic review in health care - the "enhancement" model and the "difference" model. The "enhancement" model incorporates Black's three usages for qualitative research in evidence based health and incorporates two additional roles (Table 5).

Table 5: The role of the systematic review of qualitative research

#### Enhancement model

- 1. Understanding why interventions work
- 2. Improve accuracy and relevance of quantitative
- 3. Identify appropriate variable to be measured
- 4. Explain unexpected results
- 5. Generate hypotheses to be tested through quantitative research

While individual elements of the "enhancement" model are described and supported elsewhere in the literature (Barbour 2000; Cesario et al. 2002), Popay and Williams (1998) appear to criticise the tendency for qualitative research to only be viewed in this role, one that is solely connected to quantitative research. They imply that the enhancement model sees qualitative research as having a role that is complementary but subsidiary to quantitative research. This is a shared view as Sandelowski (1997) states:

"Some people still have the view that qualitative research is incomplete by itself and that qualitative methods are useful only for discovery and description, concepts that tend to be trivialised among those who emphasise justification and technical control in scientific research" (p126)

Sandelwoski (1997) elaborates by claiming that a "key factor implicated in the inappropriate use of qualitative methods is the persistent idea that they are preliminary or ancillary steps to real research" (p126). She continues by adamantly stating that "positioning qualitative research methods as no more than mere scientific (fore)play turns the strengths of qualitative inquiry into weaknesses" (Sandelowski 1997, p126).

Lastly the alternative aspect to the role and function of qualitative research is one where qualitative research is viewed as being independent, able to function and be of use in its own right. As described by Black (1994) it is able to increase our understanding on subjects that are better investigated using a qualitative approach. As phrased by Popay and Williams (1998) in their conceptualised model on the role and function of qualitative research, it is a role of "difference".

Table 6: The role of the systematic review of qualitative research

### Difference model

- 1. Exploring "taken for granted" practice in health care
- 2. Understanding lay/clinical behaviour/developing interventions
- 3. Patient"s perceptions on quality/appropriateness
- 4. Organisational culture and change management
- 5. Evaluation of complex policy initiatives

The view that qualitative research is and can be a stand-alone piece of research places the findings of qualitative research as a valuable component to evidence based practice. No longer is it necessary for qualitative research to be aligned to a piece of quantitative research. Qualitative research has both the methodological strengths and practical outcomes that allow its research findings to be valued and useful. The incorporation of qualitative methods into evidence-based practice provides additional information as well as complements existing information (Boaz et al. 2002). Morse (2006) offers her views on the role of qualitative inquiry,

"Does qualitative research stand alone? ...The answer is qualitative research sometimes stands alone, but it must never always be partnered with quantitative research." (p420).

## **Barrier Blockades**

Qualitative research has encountered a number of hurdles in its strive towards acceptance and involvement into evidence based practice. In addition to there being misconceptions surrounding what qualitative research is and the role it could play in evidence-based practice, barriers were continually being encountered inhibiting the advancement of qualitative research.

Allocations of funding towards healthcare research often overlook qualitative research as a viable form of research to finance. Those responsible for the provision of funding bodies of research directed funding predominantly towards empirical inquiry. As highlighted by Hicks and Hennessy (1997),

"The current preoccupation with experimental research as the panacea of all the ritualistic and historical ills of the National Health Service (NHS) means that proposals employing this methodology are likely to be preferentially considered over and above any other when funding is being considered" (p598).

Hicks and Hennessy (1997) highlights the fact that without "appropriate capital to finance significant projects, it is conceivable that [qualitative research] will be trivialized and [nursing] clinical practice cast back into the barren wilderness of precedent and tradition" (p598).

In addition to the funding bodies oppressing qualitative research Hicks and Hennessy (1997) suggests that:

"Culpability for the devaluation of the qualitative methods cannot, however be levelled exclusively at these sources but may also be apportioned, in part, to some of the professional journals" (p599).

Hicks and Hennessy (1997) described how some nursing journals favoured the publication of articles that employed the hypothetico-deductive paradigm in an attempt to promote nursing research that would be considered acceptable to the evidence based practice community. A resulting consequence of this saw an upsurge in experimental research and as stated by the authors further contributed to the message that "high-quality publishable research means experimental research" (Hicks & Hennessy 1997, p599).

Further prejudice witnessed through journal publications can be contributed to word limitations placed on qualitative research. Stringent word limitations prevent qualitative research from being adequately presented further contributing to it marginalisation.

Qualitative researchers themselves have also contributed to the marginalisation of research findings with a slow response in being incorporated into the evidence-based movement. As described by Pearson (2004)

"knowledge acquired from qualitative approaches to research is largely absent in current approaches to systematic reviews. This is partly because the rapid development of accepted approaches to the appraisal and synthesis of evidence by quantitative researchers has not been accompanied by similar efforts by those with expertise in qualitative approaches to inquiry" (p46).

### Conclusion

Historically, qualitative researchers have been a minority in the domain of health care research. The reason for this can be connected to a lack of understanding of qualitative evidence. Lacking a recognisable identify and faced with constant misunderstanding of what qualitative research has to offer an evidence-based paradigm, the demise of qualitative research seemed inevitable. However a strong force, led by key qualitative researchers and notable organizations saw an improvement towards understanding qualitative research. Despite a united front towards increasing awareness and usability of qualitative research findings there maintains division as to its role and function within an evidence-based paradigm.

Part II: The Research Account

**Chapter 5 - Building blocks to systematic review** 

**Synopsis** 

While the notion was initially opposed, systematic review of qualitative research

findings appears inescapable. What remains are competing discourses on how the

systematic review of qualitative research findings should be conducted. The

dominating components of a systematic review focus on establishing the review topic

or question, searching for qualitative research findings, the issue of quality

assessment, extracting findings for the review and how these findings should be

analysed. Each of these components has competing discourses and is explored in

detail.

Introduction

Qualitative research has received increased recognition as a means to gain insights

into the "culture, practices, and discourses of health and illness" (McCormick,

Rodney et al. 2003, p933). The value of such research and its method lies in its

ability to systematically address questions that are unable to be answered by means

of positivist-empirical research (Green & Britten 1998; McCormick, Rodney et al.

2003). This has resulted in a proliferation of qualitative research.

In recent years researchers have been urged to focus on "accumulative knowledge"

and begin the task of integrating the accumulating wealth of qualitative research

findings (Finfgeld 2003; McCormick, Rodney et al. 2003). The growing interest in

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qualitative systematic review has come about due to a need to make the findings from qualitative research accessible to healthcare professionals as well as a need to increase the robustness and generalisability of qualitative research findings (Evans 2002-2003; Finfgeld 2003).

Systematic reviews assist healthcare professionals to keep abreast of the healthcare literature by summarising "large bodies of evidence and helping to explain differences among studies on the same question" (Cook et al. 1997, p376). The purpose of qualitative systematic review is "not just to identify similarities of research on a particular topic but, rather, to dig deep under the surface layer to "emerge with the kernel of a new truth" and increase our understanding" (Beck 2003, p318).

Since the call to systematically review qualitative research findings a number of terms have been used to describe this type of work. The most commonly used terms are meta-analysis and meta-synthesis. Alongside the ongoing debate about whether or not qualitative research findings should be synthesised exists the debate on how to conduct a qualitative meta-synthesis. There are multiple components to conducting a systematic review and in relation to a qualitative systematic review discussions continue on how each of the components to the review process should be undertaken.

## **Parallels of systemisation**

The systematic review is the cornerstone of the EBP movement. It is a specific methodology for searching, appraising and synthesising the findings of primary studies" (Dixon-Woods et al. 2006, p27). By definition systematic refers to "having showing or involving a system, method or plan", "given to or using a system or

method" (Dictionary.com 2010). As such a systematic review follows along these principles. As stated by Cook (1997), systematic reviews are

"scientific investigations in themselves, with pre-planned methods and an assembly of original studies as their subjects. They synthesise the results of multiple primary investigations by using strategies that limit bias..." (p377).

In short, the systematic review is an efficient technique for "hypothesis testing, for summarising the results of existing studies and for assessing consistency among previous studies" and as Petticrew (2001) highlights these tasks are not uniquely specific to medicine (p99-100). As Petticrew (2001) declares

"Systematic reviews do not have any preferred "biomedical model", which is why there are systematic review in such diverse topics as advertising, agriculture, archaeology, astronomy, biology, chemistry, criminology, ecology, education, entomology, law, manufacturing, parapsychology, psychology, public policy and zoology" (p99)

While the systematic review within healthcare has focused predominantly on evidence that answers "what works" questions there is increasing movement and acceptance towards developing methods of systematic review that allow for the inclusion of more diverse forms of evidence such as qualitative evidence (Dixon-Woods et al. 2006).

Conventionally, systematic review methods have been understood to have the following characteristics:

- an explicit review protocol
- a clearly formulated question(s)
- explicit methods for searching for studies
- the conduct of critical appraising studies to determine scientific quality and
- detailed methods and processes for extracting information and performing the pooling or aggregation of the results/findings of included studies (Petticrew 2001;Mowatt et al. 2001).

Developing processes that allow for the incorporation of qualitative research have adopted similar characteristics. An examination of the methodological developments in qualitative systematic review suggests that most work has focused on specific areas such as searching for qualitative research, appraising qualitative research and methods for the systematic review of qualitative research.

However there are those who caution the transfer of systematic review principles to qualitative research. Dixon-Woods et al (2006) suggests that more discussion needs to occur as to whether "conventional systematic review methodology is well suited to the incorporation of qualitative research" stating it is an important "empirical and epistemological question" (p31).

# **Approaching Systematic Review**

To date there are a number of approaches towards the synthesis of qualitative research such as *narrative synthesis*, views *analysis, meta-ethnography* and *meta-aggregation* to name but a few. Each of these different approaches utilise various methods to arrive at the concluding synthesis and have their own advantages and disadvantages (Sandelowski & Barroso 2003; Dixon-Woods, Agarwal et al. 2005; Oliver, Harden et al. 2005). The differences between these methods aim to address the different methodological traditions of qualitative research and the purpose of the review, such as theory development or to address a clinical question. Each of these methods is under continual development and expansion with the work being conducted by a number of key organizations and noteworthy qualitative researchers.

### **Narrative Synthesis**

Narrative synthesis was originally one of the most common approaches to present the findings from qualitative studies, however this is a largely informal approach and has been subject to much criticism and debate (Evans 2002-2003; Dixon-Woods, Agarwal et al. 2005). Narrative synthesis has been described as a form of "story telling" and differs from other narrative approaches, such as narrative review, in that it includes a formal analytical process of synthesis to generate new insights or knowledge with the process aiming to be systematic and transparent (Popay et al. 2006; Mays 2005b).

In 2006 the ESRC Methods Programme produced guidance for the conduct of narrative synthesis. The purpose of the guidance was to provide practical advice on the conduct of narrative synthesis in the context of systematic reviews of research. Narrative synthesis is a very flexible approach, allowing for different types of evidence (quantitative and qualitative) to be synthesised (Mays et al. 2005b). However, the defining characteristic of this process is its textual approach towards synthesising information. This approach to systematic reviews was one of the most commonly adopted methods to review textual data when statistical analysis was not appropriate. The guidance focuses specifically on systematic reviews using the method of narrative synthesis on the effects and implementation of an intervention.

Up until the development of the guidance, variations of a narrative approach to systematic reviews had been widely used however there was no consensus or common elements regarding the conditions for establishing trustworthiness. The guidance aimed to contribute to improving the quality of narrative approaches to systematic reviews and has since been regarded as the way to conduct narrative synthesis.

As defined in the guidance, narrative synthesis refers to "an approach to the systematic review and synthesis of findings from multiple studies that relies primarily on the use of words and text to summarise and explain the findings of the synthesis" (Popay et al. 2006, p5).

Four main elements are described in the process of conducting a narrative synthesis:

- Developing a theoretical model of how the interventions work, why and for whom
- 2. Developing a preliminary synthesis of findings of included studies
- 3. Exploring relationships in the data
- 4. Assessing the robustness of the synthesis

The narrative synthesis approach has been described as useful: "before undertaking a statistical meta-analysis; instead of a statistical meta-analysis because the experimental or quasi experimental studies included are not sufficiently similar to allow for this; and where the review questions dictate the inclusion of a wide range of different research designs, producing qualitative and/or quantitative findings, and/or non research evidence..." (Mays et al. 2005b, p4). Narrative synthesis has also been described as suited to reviews that aim to "describe the existing body of literature, identifying the scope of what has been studied, the strength of evidence available and gaps that need to be filled" (Lucas et al. 2007, p6).

Narrative synthesis has been criticised as being inadequate for a review of large numbers of studies and lacking in rigor making it difficult for any summary to be represented with accuracy and credibility (Hawker et al. 2002). Dixon-Woods (2006) shares the same opinion stating "narrative reviews are considered by the evidence based community to be the least likely to inform, and most likely to mislead because

they are not developed using rigorous processes and tend to be opinion driven" (p49).

### **Meta-Ethnography**

Noblit and Hare's (1988) meta-ethnography has been one of the more commonly cited techniques used for qualitative synthesis. Meta-ethnography sets about providing a rigorous procedure for deriving substantiative interpretations to qualitative research. It provides a set of rules to assist in collating multiple accounts of qualitative research to produce something that is meaning, useful and creates a deeper understanding of the phenomena under investigation.

It has been claimed that meta-ethnography grew out of dissatisfaction with the traditional narrative review (Mays, Pope et al. 2005). Noblit and Hare (1988) wrote the text describing the meta-ethnographic process to "improve the craft of qualitative research" and to "advance our understanding of social phenomena" (Mays, Pope et al. 2005, p9). As described by Mays, Pope and Popay (2005b):

"meta-ethnography is interpretive rather than aggregative: it seeks to do more than simply collect and review a series of accounts (as in narrative review) and instead aims at a novel synthesis which develops theory to explain the range of research findings encountered" (p7)

The meta-ethnographic approach analyses studies interpretively to identify the similarities and differences across each study with the results of the analysis summarised (Weed 2005). While originally designed to focus solely on ethnographic studies, the meta-ethnographic process has been shown to be applicable to a broader range of qualitative studies.

As meta-ethnography is situated in the interpretive paradigm any interpretation, translation, theme/metaphor is but just one possible representation. Other investigators/reviewers may reveal different interpretations. That being said, the

resulting meta-ethnographic synthesis reveals much about the perspective of the synthesiser as it does about the substance that it is reporting.

Meta-ethnography offers the possibility to empower. It expands conversation about qualitative synthesis, amplifies voices and facilitates praxis (Doyle 2003). The process seeks to provide understanding of unique individual cases but also greater understanding to the uniqueness of collectives (Doyle 2003).

One of the main advantages of meta-ethnography is its ability to offer explanation to seemingly divergent study findings. The purpose and the output of meta-ethnography is to develop a new "higher order" interpretation or theory that accounts for the body of evidence included in the review. As stated by Noblit and Hare (1988) "the idea is to record the progress in a given domain, identify the gaps and weak points that remain, and thus plot the course for future work" (p5).

Noblit and Hare (1988) argue that qualitative synthesis, specifically metaethnography, is "**interpretive rather than aggregative**" (p11). Meta-ethnographers, as they describe them, are not necessarily looking for cases from the same research perspective or with the same purpose, findings and/or interpretations. Decisions are based on which case studies provide the most "fruitful data for the research question...and not whether the cases are similar, related, and/or conflicting" (p327).

Meta-ethnography seeks to produce a synthesis and develop a theoretical explanation to account for the research findings. It sets about providing a rigorous procedure for deriving substantiative interpretations to qualitative research. It provides a set of rules to assist in collating multiple accounts of qualitative research to produce something that is meaningful, useful and creates a deeper understanding of the phenomena under investigation. The process involved in undertaking a meta-ethnography is outlined in the table below.

### Table 7 Steps to meta-ethnography

#### Seven Steps to Noblit and Hare's meta-ethnography

### 1. Getting started

a. Need to identify a topic or "intellectual interest" that can be informed through qualitative research. The type of questions relevant here are more likely to be the how and why. For example, how does a person react upon diagnosis of a terminal illness. The part of the synthesis process is important. The topic need to be something that is worthy of a synthesis. As poignantly put by Noblit and Hare "there is no value in a synthesis that is not of interest to the author". And I would add to broader community because what is the point of doing all the work involved in a synthesis if the researcher is the person that is interested in the result.

#### 2. Deciding what is relevant to the initial interest

- a. Need to be aware of who the audience is for the synthesis.
- b. "it makes sense to be exhaustive in the search for relevant accounts when one's interest is not in the synthesis of specified, particular studies." (p.26)[Noblit, 1988 #1]

### 3. Reading the studies

a. Provides extensive attention to detail.

#### 4. Determining how the studies are related

a. Noblit and Hare suggest to create a list of key metaphors, phrases, ideas / concepts that are used in each account and then analyse how these relationships connect between each of the studies.

### 5. Translating the studies into one another

a. Maintains the central metaphors / concepts of each account in their relation to other key metaphors or concepts in that account.

### 6. Synthesising translations

a. A second level of synthesis. Can a described metaphor or concept encompass those of other accounts? At this stage the researcher is analysing competing interpretation and translating them into each other.

#### 7. Expressing the synthesis

a. The resulting synthesis should be in an appropriate form to the audience to which it is targeted.

### Meta-aggregation (also termed meta-synthesis)

The purpose of meta-aggregation is, through a transparent process, "pool the results of qualitative studies that are of direct relevance to practice" (Pearson n.d., p6). Simply defined, synthesis is "the process of combining different ideas, influences or objects into a new whole" (Pearson n.d., p6). The process, termed "meta-synthesis", refers to a higher order form of synthesis where the findings of individual studies are combined to create summary statements that authentically describe the meaning of the themes (Pearson n.d.).

The Pearson approach to meta-aggregation essentially involves three components: critical appraisal, extraction of data and the development of synthesised findings or conclusions representing an aggregation of the categories (Pearson n.d.). A benefit to this approach to meta-synthesis is that it allows for the pooling of all forms of qualitative studies that are of relevance to the topic under review (Pearson n.d.).

This particular approach to meta-synthesis is embodied in an electronic package, the Qualitative Review Assessment Instrument (QARI), developed to assist reviewers in the systematic review of qualitative evidence (Pearson 2004). The package was designed in consultation with experts in the field and throughout the development phase, three consensus workshops utilising participatory processes were held to explore how evidence generated through qualitative research could be systematically reviewed (Pearson 2004).

As previously stated there are three components to meta-synthesis.

The first component involves individually assessing the validity of the interpretive and critical research studies. Pearson describes the critically appraisal of qualitative research papers as a vital component to the systematic review process and states that "a transparent approach to appraising qualitative research is central to its

ongoing credibility, transferability and theoretical potential" (Pearson et al. 2005, p51).

The second component in the meta-synthesis process involves the extraction of data. Qualitative data extraction involves extracting research findings from the original paper using an approach agreed upon and standardised for the specific review being undertaken. These findings then become the data set for categorisation and synthesis. A finding is classified as an interpretation of the researcher, and can be presented in the form of a statement, theme or a metaphor. The finding is supported by textual data illustrated within the publication. The final component to data extraction involves assigning a level of credibility to each qualitative finding represented as unequivocal, credible or unsupported.

The categorisation of the data, resulting in a final meta-synthesis, represents the final component to this approach. The extracted study findings are categorised and then these categorises aggregated to develop a synthesised finding. A synthesised finding brings together the overall meaning of the categories presented as a statement. The aim is to be able to draw some conclusion that would be of use of practice.

# Laying the foundation

Foundation refers here to the composition of the team designed to undertake the systematic review. Overall the discourse presented in the literature has general support for involving an experienced qualitative researcher or a researcher with previous experience in conducting a qualitative meta-synthesis. As Finlayson and Dixon-Woods (2008) state

"Ideally, a reviewer should work alongside competent qualitative researchers with previous experiences of QMS. If this is not possible then the support of an experienced qualitative researcher is vital" (p66).

The need for qualitative experience is echoed through out the literature. Jones (2004b) states "meta-synthesis should be undertaken by a team of researchers which includes an expert in qualitative research" (p277). Due to the analytical demands of qualitative meta-synthesis Estbrooks and colleagues (1994) suggest that a qualitative meta-synthesis is "most appropriately done by or under the guidance of the seasoned researcher" (p505). They continue their support for involving an experienced qualitative researcher by claiming that if such work is undertaken by a researcher not experienced in the many dimensions of qualitative work then the review can be subject to superficial or misrepresented analysis (Estbrooks et al. 1994). Zimmer (2006) continues this argument by claiming

"it is essential that researchers approach the task of meta-synthesis with a comprehensive understanding of the various philosophical assumptions in which qualitative approaches are based" (p317).

A lack of philosophical understanding of qualitative research places a threat on the utility of the findings in a qualitative systematic review. Sandelwoski (2004) describes how:

"The increasing publication reports of studies designated as qualitative meta-synthesis that are little more than conventional literature reviews is generating new concerns that qualitative meta-synthesis is becoming the latest methodological fad to attract would-be researchers eager for an easy entree into research and qualitative research, in particular. The methodological naiveté of many of these studies has generated a new threat to the utility of qualitative finding." (p1379.)

It is generally agreed qualitative systematic review should not be undertaken by a novice researcher with limited understanding of qualitative research and having previous experience or exposure to qualitative research is an important attribute for a reviewer to possess (Finlayson & Dixon 2008;Thorne et al. 2004;Sandelowski 1993;Finfgeld 2003;Popay et al. 1998). Previous experience or understanding of qualitative research allows the reviewer to be able to identify and distinguish between

"surface errors and mistakes fatal enough to discount findings" (Sandelowski 1993, p2) Sandelowski (1993) claims that researchers undertaking qualitative metasynthesis, who have an understanding of qualitative research, "have a much clearer understanding of the challenges involved in producing good qualitative work and of techniques that can be used to ensure its trustworthiness" (p1).

## Compass or anchor: Defining the review question

The conventional systematic review seeks a well-defined, pre-specified question at the commencement of a review. However the debates surrounding the development of a qualitative systematic review question have included an epistemological shift away from the question being concretely developed at the beginning of the review to one where the question emerges through the conduct of the review.

Eakin and Mykhalovskiy (2003) suggest treating the question as a "compass rather than an anchor". The authors here are implying that rather than the question being developed and set at the beginning of the review the question or area of interest should be used as a guide, just like a compass. This is a shared view as Mays, Pope and Popay (2005a) describe their experience with undertaking qualitative systematic reviews and describe how the questions were "developed from the process of reading and re-reading the articles retrieved, rather than a priori" (ppS1:8). This process is similar to that of primary qualitative research where definitions and areas of interest "emerge from the data" (Dixon-Woods et al. 2005, p52). It has been noted though that adopting this type of approach can result in other "serious practical problems", such as the problem of what to look for when the question has not been well defined (Dixon-Woods et al. 2005). In their paper, Dixon-Woods et al (2005) describe how other serious practical problems emerge when trying to answer

questions that are less well defined than the "what works" question. While perhaps not intentional, this statement may lead us to believe that only "what works" questions, or questions related to that of effect are the only type of questions that require a well-defined and explicit research question at the outset and can imply that due to the nature of qualitative research, qualitative systematic review research is unable to be constrained to such stringent, nonflexible questions.

However, those adopting an approach following systematic review methodology describe the importance of developing the review question at or near the beginning of the review process (Mays et al. 2005a, ppS1:8). Adopting this type of approach sees a well-defined question developed at the beginning of the review. The question directs the state of play in the review. It will identify the type of research papers that are relevant to answer the review question. As Finlayson and Dixon (2008) describe a carefully constructed review questions is "essential as this will influence both the direction of the study and the number and range of papers identified"(p68). Sherwood (1999) describes how a clearly defined review question developed at the beginning of the review assists in guiding the inclusion criteria for selecting studies to be included. Finlayson and Dixon (2008) also support this view stating

"The identification of clear objectives at the outset will give the synthesis focus and make subsequent decision relating to sampling and methods of synthesis easier to make" (p67-68).

Finlayson (2003) continues by describing the importance of ensuring the review question is broad enough to capture the phenomenon of interest yet sufficiently focused enough to ensure the findings are meaningful. As succinctly stated by Mays and colleagues (2005a) "clear review questions are generally essential, whatever the precise approach to be adopted" (ppS1:8).

# Needle in a haystack: searching qualitative research

While the value of qualitative research is increasingly being recognised, qualitative research is often difficult to find (Dixon-Woods & Fitzpatrick 2001; Shaw, Booth et al. 2004). One of the problems contributing to the difficulty of the task is that many of the commonly used databases have index systems that have been based on quantitative study designs (Shaw, Booth et al. 2004). Shaw et al (2004) evaluated three electronic search strategies (Thesaurus, free-text and broad-based terms) combined with recognised search terms and found that 96% of the records were irrelevant or lacked an abstract (Shaw, Booth et al. 2004). There is also no consensus regarding the best source for obtaining studies for meta-synthesis. Finfgeld (2003) highlights that some researchers only search peered reviewed journals for qualitative data while other researchers attempt to obtain unpublished reports in an attempt to reduce publication bias. The search for qualitative studies has also been described as "berrypicking" where information is sought from a series of search strategies rather than from a single set of search terms (Walsh & Downe 2005).

There also continues to be ongoing debate surrounding the sampling method used in a qualitative meta-synthesis. While some reviews report conducting an exhaustive search of the literature (Oliver, Harden et al. 2005) other reports such as the review on lay experience of diabetes and diabetes care reported the use of a purposive sample of papers (Campbell, Pound et al. 2003). Currently sample sizes vary considerably in published meta-syntheses, with included studies ranging from as little as 3 to 292 (Finfgeld 2003).

In a conventional systematic review a comprehensive sample is achieved, that is all relevant research and been searched for and retrieved. The purpose of a comprehensive review is to ensure that "all possible data that might contribute to the

synthesis are available, as exclusion of relevant data might affect estimates." (Dixon-Woods et al. 2006, p.37)

The discourses surrounding searching for qualitative research when undertaking a qualitative systematic review focus on whether the sample should be **comprehensive** in nature, that is, to search for and include all relevant research related to the topic or **purposive**, using a selection of the research to reflect and support the interpretations. It is suggested that the type of method used to conduct the qualitative systematic review will influence the sample size:

"...it appears that the type of meta-synthesis governs sample size. For example, proponents of the meta-study approach tend to maximise sample size to offer the broadest and most comprehensive meta-theory, meta-method and meta-data analysis. Alternatively grounded theory calls for more circumscribed sample sizes." (Finfgeld 2003, p899)

Advocates for the use of a comprehensive sampling technique describe how including all relevant studies into the meta-synthesis strengthens the findings. As Jones describes "the inclusion of all studies, following an exhaustive literature search, helps to prevent the exclusion of important information or views and thus strengthens the findings because they are generated from a broader base (Jones 2004b, p276). The main purpose of achieving a comprehensive sample is to ensure that all relevant papers, and therefore all relevant findings, are included. As Dixon-Woods and colleagues claim, "missing out some papers may therefore risk missing out potentially important insights" (Dixon-Woods et al. 2006, p37). Sherwood who also advocates for comprehensive sampling describes how "selective sampling increases the chance of omitting an important view" (Sherwood 1999, p39). The impact of omitting relevant data can often lead to limited understanding of the phenomenon of interest as Dixon-Woods and colleagues states:

"The application of this form of sampling [theoretical saturation] has been rarely tested empirically, and some express anxiety that this may result in the omission of relevant data, thus limiting the understanding of the

phenomenon and the context in which it occurs." (Dixon-Woods et al. 2005, p52)

For some however, the breadth of the review will be a factor when considering sample size (Finfgeld 2003). It is argued that a large sample size can impede the analysis of a systematic review and result in findings that are of little practical use. As Fingfeld (2003) asserts "experts caution that overly large samples can impede deep analysis, threaten the interpretive validity of meta-synthesis findings and result in gross generalisations that are of little practical use" (p899-900). Likewise Mays and colleagues (2005a) support the use of selective sampling because "reviews that involve the transformation of raw data or that include large numbers of studies require greater resources and where the review question and/or range of evidence is broad, it may be necessary to sample" (pS1:11).

It is also argued purposive sampling technique ensures "fair representation of findings" as Fingfeld (2003) states

"...sample size does not necessarily reflect the actual number of studies that were conducted, as several articles can result from a single study...Thus it would appear prudent for researchers to purposively sample among studies (as well as reports) to ensure a fair representation of findings." (p899)

It is further argued, "no definitive number has been proclaimed except that there must be a sufficient number to answer the questions and permit comparisons among selected dimensions and constructs" (Sherwood 1999, p39). The purpose is to reflect diversity. As Barbour and Barbour (2003) state "...qualitative sampling strategies are not concerned with achieving representativeness but rather reflecting the diversity within the groups or phenomena being studied" (p180). It is further argued that purposive sampling can be used in qualitative systematic reviews because the purpose is interpretive explanation and not prediction (Doyle 2003). Dixon-Woods and colleagues (2006) continue along this line of argument stating:

"for interpretive syntheses...the notion of theoretical saturation might have value...a reviewer might identify the papers that are intuitively deemed the most significant in a particular field and might deliberately sample outside the field in order to test or refine the emerging synthesis." (p37).

The notion of sampling until data saturation has been reached is advocated for within this discourse. As Dixon-Woods and colleagues (2005) declare "sampling continues until theoretical saturation is reached, where no new relevant data seem to emerge regarding a category, either to extend or contradict it" (p52). Suri (1999) who claims "one can stop looking for more research reports on reaching the stage of data redundancy when every new report included in the synthesis is likely to tell the same story rather than provide another perspective" supports this view (p3). However it is argued that "once a systematic review fail[s] to be explicit and reproducible, and allowed to include (apparently) idiosyncratically chosen literatures and to use non-transparent forms of interpretation to determine the synthesis of the included studies, they are no longer systematic" (Suri 1999, p37).

A conventional review requires explicit, replicable searching strategies with the aim being to ensure that all pieces of research relevant to the topic have been found and that the search strategy utilised can be replicated by another if required. The discourses surrounding the search and retrieval in a comprehensive qualitative systematic review centres on whether the search should be comprehensive, replicable, transparent and iterative.

Those advocating for a **comprehensive** search strategy suggest using a range of strategies. As outlined by Dixon-Woods et al (2006) searching normally involves a range of strategies but relies heavily on electronic databases (p.33). The use of multiple search strategies is also advocated for in the conduct of qualitative systematic reviews. As Shaw (2004) and colleagues proclaim "our findings suggest that any of the strategies we have used can identify potentially relevant qualitative

studies. However, relying on any one strategy is likely to miss relevant records" (Shaw et al. 2004, p4).

When specifically reviewing searching databases it is advocated that a three-step approach be utilised in order to prevent missed records. Flemming and Briggs (2006) "...found that all three search strategies [Thesaurus, free text and broad-based] were required to optimise searching for qualitative research and that relying on any one strategy risked missing relevant records" (p98). The three step approach to database searching is also advocated by Dixon-Woods and colleagues (2006) "...all three strategies [thesaurus terms, free-text terms and broad-based terms] are required to avoid missing potentially relevant records" (p34). Barbour and Barbour (2003) also advocates for multiple search strategy but emphasises the need to take time to fully understand how the database system searches for articles. "Rather than relying on free text or researchers' own terms, recourse should be made to the Thesaurus, which explains how terms are used in the context of each database" (Barbour & Barbour 2003, p183).

Electronic database searching is a core component to the search for research when conducting a systematic review and the evidence-based movement has prompted and encouraged the development of sophisticated indexing systems. However as highlighted by Dixon-Woods at al (2001)

"a great deal of work has been done to improve indexing and search filters for quantitative information on databases such as Medline, but the same effort has not gone into developing similar systems for identifying qualitative research" (p129).

The focus for these systems has been directed at medical databases and allows for the easy retrieval of, for example, the RCT. Qualitative research has not been as privy to such attention in the world of electronic indexing and therefore still remains elusive. Due to this inequality in indexing research within the databases Shaw and colleagues promotes that "until improvements are made, those searching for qualitative research must be aware that the price of designing a high recall search strategy is poor precision. Search strategies may need to be over-inclusive so as not to miss any potentially relevant records..." (Shaw et al. 2004, p4). In order to ensure that systematic reviews are comprehensive and that relevant research is not missed it is important to carry out searches on a wide variety of databases (Barbour & Barbour 2003). Mays, Pope and Popay (2005) also acknowledge the difficulties in searching for qualitative research stating "poor indexing in databases and the diversity of qualitative research make the development of search strategies for identifying qualitative studies difficult" (Mays et al. 2005a, pS1:9).

One of the components of searching in a conventional review is to ensure that the search strategy is **replicable**. There are competing discourses as to whether this applies to the search for qualitative research. There is an argument that it is not possible to have a definitive search strategy. As Barbour and Barbour (2003) states

"although Thesauri provide definitions of the terms used to index material, these are unlikely to correspond with researchers' specific interests and focus...there can be no definitive search strategy protocol for any given research topic" (p183).

They continue by saying "given the iterative nature of qualitative research and the potential for the focus to shift, it maybe necessary to expand the search strategy beyond the more general requirements of repeating and updating searchers. (Barbour & Barbour 2003, p183).

For many, an **iterative** process is embedded in qualitative research and should continue when undertaking qualitative meta-synthesis. It has been described as reflecting "real life processes" (Walsh & Downe 2005b, p207). Barbour and Barbour (2003) describe how the search for qualitative literature is an ongoing, expanding process, "...literature searching is not a discrete activity to be performed at the outset

of a research project. Given the iterative nature of qualitative research and the potential for the focus of the research to shift, it may be necessary to expand the search strategy beyond the more general requirements of repeating and updating searches" (Barbour & Barbour 2003, p183).

Alongside the discourses on how the search for qualitative research should be undertaken a number of issues are raised surrounding the **practicalities** of searching for qualitative research. Often, when undertaking the searching process there is difficulty identifying relevant qualitative research. As Flemming and Briggs (2006) describe "...it is difficult to screen qualitative research reports from title alone as they are often descriptive rather than identifying a specific topic" (p99). This concern is shared with Frohman (1994) as they describe how "...qualitative studies that use creative titles or provide inadequate information in their abstracts will be at greater risk of not being identified during searches" (p292). Evans (2002-2003) highlights how the descriptiveness of qualitative research title adds to the complex nature of searching for relevant articles,

"...qualitative research publication often use titles, which, like the studies they report, could be best termed "descriptive"...during database search they can add to the complexity of identifying qualitative research in a specific topic" (p291).

Due to the complex nature of qualitative research there are those who advocate researchers that have experience with qualitative research be involved with the searching for qualitative research.

"We recognise the part that existing knowledge plays in searching. Many reviewers bring clinical and research knowledge to a systematic review. This knowledge feeds into the searching process and may aid the identification of papers..." (Flemming and Briggs 2006, p99).

This view is shared by Mays, Pope and Popay (2005a) as they recommend "...reviewers need to be fully conversant with the subject in question to ensure that all relevant search terms are included" (pS1:9).

Another issue raised in the literature relates to the search and retrieval of unpublished reports. There is an argument claiming the validity of the work is under threat by only including published work (Sandelowski & Barroso 2002). Publication bias is a concern raised for those who do not search for unpublished reports (Finfgeld 2003). However there are also those who claim the issue of including unpublished work is debatable stating

"Theses and dissertations presented the most difficult in finding their findings...This problem calls into question the worth of the considerable time and even more considerable expense locating, retrieving and analysing these works for inclusion in a qualitative meta-synthesis." (Sandelowski & Barroso 2002, p218).

Sandelowski and Barroso (2002) continue by describing how "...yet in the case of qualitative theses and dissertations, a threat to validity may reside in the fatigue and frustration the synthesist will experience trying to identify the findings from the vast amount of information contained in these works" (p218).

# **Quality Confusion**

The issue of quality in qualitative systematic reviews is a highly contentious topic and with that the issue of critical appraisal of qualitative papers brings forth diverse opinions. In a quantitative systematic review critical appraisal is considered an essential component; it is performed to identify sources of bias (selection, performance and attrition) within the conduct of the study (Pearson 2004). However, in the qualitative research arena the appropriateness of critically appraising qualitative papers in a systematic review is still debated.

Fundamental issues of ontology, epistemology and methodology underpin the debate around the use of quality criteria to assess qualitative research (Campbell et al. 2003). The underlying philosophical assumption for those who take the position that

qualitative research can and should be assessed for quality inclusion is the assumption that qualitative research can be flawed (Walsh 2005). Pearson (2004) takes this view stating that critical appraisal of qualitative studies is a central component to its ongoing credibility, transferability and theoretical potential (Averis & Pearson 2003; Pearson 2004). Some researchers have attempted to develop criteria to assist with the process of critically appraising qualitative studies. In a review examining lay experience of diabetes and diabetes care a modified version of the Critical Appraisal Skills Programme (CASP) was used to assist with critically appraising each paper (Campbell, Pound et al. 2003). Likewise a review investigating the support for overseas qualified nurses in adjusting to Australian nursing practice performed critical appraisal however this review used the Qualitative Assessment and Review Instrument (QARI) software developed by the Joanna Briggs Institute (JBI).

The notion of critical appraisal is however still resisted by some researchers. The position held by those who do not support the critical appraisal of qualitative papers in a systematic review is based upon the view that multiple realities exist and important, relevant findings may be missed if papers were excluded based on quality and therefore all papers should be included (Sandelwoski 1997; Sherwood 1999; Dixon-Woods et al 2004). Some researchers argue that appraising each study is not important, omitting this process all together. In a review investigating factors affecting the uptake of childhood immunisation study quality was not used as an inclusion criteria (Roberts, Dixon-Woods et al. 2002). Many of these researchers justify their actions by claiming that the purpose of a qualitative meta-synthesis is to be as inclusive as possible and the act of appraising to include or exclude a study based on quality may result in a piece of relevant data ("golden nugget" of information) being missed (Walsh & Downe 2005).

The issue of quality assessment does not rest with whether or not quality assessment should or should not be conducted. Within the discourse supporting quality assessment there are varying views on how it should be performed. Some authors advocate for broad criterion to be applied to both quantitative and qualitative research. It is claimed there is no distinctive philosophy underlying qualitative research and that a broad criteria would be relevant to both types of research.

Alternatively an argument is put forth that qualitative research is a distinct paradigm, representing a different form of science and therefore requires the application of different criteria. As Walsh and Downe (2005a) describe, "the epistemological status of most qualitative research makes the indiscriminate transferral of these criteria inappropriate" (p109).

# Pragmatism vs purism

Pragmatism or purism, these are competing discourses relating to the types of research papers to be included in qualitative systematic review. The debate centers around whether all forms of qualitative research should be included in a review or whether only similarly conducted types of research should be incorporated.

Those who support incorporating only similar types of methodologies claim that "...combining studies using similar methods on a related topic, findings become more significant by drawing upon a broader range of participants and descriptions." (Sherwood 1999, p38) It is further declared that incorporating a "combination of studies using the same or closely related methodologies is likely to give a more coherent mid-range theoretical interpretation than that derived from the synthesis of findings from various different methodologies" (Zimmer 2006, p314). Supporters of this discourse also assert that the synthesised findings need to be constructed from

similar approaches to ensure that the knowledge produced is arrived at from the same perspective. As Jensen and Allen (1996) describe

"If one has blended or mixed methods one is unsure as to what has been obtained and how it has been verified...the differing views of reality underpinning the approaches leads to the generation of substantively different kinds of knowledge" (p557-558).

Jensen and Allen argue (as cited in McCormick and colleagues 2003), studies using different qualitative methods should not be combined because "different kinds of knowledge cannot be translated into each other" (p935). A related issue brought forth by Dixon-Woods et al (2006) claims that combining results from "different epistemological perspectives could yield misrepresentations" (p50). Those who advocate for purism proclaim that synthesising qualitative research conducted from dissimilar epistemological perspectives should be avoided due to the "variant foci and theoretical structures" (Finfgeld 2003, p900). More specifically Estabrooks and colleagues (1994) argue that only studies with similar research approaches should be synthesised and the "the mixing of methods [can lead] to difficulty in developing theory because of the major differences in the epistemological foundation of the two methods" (p506).

However those who support a more pragmatic view towards qualitative synthesis declare that combining all types of qualitative research papers contributes to the depth and breadth of description and counterbalances the strengths and limitations of individual methods (Jones 2004). McCormick and colleagues (2003) agree with this view stating

"...other researchers not only accept qualitative studies from a variety of methodological backgrounds but even argue that combining studies from diverse approaches serves to counterbalance the limitations inherent in a single method and can strengthen the resulting qualitative meta-analysis by enhancing the richness of the analysis" (p344).

Denyer and Tranfield (2006) also supports this notion of combining different types of qualitative methods stating "...qualitative synthesis are generally inclusive; being

capable of integrating different forms of evidence generated from different methods such as action research, case studies, in-depth interviewing..." (p222). Combining the findings from different qualitative research papers is claimed to be not only a practical approach to meta-synthesis but also possible because the findings from qualitative research are "complementary in nature" (Murphy et al. 1998; Jones 2004).

Zimmer (2006) describes how it is possible for findings from different methodologies to be incorporated in a systematic review as long as attention is given to the "complexity of methodological assumptions underpinning the primary studies" (p.315). The credibility of synthesised findings are enhanced, it is claimed, when the findings are derived from research conducted using varying perspectives and methodologies (Finfgeld 2003).

# **Finding findings**

Data for a systematic review are described as the "findings of individual reports of studies" and are distinguished from the data researchers offered to support their interpretations (Sandelowski and Barroso 2003b, p228). Extraction of findings involves transferring data from the original paper using a standardised, agreed approach and becomes part of the data set for analysis and synthesis (Pearson 2004). The very act of data extraction is a contentious issue. Some researchers claim the effort to extract findings from any qualitative research report violates the imperative to treat the particulars as an integral whole, while other researchers claim that these findings should dominate the final presented report (Sandelowski 1997; Sandelowski & Barroso 2003).

Meta-synthesis relates to the combining of separate elements of qualitative research using a rigorous approach to the analysis in order to develop new knowledge

(Pearson 2004; Thorne, Jensen et al. 2004). While there is some resistance towards the "summing up" of qualitative research findings, with some researchers claiming it to be epistemologically and ethically inappropriate to summarise findings from one or more qualitative studies, there is a need to translate research findings into something meaningful for practice (Finfgeld 2003). Sandelowski (1997) urges for generalisation to be understood in more expansive ways as providing idiographic knowledge, promoting understanding of the culture and providing means to extend beyond one project.

A number of discourses present themselves in the overarching umbrella of extraction of findings. The main issues focus on the extent to which data extraction should be performed. That is, should all findings be extracted from all relevant papers or should extraction only continue until a point of saturation has been reached.

Those who support data extraction only until a level of saturation has been reached defend their view by claiming

"once a particular theme has been identified further occurrences of this theme are only of interest in strictly quantitative terms unless they expand on or modify the already- identified theme" (Booth 2001, p4).

Cutcliffe and McKenna (2002) support this view stating that it is common for the researcher to continue until saturation is achieved and describes how saturation is reached

"When further repeated immersions produce no evidence of 'new' or; fresh' encounters, or rather, even though the researcher repeat the process that facilitated the original encounters and subsequent discovery, they find that no new themes are forthcoming, then they appear to have reached saturation" (p614).

However this method is cautioned by advocates for complete data extraction because it is viewed that important and relevant information could be missed. As Cutcliffe and McKenna (2002) states

."No matter how many times the researcher sees the same incident repeating in the data and thus decides that they have achieved category saturation, there is always the possibility that the 'next' informant or the following one would provide data that indicated that the categories are not saturated" (p.614).

Another contentious issue surrounding data extraction involves whether the raw data should be extracted or the interpretations of the data. McCormick and colleagues (2003) describe how access to raw data from the primary research can increase the richness, complexity and depth of the synthesis. Finfgeld (2003) describes how findings should be supported by raw data. Whatever level of analysis is pursued Walsh states the process requires the "preservation of meaning from the original text as far as possible" (Walsh & Downe 2005b, p208).

# The Great Divide: theory versus aggregation

There are two competing schools of thought when discussing the outcome of a qualitative systematic review. One school of thought campaigns for theoretical development to be the final outcome of a qualitative systematic review. Metasynthesis conducted with the end product being theory development is considered and labelled as "interpretive" synthesis. The second school of thought advocates aggregative synthesis as the outcome for qualitative systematic reviews.

Advocates for theoretical development in qualitative systematic review argue that

"qualitative meta-synthesis is not about averaging or reducing findings to a "common metric" but rather enlarging the interpretive possibilities of findings and constructing larger narratives or general theories" (Sandelowski et al. 1997, p369).

This form of theorising qualitative findings makes research evidence more useful and meaningful. As stated by Zimmer it "provides a means for enhancing the contribution of qualitative findings to the development of more formalised knowledge that is meaningful and useful to the discipline" (Zimmer 2006, p312). It is further contended

the application of theoretical development to qualitative systematic reviews allows "arguments to be extended and thereby provide 'added value'" (Barbour 2000, p158). This view, one where theoretical developments add value to qualitative research, is also supported by Suri (1998) who argues for qualitative synthesis to be interpretive rather than aggregative stating "inductive and interpretive techniques should be used to sufficiently summarise the findings of individual studies into a product of practice value" (p.52).

Further support is given to interpretive developments of meta-synthesis as authors argue for theory to be the product of qualitative meta-synthesis. As Dixon-Woods and colleagues (2005) concedes

"interpretive synthesis is concerned with the development of concepts, and with the development of theories that integrate those concepts...the main product is not aggregation of data, but theory (p46).

The goal of meta-synthesis as Jensen and Allen (1996) succinctly describe is "clearly interpretive, not mere aggregation to achieve unity; it is not a summary portraying the lowest common denominator" (p1346). Supporters of this discourse believe the ultimate goals of qualitative meta-synthesis are "theory development, higher level abstraction, and generalisability in order to make qualitative findings more accessible for application in practice" (Thorne et al. 2004, p313).

At the core of this discourse lies the belief that interpretive meta-synthesis is the only way in which to provide accessible and useful findings for practice. Estbrooks and colleagues (1994) argue that the development of theory builds knowledge and increases the potential for research use in practice. The formulation of theory it is contended, provides order to what is known identifying and delivering coherent and useful relationships that will be able to guide practice (Sherwood 1999). It does this while retaining the "uniqueness of individual studies" (Finlayson & Dixon, 2008, 60).

Interestingly there are arguments that claim the type of approach undertaken will be determined by the underlying aim and questions to be addressed in the review (Dixon-Woods et al. 2005;Mays et al. 2005a;Lucas et al. 2007). Finlayson and Dixon (2008) support this view claiming

"...The aims of the synthesis also need to be considered so if the main objective is, for example, theory building, then an inductive technique like grounded theory may be suitable." (p61-62).

Dixon-Woods et al (2006) claims the "...the distinction between aggregative and interpretive synthesis is a key one, crucially related to the purpose of the synthesis..." (p36). McCormick and colleagues (2003) describe the type of approach adopted as a

"trade-off in decision making for researchers pursuing qualitative metaanalysis [more data in a substantive area versus narrow, deeper analysis]...each approach has its own purposes, strengths, and limitations and researches need to be aware of these to use the appropriate methods for their intended purpose" (p942).

By its very definition aggregation involves gathering or grouping something together. The purpose of a qualitative aggregated meta-synthesis is therefore to "identify the existing qualitative studies on a similar topic in order to aggregate the findings into a single representation" (Sherwood 1999, p38). Estbrooks and colleagues (1994) share this view as they state the importance of selecting studies focused on similar populations or themes when conducting an aggregated systematic review.

Those who advocate for aggregative meta-synthesis also describe it as an interpretive process allowing for the context of the original piece of research to be maintained. As Estbrooks and colleagues (1994) describe

"...aggregation is a method, which, if used skilfully, does employ interpretive techniques and does sustain the nature of the context, if not preserving it (p505-506).

Findings from an aggregated analysis are also stated to result in a "substantive interpretation having more usefulness in developing...knowledge (Sherwood 1999, p37). As stated by Doyle (2003) aggregated synthesis "is 'a process for accumulating

knowledge relevant to a given topic, question, or issue and for showing relationships among the pieces of knowledge and the questions or issue" (p322).

The main tension between these two discourses concerns the approach undertaken to perform a qualitative systematic review. Supporters of an interpretive synthesis advocate for a new approach to qualitative systematic reviews to be developed rather than adopting the process undertaken in quantitative reviews. As Britten and colleagues (2002) claim

"...the attempt to find methods for synthesising qualitative research is not about fitting the round peg of qualitative research into the square hole of quantitative methods but about developing separate methodologies."

Jones (2004a) also describes the transfer of quantitative systematic review methods as a "mistake" for qualitative systematic reviews, claiming it reduces the value of qualitative research. Jones (2004a) continues by stating

"A mistake is often made, however, in transposing methods best suited to systematic review of quantitative studies into qualitative ones. Checklists, 'standards', 'matrices', hierarchies of evidence' and other terminology borrows from the arsenal of the quantitative camp pepper qualitative ground like so many cluster bombs; therein lies the danger of the loss of much of the ground that qualitative research has won over the past decade or so" (p95-96).

This argument is further collaborated by Barbour as they state,

"A qualitative variant of meta-analysis is likely to be a "very different beast" which might necessitate carrying out additional research...in order to seek clarification about particular aspects of study design, or analysis, and perhaps to find out more about the context in which data was generated" (Barbour 2000, p161).

However this view is opposed by advocates of aggregative synthesis because steps such as carrying out additional research and further analysis of the original data no longer meet the requirements of being a systematic review; it then becomes a form of primary research rather than secondary. Those who campaign for aggregative synthesis follow the process undertaken in a quantitative systematic review not to replicate or copy quantitative research but to follow the methodology of conducting a

systematic review. In quantitative systematic review numerical data is aggregated but in a qualitative systematic review "themes and descriptions generated by interpretive studies rather than numerical data produced by experimental and observational research" (p24) are aggregated. Both types follow the systematic review methodology of aggregation; the difference being that quantitative systematic reviews aggregate numbers while qualitative systematic reviews aggregate findings in the form of text.

### Conclusion

Conducting a systematic review involves multiple processes from developing a review question, searching of appropriate research, assessing the quality of such research, extracting the findings from the research and producing a synthesis of the findings. Those following an interpretive style to synthesis appear to advocate and be in support of developing and refining the review question through out the review process, the inclusion of all qualitative research without restrictions imposed on quality assessment and synthesising similar types of research with the aim to produce a theoretical body of knowledge. This is in contrast to those who adopt similar processes undertaken in a quantitative systematic review. Advocates for this process support a well-defined question at the beginning of the review, conducting a comprehensive, exhaustive search, performing quality assessment on studies and aggregating findings in order to produce the final synthesis.

Part III: Discussion / Conclusion

**Chapter 6 – A truth to systemisation** 

**Synopsis** 

With the discursive formations and subsequent discourses revealed, examination and discussion can be provided on the topic. These revelations enable the researcher to establish and develop an understanding of qualitative systematic

review.

Introduction

The notion of positioning qualitative research in the realm of evidence-based practice

and specifically incorporating it into a systematic review is a developing concept.

Traditionally, evidence based practice began as a scientific, strategic approach to

increasing the effective use of resources to achieve optimal outcomes for the users

and providers of healthcare services. However as time progressed there became a

realisation that not all healthcare questions can be answered by research that

focuses specifically on effectiveness and an understanding for the need to

incorporate alternative forms of research developed. At the same time there was also

a need for qualitative researchers to have their voice heard; to have their research

findings viewed as useful and credible to the wider health care community. It is from

this point that discourses surrounding qualitative research in evidence-based

healthcare arose.

# The state of play so far

### History of the present: a voice divided

Taking a retrospective examination into the incorporation and inclusion of qualitative research findings in an evidence-based practice arena (specifically into systematic review) it is clearly visible how far qualitative research findings have progressed. From the beginning developments of evidence based practice qualitative research findings were noticeably absent and this notion forms the first of three distinct formations and is titled "History of the present: a voice silenced" (Table 8).

The history of the present: a voice silenced represents in part the archaeological aspect of conducting a discursive analysis informed by Foucualt. While examining the history of a discourse is not conducted separately to the genealogical aspect (which pays particular attention to that which conditions, limits, and institutionalises discursive formations), presenting the history of the discourse allows for an understanding of the rules governing the evidence-based practice paradigm and the incorporation of qualitative research findings into this domain.

There are three discourses within this first formation. The discourse "Evidence revolution" provides insight into why and how evidence-based practice came to rise and those instrumental to its success.

The "Systemisation of evidence" provides knowledge and understanding to the discourse that relates to the movement towards the systematic review of evidence. With a growing amount of isolated pieces of research being conducted and inadequate time and resource to find and evaluate research knowledge to inform clinical practice the need to consolidate research became paramount. The development of the systematic review approach for health care emerged and is the

cornerstone to evidence-based practice. However qualitative research and its findings in systematic review were continually marginalised as the focus within healthcare and evidence base practice was directed at producing objective, quantifiable evidence on which to based practice. Qualitative research findings were not considered "real evidence". Instead this type of evidence was viewed as being "soft, based on perceptions, subjective assessment, opinions and biases" (Morse 2006, p415-6). This was the dominating view towards qualitative research and as such we saw an absence of any reference to qualitative research being viewed as evidence.

The last discourse within this formation titled "The order of things" provides insight and understanding into the perceived value of different forms of evidence. The evidence hierarchical system demonstrates the perceived value placed on different types of research. The initial hierarchies developed placed the randomised controlled trial as the highest form of evidence with reference to qualitative research absent all together. It is interesting to note that while randomised controlled trials are only able to provide evidence on the effectiveness of an intervention there were no other hierarchies developed, at this stage, that incorporated or even considered other types of research being able to provide evidence in other areas (such as how appropriate or meaningful something might be).

### Rise of the silence voice

An additional layer of interpretation has been given to the second and third discursive formation. Titled "Rise of the silenced voice" this over arching formation presents two separate formations each with their own relevant discourses that have a common

connection of strengthening the voice of the minority, that being the voice of qualitative research findings.

### Staking Identity

The discursive formation titled "Staking identity" (Table 9) comprises four discourses, each discourse instrumental in paving an identity for qualitative research findings in evidence based practice.

The discourse titled "What it is and what it is not" represents the need to clarify and establish what qualitative research was able to offer. The focus of attention and investment in evidence-based practice politically and financially were directed at understanding and generating evidence about effectiveness (Rycroft-Malone et al. 2004). Those involved in the development for evidence-based practice came from a quantitative empirical background and often there was very limited understanding or even awareness that qualitative research existed. It was often seen as "frivolous, faddish, and devoid of real substance, value and utility in the "real" world of people and their problems" (Sandelowski 1997, p125). Clarifying the function and usefulness of qualitative research findings began to pave a path of clear identity for qualitative research findings.

The second discourse within this formation "The search for wider meaning" demonstrates the need to broaden the meaning of evidence within the evidence-based paradigm by being more inclusive of alternative forms of evidence. An understanding and realisation developed that quantitative empirical research could only answer questions related to effectiveness but health care questions were far more complex in nature began to be realised.

The remaining discourse titled "advancing qualitative systematic review" present key influential groups and persons that advocate for and were instrumental to the incorporation of qualitative research findings as evidence in systematic review.

#### **Voice Divided**

A united front was formed in staking an identity to qualitative research findings in evidence-based practice and this united front gave rise to strengthening this marginalised voice within the domain of evidence-based practice. However as the voice strengthened it began to divide (discursive formation titled "Voice divided" Table 10) with competing discourses related to the role and utility of qualitative research findings in a systematic review. The discourse "To synthesise or not to synthesise" presents the competing discourses related to whether qualitative research findings are able to, or should be synthesised into a systematic review.

Continuing on, the discourse titled "Qualitative evidence in systematic review" comprises subgroups with competing views on the role and function of qualitative research findings in a systematic review. The subgroups advocate there is no role for qualitative research findings in a systematic review, there is a complementary but subsidiary role within a systematic review or lastly qualitative research findings are able to have an independent role in a systematic review.

# **Building blocks to systematic review**

This united front divides however when discussions turn to how a qualitative systematic review should be conducted. The examination into this discourse resulted in the formation titled "Building blocks to systematic review" (Table 11). Eight discourses relate to this formation with subgroups formed with these. These Page | 131

subgroups present competing views or opinions related to the over arching discourse. A brief overview and explanation for the competing discourses and their subgroups are summarised below.

The first discourse presented in this formation is titled "Approaching systematic review" and basically outlines that there are a number of approaches to conducting a qualitative systematic review. While the following discourse "laying the foundation" brings to light the composition of the systematic review team.

The discourse concerned with the development of the review question(s) uncovers essentially two subgroups. One subgroup claims the review question should be treated like a compass and used to guide the direction of the review, allowing for a change in direction to occur if deemed necessary by the reviewers. The other subgroup presents the review question as an anchor that holds the boat (which is the review) steady and strong. This stance taken within this subgroup states a systematic review question should be explicit and well defined. The explicit nature of the review question will ground the review influencing both the direction of the study and the number and types of papers that will be identified (Finlayson & Dixon 2008;Sherwood 1999). When examining the groups who advocate each of these two techniques, it is evident that those who advocate for an interpretive approach (in favour of theoretical development as the outcome) to meta-synthesis favour the question being treated as a compass, while those who anchor the review question at the beginning of the review preference an aggregative approach to qualitative systematic review.

The search for qualitative literature can essentially be described as searching for a "needle in a haystack"; it is often a long, tedious and time-consuming task. The difficulties of searching for relevant and applicable qualitative literature are well documented. One of the many reasons searching for qualitative literature can be complicated is that often the databases being used have index systems that are

designed and based on retrieving quantitative study designs. As Shaw and colleagues showed in their examination of databases searching for qualitative literature, 96% of the records were irrelevant or lacked an abstract (Shaw et al. 2004).

The systematic review methodology adopted in a conventional systematic review requires the search for research studies to be comprehensive and transparent. However the discourses revealed in searching for qualitative literature describe two different and opposing processes. One method closely adopts the search strategy undertaken in a conventional systematic review while the opposing discourse supports a purposive type of searching where a selection of the literature is retrieved that reflects and supports the interpretations. As with the discourse surrounding the development of the review question the type of approach undertaken dictates the type of processes to be used. Those who advocate for an interpretive approach to meta-synthesis support the purposive sampling of research. While those undertaking an aggregative approach support and advocate for a comprehensive search for relevant literature.

The highly contentious topic of critically appraising qualitative literature brings forth a vast amount of debate and discussion and encompasses the discourse tilted "Quality Confusion". As the title of the discourse suggests there is confusion as to if, when or how assessing the quality of qualitative literature should be performed.

The process of assessing the quality of research papers is a critical component to a traditional systematic review. It is performed to identify sources of bias (selection, performance and attrition) within the conduct of the study (Pearson 2004). The underlying philosophical assumption for those who perform critical appraisal and assess research for quality is the assumption that research can be flawed (Walsh & Downe 2005a). However, there are those who oppose the act of critically appraising

qualitative literature. This is based on the assumption that important, relevant findings may be missed if papers were excluded based on quality and therefore all papers should be included (Sandelwoski 1997; Sherwood 1999; Dixon-Woods et al. 2004). These actions are justified by claims that the purpose of a qualitative metasynthesis is to be as inclusive as possible and the act of appraising to include or exclude a study based on quality may result in a piece of relevant data ("golden nugget" of information) being missed (Walsh & Downe 2005).

It is worthy to note that often the same groups of people who do not perform critical appraisal also support collecting data until a point of saturation has been met. This is an interesting concept because on one hand all retrieved papers are included, regardless of their quality in order to prevent the "golden nugget" of information being missed however extraction of findings are often performed until a level of saturation is obtained. It is argued that extracting findings until a believed level of saturation is achieved could result in a "golden nugget" of information being missed. There is always the distinct possibility that the next research paper could provide new insights and meaning to the phenomenon at hand (Cutcliffe & McKenna 2002).

Moving on from quality assessment is a discourse concerned with how different methodological qualitative research papers are analysed in a systematic review. The discourses are titled "pragmatism versus purism." Essentially the discourse has two competing subgroups; one subgroup supports combining into the final systematic review analysis all the different types of methodological qualitative research papers while the other subgroup advocates for isolating in the analysis each of the different types of methodologies, for example, analysing all phenomenological research papers, analysing all ethnography research papers etc.

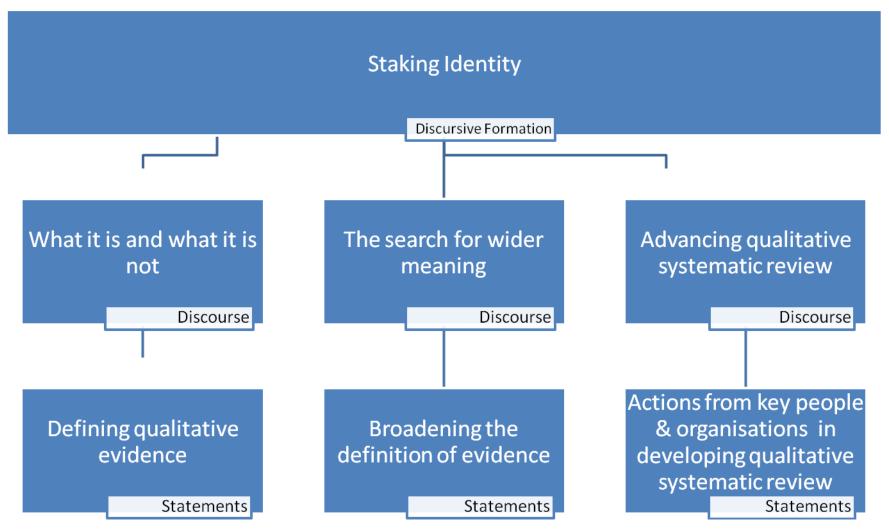
The next stage of a systematic review is the extraction of findings, this brings about the discourse titled "Finding findings". There are two subgroups positioned under this discourse. One particular view campaigns for the extraction of findings to occur until about a point of saturation has been met, that is until it is believed there are no new findings that will be revealed be analysing further research papers. The remaining subgroup advocates for the extraction of findings from all of the included research papers.

The final discourse presented is titled "The great divide". This discourse encompasses two opposing subgroups and relates essentially to the outcome of conducting a qualitative systematic review. One subgroup promotes the outcome of a qualitative systematic review being an aggregative analysis while the remaining subgroup opposes this type of analysis and endorses the outcome of a qualitative systematic review as being theoretical.

History of the Present:a voice silenced Discursive Formation **Evidence** Systematisation of The order of things revolution evidence Discourse Discourse Discourse Move to systematically Focus on evidence-based Levels of evidence reviewing evidence practice Statements Statements Statements

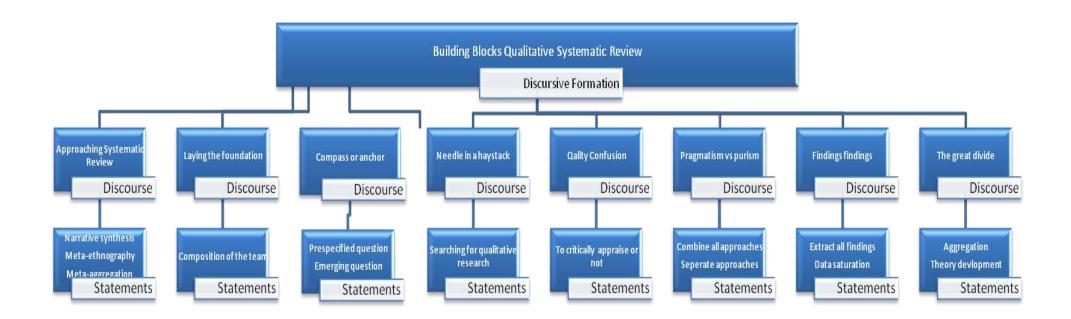
Table 8: Discursive Formation History of the Present: a voice silenced

Table 9: Discusrive Formation: Staking Identity



Voice Divided Discursive Formation To synthesise or not to Qualitative evidence in **Barrier Blockades** synthesise systematic review Discourse Discourse Discourse Qualitative systematic review Misconeptions of qualitative No role should be conducted research Supportive/enhancing role Qualitative systematic review Funding towards qualitative Independent/difference role should not be conducted research Statements Statements Statements

Table 10 Discusrive Formation: Voice Divided



# A path to systematic review

After examination of the discourses represented in the literature surrounding the use of qualitative findings as evidence, specifically its role within a systematic review, it is understandable how confusion reigns. Just examining the terms used to describe the process of a qualitative systematic review is overwhelming in itself. The terms include systematic review, meta-synthesis, meta-ethnography, narrative synthesis and qualitative synthesis. The literature presents a multitude of views on how each of these approaches should be conducted but seems to refer to all of them as being a systematic review of qualitative research.

Traditionally the systematic review approach focused on meta-analysis and its examination into effectiveness. It is from this stage of development that there were calls to change the traditional process to systematic review and arguments for developing new methodological approaches that specifically met the needs of qualitative research.

The purpose of this piece of research was to discursively analyse the discourses surrounding the incorporation of qualitative research into evidence based health care, with specific emphasis on the incorporation of qualitative research findings into a systematic review.

The systematic review is not a piece of primary research. Its data are the findings from an original piece of included research. If the research report is quantitative in nature then its data are numbers. If the included research report is qualitative in nature then its data becomes the words used to describe the phenomenon. A systematic review does not attempt to reanalyse primary data but instead aggregates the findings and conclusions from the primary authors.

It has been demonstrated throughout the literature that systematic review has its own methodology and presents the highest standard of comprehensively summarising research on a stated topic. Dixon-Woods (2006) clearly states that

"...systematic review has developed as a specific methodology for searching for, appraising and synthesising findings of primary studies" (p27).

Here Dixon-Woods does not distinguish that the systematic review process can only be applied to certain types of primary studies. It is argued that systematic review methodology can be appropriately applied to all forms of research. As Evans and Pearson (2001) proclaim

"...systematic reviews represent the "gold standard" in research summaries. On this basis the methods utilised should therefore be able to address all types of health care research" (p595).

Systematic review provides the framework whereby the findings generated from multiple independent studies can be synthesised to produce and provide valid evidence on a topic of interest (Evans & Pearson 2001).

There are a variety of approaches detailed in the literature that have been used to synthesise two or more pieces of qualitative research and claim to be a systematic review (meta-ethnography, meta-aggregation, meta-theory etc to name but a few). All of these approaches are noteworthy, valuable pieces of research. However, if a piece of qualitative secondary analysis is to be labelled a "systematic review" then I argue the process undertaken throughout the review must follow the 5 Stages to Systematic Review (Figure 3).

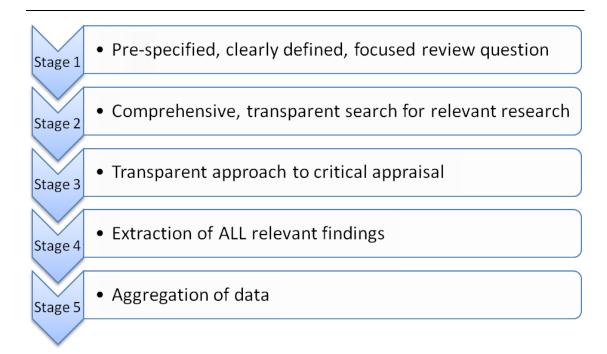


Figure 3: Five Stages to Systematic Review

Stage 1, the development of the review question, is an essential component to situating the direction of the review. Adopting the compass or anchor analogy developed by Eakin and Mykhalovskiy (2003), I argue the review question can and should be treated like an anchor when conducting a qualitative systematic review. A specific and well-defined question can hold steady the review, anchoring it as such, to ensure the findings are relevant and meaningful.

"The identification of clear objectives at the outset will give the synthesis focus and make subsequent decision relating to sampling and methods of synthesis easier to make" (Finlayson & Dixon 2008, p67-68).

A well defined review question will be able to guide the direction and focus of the systematic review and as such will be able to make the decision making process more transparent. A well-defined review question will state who and what the interests of the review are and what outcomes are being examined. This will guide the searching and retrieval process as it becomes much clearer as to what papers meet the purpose of the review.

Stage 2 requires a comprehensive and exhaustive search for literature. This type of search strategy ensures all relevant studies and therefore relevant findings are retrieved. As Dixon-Woods and colleagues (2006) claim, "missing out some papers may therefore risk missing out potentially important insights" (p37). It is vital to ensure that a comprehensive search is undertaken to alleviate the risk of omitting data that could potentially be relevant. Omission of any relevant data could potentially limit or obscure understanding of the phenomenon of interest.

Searching for qualitative research can be a difficult task. As examination into the discourse has shown there are many obstacles that can be encountered when searching for qualitative research. Database systems have traditional been designed to easily access quantitative research and a great deal of improvement is needed to develop similar systems for identifying qualitative research (Dixon-Woods et al. 2001). Often the price of designing a "high recall search is poor precision" (Shaw et al. 2004, p4) and the reviewer, in an attempt to not miss any relevant studies, is often left with a large number of references to wade through, most of which will not be relevant to the review topic.

Other obstacles encountered during the searching process relate to the difficulty in identifying relevant qualitative research. Qualitative research by its very nature is descriptive and as highlighted by Flemming and Briggs (2006) often qualitative research reports have creative, descriptive titles rather than specific titles. This can make identifying relevant research a difficult task. In order to assist in the retrieval of relevant studies I urge authors of qualitative research reports to consider how they frame the title of their paper for publication. It would surely be a great shame to have well conducted qualitative research findings overlooked due to a creative title. Titles that clearly describe what the paper is about will assist in the task of retrieving relevant data during the searching phase of a systematic review.

Barbour and Barbour (2003) claim that "critical appraisal is a corner stone of systematic review" (p181). The process of applying critical appraisal to qualitative research was long over due and acknowledges that there is such a thing as bad qualitative research (Barbour & Barbour 2003). There are many and varying forms of critical appraisal tools available to assess the quality of qualitative research. While this research does not delve specifically into what elements should be incorporated into a critical appraisal form it does advocate for the need to critically appraise. The process of critical appraisal, like all processes in a systematic review, should be clear and transparent and is represented as the third stage in a systematic review.

Stage Four focuses on collection of data for the systematic review. The data in a systematic review are the findings from the included primary studies. If the outcome of the systematic review is concerned with the effectiveness of interventions then the systematic review data are the measurement of effect represented as numbers. If the interest is in the meaningfulness or appropriateness of an area of interest then the data for the systematic review are the findings from the studies presented in textual format. The information whether they be numerical or textual in form become the findings for a systematic review. A systematic review aims to be conclusive and therefore requires the extraction of all information related to the area or topic of interest.

The findings are then aggregated and this stage represents the final stage of a systematic review. The aggregated findings provide, in an effectiveness review, an indication as to which treatment is more effective. Aggregated findings from textual data provide a collective insight into the phenomenon of interest.

Below is a comparison table detailing a number of approaches identified in the literature that claim to synthesise or systematically review primary research. It outlines the 5 Stages of Systematic Review to the left of the table and compares the

process adopted in a variety of review approaches such as meta-aggregation and meta-ethnography to the right of the table.

Table 12: Comparing secondary analysis approaches to 5 stages of systematic review

5 Stages of Systematic Review	Approach: Quantitative: Meta-analysis	Approach: Qualitative: Meta-aggregation	Approach: Qualitative: Meta- ethnography	Approach: Qualitative: Narrative Synthesis
1. Question – Clear and focused	A pre-specified and focused question(s)	A pre-specified and focused question(s)	Adaptive	Adaptive
2. Searching for studies - Exhaustive	Exhaustive	Exhaustive	Selective	Selective
3. Critical Appraisal - conducted	Critically appraise studies to determine scientific quality	Critically appraise studies to determine scientific quality	Opposed All studies included	May or may not be used
4. Extraction of data - comprehensive	Comprehensive  Extract results from all included studies  (Presented as numbers)	Comprehensive Extract findings from all included studies (Presented as words)	Interpretive	Interpretive
5. Process - aggregative	Restating and aggregating quantitative data	Restating and aggregating qualitative data	Constructing Interpretations Theoretical development	Narrative summary

As outlined in the table above meta-analysis and meta-aggregation closely follow the Five Stages of Systematic Review. From the particular standpoint taken within this piece of research, that a systematic review needs to have incorporated the 5 Stages of Systemisation, it is concluded that meta-analysis and meta-aggregation are, by these criteria considered to be a systematic review.

While the information outlined in the above table demonstrates that the process of meta-analysis and meta-aggregation follow the processes of a systematic review, these are not necessarily the only two approaches that can be used to conduct a systematic review. Any approach that follows the 5 Stages of Systematic Review could be considered to be a systematic review.

### Conclusion

The growing popularity of qualitative research and the overwhelming force of the evidence-based practice movement has led to calls for qualitative research to be incorporated into the evidence base. The systematic review of research is seen as the highest level of evidence on which to inform practice and as such attempts have been made to systematic review quantitative and qualitative research. The process for systematic reviewing quantitative research is well developed and accepted however there continues to be competing discourse surrounding the systematic review of qualitative research.

It is important to recognise that there are differences between quantitative and qualitative research. Quantitative research has a focus towards numbers and effect size and delivers conclusions regarding the effectiveness of treatments. Qualitative research offers a distinctive contribution towards health care; it has a focus toward the written word and develops a deeper understanding on a phenomenon of interest.

There has been and continues to be considerable debate surrounding whether qualitative research can or should be adopting the systematic review template used for summarising quantitative research. There are those who caution against adopting the systematic review principles and argue for developing a distinctive approach specifically for qualitative research.

I argue that all approaches to synthesising qualitative research are useful and have a place within health care but only reviews that follow the Five Stages of Systematic Review can be given the label of being a "systematic review". Only those methods that detail an explicit, well defined question, perform a comprehensive search for

research, critically assess the quality of research papers, extract and aggregate the findings of the included research papers can be given the label of being a qualitative systematic review.

Part III: Discussion / Conclusion

**Chapter 7 – Research revisited** 

**Synopsis** 

With the thesis coming to an end it is timely to revisit why this piece of research was

imperative and how it will make a significant contribution to advancing the field of

qualitative systematic review. This is achieved by re-examining the influence Michel

Foucault has had on the theoretical and practical components of conducting a

discursive analysis. With the discursive formations unmasked it is possible to reveal

the discourses that have influenced the direction of qualitative systematic review.

With all discourses, both dominant and marginalised revealed, I take a position on

the construct of a qualitative systematic review advocating that in order to be

considered a systematic review the 5 Stages of Systematic Review must be followed.

This thesis concludes with identifying any possible limitations that may have impact

on the outcome of this piece of research and provides direction for the future of

qualitative systematic review.

Introduction

At the beginning of this analysis I asked "How is today different from yesterday? How

is the world of evidence based practice different today than from when it began?"

This discursive analysis informed by the works of Foucault has provided an in depth

understanding into how qualitative research findings have been and are positioned in

evidence-based health care, specifically within the systematic review of evidence.

The gradual inclusion of qualitative research findings is documented and the competing discourses into its incorporation into systematic review revealed. The contemporary arguments for and against the use of qualitative research findings in a systematic review have been accounted for and the future of qualitative systematic review directed towards an approach to conducting a systematic review.

# Foucault, discursive analysis and qualitative systematic review

Discursive analysis aims to bring to light all of the discourses on a given topic, placing them on a level playing field. A Foucauldian influenced discursive analysis takes into consideration the historical development of discourses and any relations of power that hold the discourses together. More clearly stated, a Foucauldian inspired discursive analysis examines who is saying what in relation to qualitative research findings as evidence in evidence-based practice, and specifically in relation to its role in systematic reviews. The type of analysis further examines when something is being said and why it is being said. Illustrations or examples within the text (from the literature included) reveal these statements. This type of context specific information assist in identifying the discourses related to the field. It is necessary to position all identified discourses side by side, on a level playing field (while acknowledging that not all discourses may have been revealed), in order to reveal the discursive formations. Identifying points of difference between these discourses will assist in unveiling the discursive formations while further examination is required to identify how and why a particular view emerged and what group claims authority to such views.

The initial discursive formation had a strong archaeological influence. The history of evidence-based practice and the incorporation of qualitative research findings were explored. Initially focused solely on the results of randomised controlled trials the evidence based-practice paradigm alienated or marginalised qualitative research findings. Examining the history of evidence-based practice and how qualitative research findings were incorporated into the evidence-based paradigm provides a clearer and deeper understanding of the status of qualitative research with this field today.

A connection between the second and third discursive formation was seen and a higher order formation was deemed necessary to demonstrate this link between the two discursive formations. The second and third discursive formation, titled "Staking Identity" and "Voice Divided", were therefore placed into the higher order discursive formation representing the "rise of the silenced voice".

The second discursive formation revealed the discourses connected to qualitative research staking an identity, claiming position within evidence-based healthcare. It was necessary for qualitative researchers to have represented a collective voice in order to stake an identity within the world of evidence-based practice. The discourses revealed within this formation demonstrated a need to clarify and define what qualitative research is and is not and to have it accepted as an appropriate form of evidence. The third discourse within third formation focuses on a number of influential persons and groups that have contributed to advancing qualitative research findings and the systematic review of qualitative findings.

While united to be included as a worthy component to evidence based practice the qualitative voice was divided in how this should be achieved. This divided voice becomes the third discursive formation revealed through this analysis. There are separate views as to whether qualitative research findings should be incorporated

and included in the systematic review process and what role and function qualitative research findings have within systematic reviews.

This leads into the final discursive formation that represents the discourses related to the elements of a systematic review or otherwise known as the "building blocks to synthesis".

## Constructing a qualitative systematic review

Resulting from an in depth examination of the literature related to the systematic review of qualitative research the notion was formed that a systematic review should only be considered to be a "systematic review" when the 5 stages of Systematic Review were met. These five stages represent key elements of a systematic review and are applicable to all forms of systematic review of research regardless of whether the data is numerical or textual in nature.

When these five stages (stage 1: the need for a clearly defined, focused review question, stage 2: a comprehensive and transparent search, stage 3: a transparent approach to critically appraising the literature, stage 4: the extraction of ALL relevant findings or results, and stage 5: the aggregation of the data) are represented the research can be considered to be a systematic review.

#### Limitations

When conducting any type of research it is important to be aware of any potential limitations or criticisms that could transpire. Maintaining awareness of these issues will assist in reducing the incidence in which they could occur.

The limitations of this study include the arguments concerning the validity of a discursive analysis informed by the work of Foucault in favour of other philosophies in providing an articulate interpretation of reality. Incorporating both the archaeological and genealogical aspect of Foucault's discourse analysis strengthens this research. Understanding where a discourse has come from and the power connected to the formation of discourses, and by bringing to light all forms of discourses provides clarity and insight to the topic.

Within the literature on discourse analysis a number of potential limitations and criticisms have been highlighted (Antaki et al. 2003;Stevenson 2004); they are presented here with a response as to how this study attempted to reduce the occurrence.

Under-analysis through summary: this can occur when there is a lack of clarity in the theoretical/methodological approach. This can occur when the researcher is unsure of how to examine the data providing a mere summary of the data and no further analysis.

The researcher has previous experience and knowledge in the area of qualitative research and specifically in qualitative systematic review that has allowed for an existing understanding of the theoretical and methodological approaches.

Under-analysis through taking sides: Antaki (2003) describes how there is debate among discourse analysts as to whether analysts should take positions, or sides with respect to the material in their study (Antaki et al. 2003). The authors do not take a position on this topic but advocate for researchers to ensure that whatever position is taken the data is analysed proficiently (Antaki et al. 2003).

It is inevitable that my previous experience and knowledge will influence any judgements that I form. I have strived to minimise the impact this may have and

balance my exposure to the works related to qualitative systematic review. However the concern that my previous experience may influence my interpretation will always remain.

*Under-analysis through over-quotation*: this involves a failure to move beyond the text (Stevenson 2004).

Continually throughout the process of conducting the discourse analysis the researcher was mindful of moving beyond the stated text.

Circularity in identification of discourses: there is a potential in doing discourse analysis to present only what the researcher expected to find (Stevenson 2004). A broad search for text and an awareness on the researcher's part will assist in preventing this from occurring. In order to overcome these potential problems it is necessary to detail a clear process in which to approach the data.

The researcher regularly throughout the conduct of the research conducted broad searches for literature that involved accessing libraries, databases and a search on the World Wide Web. A clearly described theoretical/methodological approach for this study has been detailed and subscribed to.

# Directing the future

In order for qualitative research to be constructive and able to progress in this current period of time I suggest the 5 Stages to Systematic Review be adopted when conducting a qualitative systematic review. This is not to suggest that alternative approaches that have been taken to summarise qualitative research are inferior to this particular approach but instead implies that they cannot be named a systematic review if these five stages are not represented.

However, I strenuously emphasise the need to continue with some of the ongoing debates surrounding qualitative systematic review.

While beyond the scope of this research, further debate and discussion is required in relation to advancing the discourse on assessing the quality of qualitative research. While the conduct of this discursive analysis brought to light the discourse advocating for quality assessment it also brought to light that within this discourses there is no consensus as to how quality assessment of qualitative research should be conducted.

#### Conclusion

Qualitative research is a valuable form of research in health care and delivers a unique perspective to increasing our understanding of phenomenon of interest. The systematic review of qualitative research in relation to clinical questions broadens and strengthens qualitative research findings and in the age of efficient, effective and appropriate healthcare the findings of a qualitative systematic review will be and are in a superior position to assist with ensuring the best available evidence is actually available to guide practice.

By conducting a discursive analysis on the discourses presented throughout the contemporary literature surrounding the incorporation of qualitative research findings into evidence based practice, with a specific focus on the inclusion of qualitative research findings in systematic review, a deepening level of understanding is gained. The knowledge gained from this discursive analysis has been able to influence the future direction of qualitative systematic review.

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