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**RESEARCH
METHODS *FOR*
NURSES *AND*
MIDWIVES**
THEORY *AND* PRACTICE

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THE DEVELOPMENT OF NURSING AND MIDWIFERY KNOWLEDGE

Within this chapter we will consider where nursing and midwifery knowledge comes from and what shapes this knowledge. In this chapter we will:

- identify the sources of nursing and midwifery knowledge
- establish the important role that research plays in the development of nursing and midwifery knowledge
- explore the three main research paradigms of positivism, interpretivism and pragmatism; this exploration will include the development of the paradigms over time, their assumptions, their values and the research approaches with which they are associated
- consider alternative, less common research paradigms such as post-positivism and feminism
- review the influence that research paradigms have on nursing and midwifery research
- examine the tensions between the paradigms of positivism, interpretivism and pragmatism.

This chapter builds upon Chapters 1 and 2 and provides a foundation for Chapters 4, 5, 7 and 8.

Sources of knowledge for nursing and midwifery

Although this is a book about research and evidence-based practice, it is important to place this source of knowledge in the context of other types of

nursing and midwifery knowledge. We will review these other sources and in doing this we will see that there is some overlap between the different types of knowledge (see Figure 3.1). However, when reviewing the sources of knowledge separately it is clear that they vary in their reliability and appropriateness. These are important factors to consider when using knowledge to support the decisions we make about the provision of care for patients, clients and their families.

Think about a time when, as a student, you went to work on a new placement. You almost certainly at some point asked your mentor or a member of staff, 'Why do you do that this way here?' This could have been a question about the type of dressings used, routes and frequencies for taking temperatures or perhaps the visiting policy for family and friends. You may have asked the question because this was the first time you had encountered that particular aspect of care or you may have been told to use a different care strategy on a previous placement. Alternatively if you are a qualified nurse or midwife you may have been on the receiving end and have been challenged by students, patients, clients or relatives about your practice. These questions can reveal some uncomfortable truths when we examine the reasons why we do what we do; in other words, the sources of the nursing and midwifery knowledge that underpins our practice.

THINK POINT ACTIVITY 3.1

Make a list of the different sources of nursing or midwifery knowledge. To help you do this, think about the types of knowledge that you have acquired that informs your practice. Where does this knowledge come from? Think also about the experienced nurses and midwives that you have worked with. What informs their practice?

Traditional knowledge

In the early decades of the twentieth century most nursing and midwifery practice was based on traditionally held beliefs about the best way to care for patients and clients. Over time, these beliefs became accepted truths and this knowledge was passed on to other nurses and midwives through word-of-mouth, custom and practice and socialisation. Once acquired, this knowledge became comfortable and familiar. Possessing this knowledge also created a sense of identity, empowerment and belonging amongst nurses and midwives.

However, practice based solely on tradition can lead to entrenched ways of working that perpetuate over time. There is little scope to question the knowledge base or change practice. As a consequence, this can lead to ritualistic ways of working that are not scrutinised, challenged or tested. This culture was able to persist at a time when nurses and midwives were not taught to challenge the knowledge base or those in positions of authority. Indeed if a practice was questioned the likely response would be 'because we've always done it this way'. Moving away from the comfortable security of practice based on traditional knowledge can be difficult for practitioners. Accepting that what you have been doing up to now has been ineffective, inappropriate and in some cases harmful can lead to reluctance to acknowledge the need for change.

When we look back now, we can identify many examples of questionable traditional or ritualistic practices from the past that were based on what we now realise is dubious evidence. Examples could include putting a handful of salt in bath water to promote healing, giving women an enema prior to childbirth, preventing parents from visiting their child in hospital or carrying out four-hourly observations of vital signs on patients who were hospitalised solely because of mental health problems. We would like to think that practice is no longer based upon traditional knowledge that although accepted over time, is without any other foundation. However, it is unlikely that this is the case.

THINK POINT ACTIVITY 3.2

Identify examples of practice that are based solely on traditional knowledge. These might be examples from the past or from practice that you have personally encountered. How were the practices that you have identified able to perpetuate?

Personal knowledge

Personal knowledge is a source of knowledge developed by individual nurses and midwives through their experience and expertise over time and can therefore be enhanced through reflection on practice. Practitioners may also draw on knowledge, experience and expertise developed outside the health-care system that they feel is relevant to their practice. Nurses and midwives may therefore believe that they have developed a

knowledge base that has been acquired through the ‘wisdom of experience’ or life experience. These practitioners may also be regarded by their colleagues, patients, clients and relatives as being an ‘expert’. The extent to which individuals are able to exert the wisdom of their experience will be determined by the position of power or authority that they hold. The stronger their position of power, the more senior their role or the higher their authority, the more likely that the knowledge they use to inform practice will go unchallenged. In the past, care was commonly delivered in accordance with the senior nurse or midwife’s wishes: ‘Sister likes it done that way.’ Whilst we have hopefully moved away from such dominance, it may still be the case that some senior nurses and midwives are not challenged about the personal knowledge they use to make decisions about care.

As we have seen in Chapters 1 and 2, personal knowledge in the form of clinical experience and expertise is one of the four components required for evidence-based practice. However, it should not be used in isolation as a source of knowledge. Using just personal knowledge to inform practice may lead to complacency and flawed judgements. In utilising personal knowledge practitioners may simply be drawing on traditional ways of working. In addition, having lengthy clinical experience and having a senior role does not necessarily mean that a practitioner is drawing on the most appropriate knowledge to inform their practice. This is because the knowledge that they have acquired through experience in one situation may not apply in another. Indeed, drawing exclusively on personal knowledge could lead to the perpetuation of poor, inappropriate or even harmful practice. It may also mislead students, colleagues, patients, clients and relatives. For example, a nurse may believe through her years of experience that she has developed a dressing technique that promotes wound healing. However, any wound healing that has occurred using her technique may just be coincidental and there may be other tested methods available that lead to more effective wound healing.

THINK POINT ACTIVITY 3.3

Identify examples of practice that you have observed over time that appeared to be based purely on personal knowledge.

Intuition as a source of knowledge

Intuition is in many ways similar to personal knowledge. Intuition is used when practitioners believe that they instinctively know the best way to care for patients and clients. This innate form of knowledge is sometimes referred to as having a 'sixth sense', a 'gut feeling' or a 'hunch' about something. Practitioners may base their instinct about something on their previous experience of a similar situation. Alternatively they may encounter a new situation and feel they know instinctively how to deal with it. Either way, practitioners using intuition as a source of knowledge are usually unable to explain, rationalise or justify their actions to others. When asked they say they 'just know what to do'. We can probably all think of a situation where intuition played a part in informing the decisions that we or others made about care. However, the potential problem of using intuition and nothing else is that, whilst you may be right, you may also be wrong. The latter scenario could have serious implications for the patient, client, relatives, the practitioner and the wider service.



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THINK POINT ACTIVITY 3.4

Identify examples of practice that was based solely on intuition. These might be examples from your practice or that of others. Was the practice based solely on intuition or were other sources of knowledge also used?

Knowledge from other disciplines

We have seen in Chapter 1 that in the early part of the twentieth century it was believed that the knowledge base required for nursing and midwifery practice was simplified medical knowledge (Jolley, 1987; Yuill, 2012). Although there has been a move away from medical dominance since then, knowledge from other disciplines quite rightly continues to inform aspects of nursing and midwifery practice. These other disciplines include psychology, human biology, sociology, medicine, pharmacology and physiology. The range of disciplines illustrates the diverse, complex and holistic nature of nursing and midwifery practice. However, if knowledge from other disciplines is used to inform nursing and midwifery practice it should not be directly lifted. It is imperative that it is *applied* to nursing and midwifery practice to ensure the problems and needs of individual patients, clients and families are met. It is also important that the professions of nursing and midwifery sustain their own identity by continuing to generate their own body of knowledge rather than relying solely on knowledge taken from a mix of other disciplines.

THINK POINT ACTIVITY 3.5

Think of a patient or client you have cared for. Identify knowledge acquired from other disciplines that underpinned aspects of this care. Was the practice based solely on knowledge from other disciplines or was it applied to nursing or midwifery practice?

Research

Well-conducted, robust research studies provide the most reliable source of knowledge for nursing and midwifery practice. Whilst the other sources of knowledge that we have identified may on occasion have their place, these should always be underpinned by relevant research-based evidence. This will provide a solid foundation upon which care can be rationalised and justified. It will also ensure that practitioners meet their professional, ethical, legal and moral responsibilities. As we have seen in Chapter 2, the challenge for nurses and midwives is when it appears that there is no sound research relating to an aspect of care. In those cases, practitioners must use the 'next best' form of evidence that is available. Beyond that particular situation,

the extent to which a practitioner uses research as a source of knowledge provides some insight into their beliefs about the value of research and the culture of the environment in which they work.

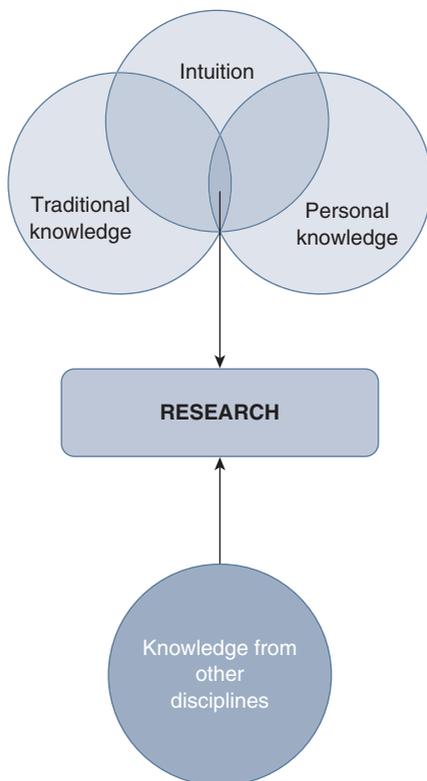


Figure 3.1 Sources of knowledge for nursing and midwifery

THINK POINT ACTIVITY 3.6

Identify examples of practice that is based on research. These might be examples from your practice or that of others.

Go back to the list of the sources of knowledge that you compiled for Think point activity 3.1. How does your list compare with what we have described? Do you agree with our list? Is there anything from your list that you would add to ours?

Research paradigms

Having identified the importance of research as a source of knowledge for nursing and midwifery practice, we now need to consider the different types of new knowledge that research can generate and the different ways that this knowledge is produced.

Before a researcher undertakes a study, they must make a number of decisions. Firstly, which **phenomena** are they going to investigate? In the context of research, phenomena is the term used to describe what is being investigated and this can include any event, experience or attribute that can be perceived by the senses. In health-care research, examples of phenomena could include blood pressure, wound healing, the impact of bereavement or a student's first day on clinical placement. Next, the researcher must decide what exactly they want to find out and the best way of discovering that new knowledge. This will help them to decide which **research methodology** and method to use. The research methodology is the philosophy or principles of an approach to research that determines the way in which a research method is carried out. A research methodology incorporates a number of research methods that are the specific ways in which a study is conducted. The two most common methodologies are qualitative and quantitative. The methodology and method that the researcher chooses should be determined by what they want to find out and what is considered to be the most appropriate way of finding out that new knowledge.



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The ways in which research may be conducted and new knowledge acquired are captured within different research paradigms. The word paradigm comes from the fifteenth-century Greek word *paradeigma* meaning ‘show side by side’ (Stevenson and Waite, 2011: 1038). In the context of research, a **research paradigm** can be described as being a school of thought, an overarching view, a set of assumptions or a framework that consists of ideas, beliefs, opinions and values which guide the way researchers carry out a study. These ideas, opinions and values are sometimes referred to as the ontological, epistemological and methodological beliefs, and these vary according to the different paradigms (**ontology**, **epistemology**, **research methodology**) (see Table 3.1). The paradigm therefore provides a philosophical underpinning, a worldview or a general perspective about reality, the nature of knowledge and how it is created. The paradigm also shapes the way a research study is conducted and the way that new knowledge is developed. Each paradigm encapsulates a number of research methods in accordance with the paradigm’s view of how knowledge is produced. The most commonly used research paradigms in health care are **positivism**, **interpretivism** (sometimes known as **naturalism**) and **pragmatism**. Other less commonly used paradigms include **post-positivism** and **feminism**.

Table 3.1 The ontological, epistemological and methodological beliefs of positivism, interpretivism and pragmatism

Ideas opinions and values	Positivism	Interpretivism	Pragmatism
Ontological beliefs: these are the beliefs about the nature of being and the characteristics of reality.	There is one, singular reality. Reality is controlled by universal laws which apply irrespective of time and place. Reality is not haphazard. Reality is objective.	There are multiple realities. Individuals construct their own understanding of reality so there are many different interpretations. There is no universal truth. Reality is subjective.	It is accepted that there are varying points of view about reality. Reality can therefore be regarded as being singular or multiple.
Epistemological beliefs: these are the beliefs about the nature of knowledge and how it is generated.	The generation of knowledge is not influenced by the researcher. The researcher can therefore be independent,	Knowledge is generated through shared understanding between individuals.	Knowledge can be generated both objectively and subjectively.

Ideas opinions and values	Positivism	Interpretivism	Pragmatism
Methodological beliefs: these are the beliefs about the way research is conducted and knowledge is created	<p>objective and value free. The researcher is 'outside' the research.</p> <p>The research involves fixed designs with emphasis on measured, quantifiable information. To establish cause and effect the researcher controls and manipulates events or people. Research methods include randomised controlled trials, cohort studies and case studies.</p>	<p>The researcher's beliefs will influence the research. The researcher is 'inside' the research.</p> <p>The research involves flexible designs with emphasis on detailed, narrative information. There is no attempt to control or manipulate events or people. Research methods used include phenomenology, ethnography and grounded theory.</p>	<p>The most practical approach is adopted. The researcher selects the most appropriate research method and design in order to address the study's aims and objectives. A variety of qualitative and quantitative research methods can be used.</p>

Positivism

With its foundations in the sciences of physics, chemistry and mathematics, early proponents of positivism included philosophers and scientists such as Locke, Spencer, Comte and Newton (Crossan, 2003; Polit and Beck, 2014). Positivists believe that facts and events do not occur haphazardly or randomly but instead have antecedent or underlying causes (Polit and Beck, 2014). Positivists therefore argue that an objective reality exists which is independent of human behaviour (Crossan, 2003). Advocates of positivism believe that measurable, objective and generalisable data are required in the generation and dissemination of new knowledge (Doyle et al., 2009). Positivists aim to be objective in their pursuit of knowledge and research undertaken within this paradigm uses quantitative approaches (Weaver and Olson, 2006). The key features of **quantitative research** include testing a theory, prediction,



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measurement and **objectivity** with the aim of explaining causal relationships using research methods involving structured, fixed designs (Ashworth, 2015). Testing a theory or prediction is known as **deductive reasoning** (see below).

In order to achieve the key features of quantitative research, a reductionist approach is usually adopted. This means that the phenomena under investigation are reduced into manageable constituents so that they become objective, measurable components (Crossan, 2003). To facilitate objectivity the researcher adopts a position of neutrality or detachment during an investigation, 'outside' the research (Coyle, 2016). As a consequence of these features, positivism is often regarded as being the traditional 'scientific' research paradigm. Examples of research methods that follow the paradigm of positivism include randomised controlled trials, cohort studies and case-control studies (see Chapters 4 and 7) (Table 3.2).

Interpretivism



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Interpretivism developed as a counter-movement to positivism and is based on the view that truth consists of multiple realities that are subjectively perceived by individuals (Denzin and Lincoln, 2011). Interpretivist researchers argue that reality is established and understood through the meanings that individuals generate from their world (Kelly et al., 2018). Within interpretivism **subjectivity** is inevitable, indeed it is desirable. Humans are believed to have individual and often different interpretations about their experiences that are socially constructed (Polit and Beck, 2014; Robson and McCartan, 2015). Interpretivism therefore places emphasis on understanding the meaning individuals give to their experiences, thoughts and feelings (Weaver and Olson, 2006; Denzin and Lincoln, 2011). As a consequence there is no single interpretation, truth or meaning. However, the notion of 'multiple realities' does not necessarily mean diverse realities. Interpretivists acknowledge that it is quite likely that there will be close similarities between the understanding and meanings of individuals who have encountered the same experience.

Interpretivists reject the view that truth can only be established by quantifiable methods (Robson and McCartan, 2015). Interpretivists also argue that knowledge generated by obtaining an understanding of an individual's perspective and behaviours should occur in the settings in which they happen (Dykes, 2004; Denzin and Lincoln, 2011). Interpretivists use interactive and flexible qualitative methods, and the knowledge that the study produces may lead to the development of a theory (Weaver and Olson, 2006), which is known as **inductive reasoning** (see below).

Within qualitative studies phenomena are explored through the eyes of individuals encountering the issue under investigation often through detailed descriptions of their experiences (Dykes, 2004; Weaver and Olson, 2006). Researchers work closely with participants and are therefore sometimes referred to as being ‘inside’ the research. By taking this approach, researchers endeavour to attain a relationship of mutual respect with research participants (Weaver and Olson, 2006; Birks et al., 2008). The research findings are the product of this interaction (Polit and Beck, 2014). Examples of research methods that follow the paradigm of interpretivism include phenomenology, ethnography and grounded theory (see Chapter 8) (Table 3.2).

Table 3.2 Research paradigms and research methods

Positivism	Interpretivism
<ul style="list-style-type: none"> • Randomised controlled trials • Cohort studies • Case control studies 	<ul style="list-style-type: none"> • Phenomenology • Ethnography • Grounded theory



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Deductive and inductive reasoning

As we have identified above, positivistic research involves deductive reasoning whilst interpretivism involves inductive reasoning. It is worth exploring these two concepts in more detail to gain a deeper understanding to the essence of and therefore the differences between these two research paradigms. Deductive reasoning establishes whether the research question has been answered or if the hypothesis (or theory) has been supported or refuted. Hence deductive reasoning is often referred to as theory testing. It may be helpful to think of a detective who *deduces* what has happened based on his or her ‘hunch’ about events. The detective conducts an investigation to determine whether the hunch is correct. In the context of research, the researcher has an idea about the potential findings based on what is currently known in relation to the potential study and sets about conducting research to determine whether those ideas are correct. Deductive reasoning therefore applies what is generally known about something to a new context; in other words, it is reasoning that moves from *the general to the specific* (see Box 3.1).

Conversely, inductive reasoning starts without preconceived ideas. In effect it starts with a blank piece of paper. Conclusions are established from a specific situation and from this a theory is developed. In other words it is reasoning that moves from *the specific to the general* (see Box 3.1).

BOX 3.1

A qualitative study in a particular setting establishes the experiences of mothers of twins and triplets during the first 12 months following the birth of their children. The conclusion is established by inductive reasoning that inadequate community-based health-care support adds to maternal stress and anxiety - *specific to the general*.

Taking the findings of the qualitative study, a research team conducts a quantitative study which hypothesises that mothers of twins and triplets who receive a bespoke programme of community-based health-care support experience less stress and anxiety - *the general to the specific*.

Pragmatism



The paradigm of pragmatism has been described as being the third or middle way between the opposing forces of positivism and interpretivism (Doyle et al., 2009). There are clear differences between the quantitative and qualitative methods that are allied to positivism and interpretivism (Bryman, 2012). Within the paradigm of pragmatism the researcher is able to use aspects of both qualitative and quantitative approaches in a **mixed methods study** because the outcome is more important than the process (Doyle et al., 2009; Creswell and Plano Clark, 2017). This paradigm has therefore been described as being eclectic, practical, logical, intuitive, dynamic and common sense (Doyle et al., 2009; Robson and McCartan, 2015).

Research undertaken within the paradigm of pragmatism aims to seek meaning and the context is also regarded as being important. Researchers who take this approach believe a person's experience is primarily determined by the situation rather than any antecedent causes (Creswell and Creswell, 2017). Within this paradigm the researcher selects the most appropriate approach in order to address the aims and objectives rather than being constrained by the restrictions of the defined epistemological and ontological beliefs of a particular paradigm (Polit and Beck, 2014; Creswell and Creswell, 2017). Pragmatism therefore overcomes the limitations of utilising an exclusively positivistic or interpretivist approach (Doyle et al., 2009) and it is argued that the mixed methods approach yields a more complete picture of the phenomena under investigation (Yardley and Bishop, 2017). This is achieved through the facility to collect both qualitative and

quantitative data and the researcher's opportunity to adopt both structured and unstructured approaches (Bryman, 2012). Combining qualitative and quantitative methods in this way enables the researcher to draw on the strengths of interpretivism and positivism to measure the same or similar concepts. As a consequence the findings from these different approaches can be expanded, combined and compared. This combining of approaches, or **triangulation**, has the potential to strengthen the overall study if the findings are corroborated through the use of qualitative and quantitative methods (Teddlie and Tashakkori, 2009; Bryman, 2012; Creswell and Plano Clark, 2017).

Other research paradigms

Although we have focused on positivism, interpretivism and pragmatism, there are other paradigms that influence nursing and midwifery research. We will explore two other paradigms here: post-positivism and feminism. Support for the paradigm post-positivism arose out of criticism of positivism. Whilst positivists maintain that the researcher is independent, objective and 'outside' the research, post-positivists believe that whilst every effort should be made to remain objective, the researcher will to some extent influence the findings. Post-positivistic research retains most of the features of positivism and usually takes a quantitative approach. However, proponents of post-positivism acknowledge that in research involving people it is not always possible to predict events and responses in the same way that a chemist can with chemicals in a test tube. Rather than establishing cause and effect, post-positivists aim to identify correlations or relationships. They endeavour to obtain **probabilistic knowledge**; in other words, knowledge that 'probably' explains phenomena. In doing this, post-positivists acknowledge that there will always be some level of uncertainty about the findings.

Proponents of feminism regard the paradigms of positivism and post-positivism as being paternalistic and male-centred (androcentric) and reject them on this basis. To generate knowledge, researchers follow the paradigm of feminism and aim to work collaboratively with participants and create an atmosphere of cooperation, trust and mutual respect. Participants are encouraged to reflect on their experiences and feelings and this is usually, but not exclusively, done using qualitative methods. Because of the collaborative nature of feminism it is particularly suited to exploring participants' experiences of domination, marginalisation, inequality, oppression, discrimination and exploitation. A key feature of this paradigm is to challenge conventional views and empower participants by giving a voice to those



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whose stories have not previously been heard and are under-represented in research. This paradigm is therefore particularly suited to research involving vulnerable groups and those who are 'invisible' to society. Gender is a central tenant of feminist research and researchers often aim to determine the ways in which perceptions of gender govern the lives of participants. Not surprisingly the majority of research using the paradigm of feminism has involved women and is particularly suited to midwifery and women's health research. However, the paradigm of feminism has also been successfully employed in studies involving other groups such as children, immigrant populations and, in some situations, men.

THINK POINT ACTIVITY 3.7

In the context of health care, think of examples of individuals or groups of people who may feel dominated, marginalised, oppressed, discriminated or exploited. Consider whether using the paradigm of feminism would be likely to enable them to tell their stories.

Using research paradigms

You will recall that earlier in this chapter we said that the researcher's choice of method will reflect the underpinning research paradigm. But how are the decisions made about which paradigm and specific method to use? Trying to unravel this can be a bit like untangling the conundrum about the chicken and the egg; in other words, which comes first? In deciding which research method to use, in some cases the purpose of the research will identify to the researcher which paradigm is the most appropriate and they will then select a method and design that follows that paradigm. However, in other cases a researcher's beliefs and values about the way in which research should be conducted will determine their preferred paradigm and thereby their preferred research methods. This preference will govern which phenomena they chose to investigate in the first place (see Figure 3.2).

It is likely that we all have a preferred research paradigm, one that we feel most comfortable with. This will be determined by our previous exposure

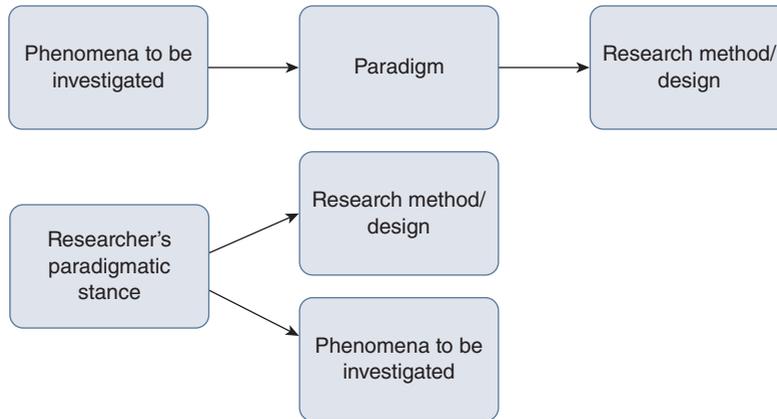


Figure 3.2 Using research paradigms

to and experience of research and perhaps to some extent by the settings in which we work and the phenomena that we are interested in. We believe, however, that all research paradigms have something to offer and it is essential that the most appropriate paradigm is followed for each individual study. This means that sometimes researchers have to set aside their preferences if the study they are involved with is carried out following an alternative paradigm.

It is also the case that decisions about which paradigm to follow are not always made consciously by researchers when they embark on a study. This might be because the knowledge and experience that they have developed about research mean that they are able to make these decisions instinctively. However, it should always be possible to identify which paradigmatic stance a study has followed.

We are aware that research paradigms can be difficult and challenging concepts to grasp. For some people, grappling with research paradigms is akin to navel gazing. As you read this section, you may be thinking, do I really need to know this? It might be tempting to try to ignore research paradigms altogether or to focus solely on your preferred paradigm. However, it is important that we understand the paradigms commonly used in health-care research and the influence they have on the ways in which research is conducted. This is because any study we encounter will have been underpinned by a paradigm which we should be able to identify. This in turn will tell us about the beliefs, assumptions and values of the researcher.

Research paradigms and nursing and midwifery research

In any era, one research paradigm usually dominates. Much health-care research over the last century was dominated by the paradigm of positivism and involved medically orientated quantitative studies that were carried out to determine the underlying causes of disease and the most effective forms of treatment. As we identified in Chapter 1, those who led the drive for nursing and midwifery to be accepted as professions recognised the need for a unique body of knowledge that would be acknowledged by others, particularly within medicine and academia. In the pursuit of this knowledge, early nursing and midwifery research was almost exclusively undertaken within the then dominant paradigm of positivism using quantitative methods (Weaver and Olson, 2006).

In the latter half of the twentieth century the use of quantitative methods to investigate human phenomena, particularly in relation to nursing and midwifery practice, began to be questioned. The paradigm of positivism was felt to be inappropriate for studies that aimed to understand and interpret human behaviours and experiences in a detailed way (Crossan, 2003; Mapp, 2008). Consequently other paradigms began to be used and the most frequently adopted alternative was interpretivism. The paradigm of interpretivism was particularly suited to research endeavouring to gain insight into the experiences of patients, clients, their families and health-care professionals in order to improve the quality of care (Foss and Ellefsen, 2002; Kingdon, 2004). Interpretivism is especially useful when little is known about a particular phenomenon (Richards, 2014) because it provides a way of exploring human behaviour in an in-depth way without the researcher superimposing their preconceived ideas or becoming entrenched in conventional ways of thinking (Allsop, 2019). Interpretivism is also compatible with the holistic approach to nursing and midwifery care. As a result, **qualitative research** has played an increasingly important role in the evaluation and development of nursing and midwifery practice over the last few decades (Polit and Beck, 2014).

A further more recent paradigm shift has been made in the way that nursing and midwifery research is carried out. The move away from positivism to interpretivism in the latter half of the twentieth century has been followed by a shift towards the use of pragmatism in the past decade (see Figure 3.3). Pragmatism is now rapidly becoming the dominant, yet often understated, paradigm in health-care research (Doyle et al., 2009). Pragmatism is particularly suited to nursing and midwifery research because

it enables the researcher to investigate complex issues in the most appropriate way. Pragmatism therefore reflects and suits the problem-solving nature of nursing and midwifery practice.

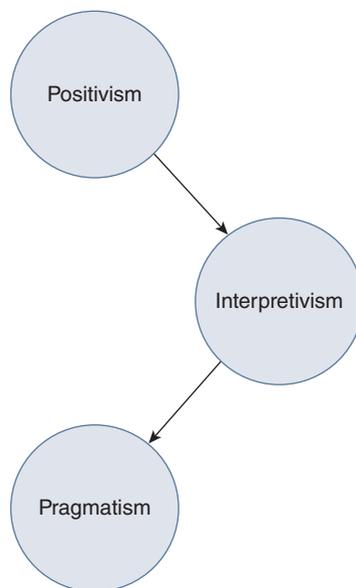


Figure 3.3 The paradigm shift in nursing and midwifery

Tensions between the research paradigms

We acknowledge that there are opposing views about the value of research paradigms. Some argue that the importance of paradigms has sometimes been over-emphasised (Bryman, 2012; Yardley and Bishop, 2017) and that demarcations between different paradigms are not always clear cut (Foss and Ellefsen, 2002). It has also been argued that focusing on a particular paradigm constrains a person's understanding or acceptance of other perspectives (Dykes, 2004). However, an alternative view is that paradigms help researchers to select the most appropriate method for their research (Crossan, 2003).

There will always be tensions between the opposing paradigms of positivism and interpretivism. Positivists will continue to criticise interpretivism for its lack of objectivity. However, those advocating interpretivism see subjectivity as a key strength and not a weakness. Conversely, interpretivists



advocate the holistic approach that interpretivism offers and regard the reductionist approach of positivism as a serious limitation.

Could it therefore be possible that the third or middle way of pragmatism is the perfect answer for nursing and midwifery research? It appears that the answer to this question is no, as pragmatism also has its critics (Morgan, 2007; Bryman, 2012). It has been suggested that the epistemological differences between quantitative and qualitative approaches are irreconcilable and any integration of the two approaches is often done in a superficial way (Mason, 1993; Yardley and Bishop, 2017). In addition, it is argued that researchers often do not have the skills to use both approaches successfully (Bryman, 2012). The counter-argument has been given that qualitative and quantitative approaches are compatible and that the fundamental goals of both approaches – the rigorous, scientific and context-sensitive generation of knowledge – are the same (Bryman, 2012; Yardley and Bishop, 2017). We reiterate our belief that all research paradigms have their place. It is essential that the most appropriate paradigm is followed for an individual study, and the choice of paradigm should be determined by both what the researcher wants to find out and the most appropriate way of finding out that new knowledge.

Summary

In this chapter we have identified the different sources of nursing and midwifery knowledge. In doing this, we have established the important role that research plays in the development of knowledge. We have also explored research paradigms, particularly positivism, interpretivism and pragmatism. Noting their philosophical differences has emphasised some of the ongoing tensions between these research paradigms.

Further reading

- Dykes, F. (2004) What are the foundations of qualitative research? In T. Lavender, G. Edwards and Z. Alfievic (eds), *Demystifying Qualitative Research in Pregnancy and Childbirth*. Salisbury: MA Healthcare Ltd, pp. 17-34.
- Morgan, D.L. (2007) Paradigms lost and pragmatism regained. *Journal of Mixed Methods Research*, 1(1): 48-76.
- Kelly, M. Dowling, M. and Millar, M. (2018) The search for understanding: the role of paradigms. *Nurse Researcher*, 25(4): 9-13.

These three sources explore the research paradigms and their use in nursing and midwifery research.

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This source explores some of the challenges and tensions associated with research paradigms.

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