MIDWIFERY STUDENTS AND OBSTETRICAL RESIDENTS LEARNING, UNDERSTANDING AND APPLICATION OF SHARED DECISION MAKING

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Lay Abstract

This thesis examines the ways in which obstetrical residents and senior midwifery students learn, understand and apply shared decision making in their training. Shared decision making is a way in which health care providers can work collaboratively with their patients or clients to make decisions that are best for their health. Both obstetrical residents and midwifery students were asked about how they understood shared decision making, and the process by which they learn and perform shared decision making. Childbirth is full of uncertainty and fear. Shared decision making may be one way that the pregnant patient or client navigates through the fear by having some control over their decision making. Our study intends to help understand how obstetrical residents and midwifery students gather the skills they need to do shared decision making and how best to support learners with this skill set in the future.

Abstract

Introduction:

Childbirth is an important time in a client and patient's life. The pregnant client seeks to obtain as much control over their circumstance as possible. The more perceived control in childbirth by the client, the better the outcomes are for the client-newborn dyad. One way that clients obtain control during childbirth is by participating in clinical decision making with their healthcare providers. This research intended to study the ways in which OB residents and midwifery students engaged in the understanding, learning and application of shared decision making with clients and patients.

Methodology:

This study utilised a constructivist grounded theory approach to obtain data and formulate a theory using semi-structured interviews with five senior obstetrical residents and five senior midwifery students from Ontario.

Results:

Qualitative data revealed four themes and eight sub-themes. Our theory describes the way residents and students absorb, mirror, and perform shared decision making through an informal process of observation and experience throughout their training. Our theory further describes how support for students and residents creates the foundation for learning shared decision making. Support includes how the mentor minimizes the impacts of the hierarchy of power in medical and midwifery education, as well as increasing psychological safety for the learner.

Conclusion:

The study results support the exploration of future methods for the teaching of shared decision making to obstetrical residents and midwifery students. Participants of this study agreed that more training is needed for shared decision making, as well as training for the mentor to ensure learners are optimizing their experience. More training needs to be available for mentors to help reduce the negative impacts of the hierarchy of power, and to increase psychological safety for the learner.

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List of Abbreviations and Symbols

CGT	Constructivist Grounded Theory
CGGT	Classic Glaserian Grounded Theory
OB	Obstetrical
RM	Registered Midwife
SDM	Shared Decision Making
ICD	Informed Choice Discussion
ICA	Informed Care Agreement
PCC	Patient Centred Care
PGY	Post Graudate Year
WHO	World Health Organization
CHEO	Children's Hospital of Eastern Ontario

Declaration of Academic Achievement

The work described in this thesis was performed by Meagan Furnivall (hereafter referred to as the "primary researcher") and supervised by Dr. Elizabeth Darling.

Dr. Beth Murray-Davis and Dr. Sandra Monteiro assisted with the research process and the completion of this thesis. Dr. Val Mueller acted as external reviewer.

Introduction

Control and Childbirth

Childbirth is a complex process that is both physical and emotional, leaving lasting impacts on a client's life forever. These impacts include life-long vivid memories in clients (Simpkin, 1991). Although having a 'healthy baby' is often made the primary focus by the medicalized childbirth movement, the experience of birth itself leaves its mark on the client forever (Skari et al., 2002). A client's experience has lasting effects on both their journey into motherhood, but these effects also deeply impact their families (Nieuwenhuijze et al., 2013). The positive childbirth experience enhances maternal-child attachment and improves maternal descriptions of their baby (Green et al., 1990; Mercer & Ferketich, 1994).

Childbirth has the potential for a rewarding experience by the client. Most importantly, what clients require throughout this process is the 'feeling' they get when they have a sense of power and control over their circumstance (Green, 1999). Positive childbirth experiences can give clients higher self-esteem and feelings of competence and well-being (Green et al., 1990; Mercer & Ferketich, 1994; Simpkin, 1991).

Unfortunately, not all new mothers can report a positive childbirth experience. Skari et al. (2002) report that a negative childbirth experience can influence women's emotional well-being severely. These experiences may lead to post-traumatic stress disorders (Creedy et al., 2000; Garthus-Niegel et al., 2014) and depressive moods (Houston et al., 2015). These negative lasting states can severely impact relationships with partners and bonding with the newborn (Elmir et al., 2010). Further, these negative experiences may be associated with avoidance of a subsequent pregnancy or the desire for an elective cesarean section in future births (Hildingsson et al., 2002).

It is evident to many maternity care providers that the childbirth experience has equal potential to create a beautiful or a painful postpartum period.

The literature demonstrates that much of the client's childbirth experience is influenced by labour pain, expectations, support, interventions and most importantly, control (Christiaens & Bracke, 2007; Green, 1999; Waldenström, 1999). Studies show that sense of control is the strongest predictor for satisfaction with childbirth (Goodman et al., 2004; Waldenström, 1999). When looking at the concept of control concerning birth, many authors have discussed the different internal and external aspects of control. Internal control is often centered around control of thoughts, emotions, behaviour and dealing with labour pain (Ford et al., 2009; Green & Baston, 2003). According to Waldenström (1999), external control was described as involvement in the birth process. Clients wanted involvement and influence over procedures, decisions or information (Ford et al., 2009). Green (1999) reports that what is most important to clients is not the 'having' of control, but the affective component, the 'feeling' of having the possibility to influence. The pregnant client's involvement often arises from feeling that they are informed and could challenge decisions if the need arises.

In order to understand the complexities of healthcare provider-patient decision making in childbirth, it is essential to discuss the landscape of childbirth and its effects on choice. Obstetrical and midwifery clients are unique to other areas of healthcare and medicine because these clients are dealing with a normal phenomenon, childbirth, for the most part, that can be complicated by external influences. These influences have been shown to impact the ways in which clients engage in decision making with their healthcare provider. These external influences include social change, the gendering of women, the power of control and

organization, the normalization of surgery, and convenience and the role of technology on the construction of choice (McAra-Couper et al., 2012).

Preserving a sense of control in childbirth is not always possible. Noseworthy et al. (2013) discuss the fact that autonomy is a high priority for clients in childbirth, however, clients report increased levels of vulnerability when complications are present. This is because decision making is complicated by the unfolding of unexpected interventions that arise. The childbirth experience can quickly veer off the client's intended course due to decision making being taken over by experts.

Green & Baston (2003) conducted a study in England exploring different aspects of control in childbirth. They evaluated the interrelationships between different concepts of control and considered how these relate to different psychological outcomes. The authors controlled for age, parity and education but not race. The sense of control that had the largest effect on psychological outcomes was the feeling of control over what healthcare providers were doing. Clients reported feeling the least amount of control over this variable. This is strongly linked to the way clients perceived themselves being treated. Client's desired involvement often stems from the feeling that they are informed and could challenge decisions if the need arises (Green & Baston, 2003). In other words, childbearing clients benefit from engaging in decision making with their care providers.

More research is evolving to include the experiences of minority groups of women as it relates to control in childbirth (Higginbottom et al., 2012; Varcoe et al., 2013). Safe motherhood is no longer reduced to the prevention of morbidity and mortality solely, but it now also includes the need for women's "autonomy, dignity, feelings, choices and preferences (Reis et al., 2012, p.

v). The World Health Organization provides standards for high quality maternity care that include the need for women and newborns to receive care with respect and preservation of their dignity and autonomy, amongst others (WHO, 2016).

Vedam et al. (2019) published a study examining the findings of the Changing Childbirth in BC Study. The authors looked at whether autonomy and agency in decision making during pregnancy and childbirth, measured using the Mothers Autonomy in Decision Making (MADM) scale, was experienced differently depending on socio-demographic and prenatal risk profile, type of prenatal care provider, nature of communication with care providers and/or interventions received. Participants were women, and self-identified as Asian, First Nations, Inuit, or Metis, White and other/biracial. Of the 2051 women, 8.2% were from a vulnerable group, self-identified as Immigrant, or Refugee, First Nations, Inuit, or Metis, or had a history of incarceration, homelessness or substance use. The sample however was under-representative of women of colour. The authors discovered that reduced autonomy was associated with having no postsecondary education, having medical or social risk factors during pregnancy or perceived racial discrimination from providers. They reported that women experienced less autonomy if they had difficulties communicating with their care provider, including differing opinions, or feeling pressured to undergo interventions. Participants in their study expressed a strong desire for support of women-led decision making despite care providers mostly leading decisions around interventions. They also concluded that women's "autonomy and agency are affected more by interactions with care providers than risk-status and other maternal characteristics" (Vedam et al., 2019, p. 8). It is essential that healthcare providers are aware of the importance of the client's role in decision making throughout the childbirth process.

Martin (2007) continues to report that choice in childbearing is only partial and experienced within the confines of protocols and a hierarchy of fear. The belief that birth is inherently dangerous, and the dependence that healthcare providers have on the hospital system, intervention and technology are all a part of the decision making process in childbirth (Jomeen, 2007). Therefore, one may assume that within these complexities lies a need for a deeper understanding of how midwives and obstetricians engage in decision making with their patients. Unfortunately, there is little research outlining the approach midwives and obstetricians take towards educating the next generation of obstetrical and midwifery care providers in decision making with patients and clients.

Understanding the needs of childbearing clients is essential to being able to engage with these clients fully. Understanding barriers to engaging in decision making would be critical for clarifying how best to train our obstetrical residents and developing midwives.

Language and Decision Making

There are many terms used within the medical and midwifery literature when discussing decision making. At times these terms are used interchangeably. Such terms include 'informed decision making,' 'informed choice,' 'patient-centered care,' 'shared decision making' and 'informed consent.' These are deceptively complex processes which are often easily confused (Whitney et al., 2004a). It is imperative that one understands these differences in order to navigate and interpret the evidence surrounding decision making in health care.

Midwives and Decision Making

Although the previously mentioned, decision making models apply mostly to the medical landscape, there are distinct differences in how midwives and physicians engage in decision

making processes. Midwives engage in a process known as informed choice (Thachuk, 2007). The closest relatable medical decision making model would be the informed decision making model, as both models allow the patient to make the final decision regarding patient care. The definition of informed choice as it originates in maternity care is, "having had enough information and detailed discussion from a midwife for the woman and the midwife to make a choice together" (McDonald et al., 2013; O'Cathain et al., 2002).

'Informed choice' has been touted as "contemporary midwifery's hallmark clinical principle" (MacDonald, 2018, p. 279). The author tells the story of the origins of informed choice as it pertains to midwifery. In the 1960s, 'choice' was becoming increasingly more a part of the childbirth conversation. There was a movement to "up-end paternalisms in the doctors' office," (MacDonald, 2018, p. 294). Across North America, grassroots midwifery began to grow through the 1970s and 80s. In Ontario, a social movement that sought to reclaim the domain of childbirth would eventually lead to the regulation and formalization of the midwifery profession in the 1990s.

In the late 1970s, a document called the 'Informed Choice Agreement'(ICA) developed within American lay-midwifery and traveled through activist networks to Canada. In Ontario, Informed Choice Agreements were given to potential clients to inform them about the midwifery clinical philosophy and qualifications. ICA's also outlined the legal standing of the profession and the midwife's expectations of the client's anticipated behaviour (Bourgeault, 2006; MacDonald, 2018). Over the past 20 years, the original radical concept of informed choice has been integrated into standard practice and has become part of many health institution landscapes across North America (Roberts, 1999).

When midwifery was regulated in Ontario, the concept of informed choice shaped the regulations governing the profession. According to the College of Midwives of Ontario, in order to achieve informed choice: midwives must recognize clients as primary decision makers and provide informed choice in all aspects. Midwives do this by informing clients with the necessary level of information to make their own decisions about their care, advise about the nature of any proposed treatment including benefits, risks, materials, and side effects as well as alternative courses of action. Midwives also attempt to understand and appreciate what is motivating clients' choices, as well as supporting clients' rights to accept or refuse treatment. (College of Midwives of Ontario, 2018).

The Canadian Association of Midwives provides the following definition of informed choice as it pertains to midwifery practice:

> *Informed choice requires cooperative dialogue and encourages shared responsibility between client and midwife or midwives. Midwives share their knowledge and experience, provide information about community standards and offer evidence-based recommendations. Midwives encourage clients to actively seek information and ask questions throughout the process of decision making. Midwives recognize and respect that clients will sometimes make choices for themselves and their families that differ from their midwife's recommendation and community standards. In such circumstances, midwives will continue to provide access to the best possible care (Canadian Association of Midwives, 2020.).*

Informed choice is a politicized term that was created inside the midwifery and women's health movement and "was meant to be part and parcel of a fundamentally different way of caring" (MacDonald, 2018, p. 287). Informed choice was also intended to be provided within the midwife-client relationship that is structured upon an equal balance of power, longer appointments, and continuity of care. The time spent with the client and caregiver enables informed choice. Handa & Donovan Sharpe (2015) argue that informed choice on its own is

insufficient, rather it must be part of a relational approach to truly support autonomy. Noseworthy et al. (2013) highlight the unique relationship between clients and their midwives and posit that a relational decision making model is ideal for midwives, as it would situate informed choice within the acknowledgment of familial, cultural and socio-political contexts within which decisions about care are made. In other words, in a relational model, midwives can help the 'whole' woman make decisions.

Midwives identify with the use of informed choice as a decision making model (Thachuk, 2007) because they value the client being the primary decision maker as opposed to a collaborative partner in decision making (Valerio, 2001).

Physicians and Decision Making

Informed consent is an institutional process required to obtain permission for a medical procedure granted by a patient prior to that procedure (Beauchamp, 2003; Faden & Beauchamp, 1986). Informed consent was developed primarily in law "to enhance patient control over his or her medical care" (Whitney et al., 2004, p. 50).

The result of informed consent is the patient's decision to either accept or refuse a proposed intervention. This decision may be made over one or a series of appointments. Since some consent is required for every medical intervention, Whitney et al. (2004) described the concept of either simple consent or informed consent. As in the case of informed choice, there is a clear discussion of the nature, purpose, risks, and benefits of proposed intervention, as well as any alternatives, and the risks of no treatment. This discussion, they report, will be followed by explicit patient agreement or refusal. Therefore, simple consent is adequate for low-risk decisions, and informed consent is required for high-risk decisions (Whitney et al., 2004).

The College of Physicians and Surgeons of Canada provide the following guidance to physicians regarding informed consent:

> *In order for this consent to be valid, it must be voluntary and informed. As such, a physician must provide the patient with all of the information necessary to make an enlightened decision about whether to accept the intervention or treatment proposed. This information includes the patient's diagnosis, illness or injury; the nature, objective and risks of the proposed intervention or treatment; and the range of possible treatment options. The physician must also respond to the patient's questions. The information should be explained in plain and clear terms, and the physician must do their best to ensure that the patient has understood. The patient then must clearly express their consent before the physician may proceed with the proposed intervention or treatment.* (*The Royal College of Physicians and Surgeons of Canada, 2018*).

Informed Choice is distinctly different from informed consent. Both of these concepts require the ethical duty for care providers to discuss clinical information and options in an easy to understand way. Both require that patients' autonomy be protected. Even though there has been a movement toward a more patient-centred care approach, "the process of informed consent, as it stands, does not respect patient autonomy, to its fullest extent" (Sherwin, 2000, p. 24).

Decision Making Models and Autonomy

Much of the way decision making with childbearing clients conducted today has evolved from various types of decision making models. These decision making models all entail varying levels of patient or client autonomy and have evolved over time (Charles et al., 1997). It would prove useful to understand the origins of the most notable decision making models in medicine and midwifery. The first and original model is called the paternalistic decision making model. This decision making occurs when information flows in one direction, from healthcare provider to patient. This model is considered very medicalized, and the healthcare provider independently

decides on a treatment plan without acknowledging patient preferences (Charles et al., 1997, p. 199). This model has been critiqued for disempowering the patient and minimizing their autonomy (Sherwin, 2000).

The informed decision making model also flows from healthcare provider to patient. However, although information is transferred, information sharing does not necessarily lead to a sharing of the treatment decision making process. In this model, the patient is empowered to make the decision alone. According to Emanuel and Emanuel (1992), the healthcare provider is deterred from providing a treatment recommendation so that they avoid influencing the patient and claiming some of the power that is intended for them. In this model, the patient has full autonomy over decision making.

The professional-as-agent model is the mirror image of the informed patient model of treatment decision making. Its goal is to ensure there are no outstanding informational discrepancies between healthcare provider and patient. The professional-as-agent assumes responsibility for directing the health care utilization of the patient. The healthcare provider acts as an agent attempting to guide decision making in a way that the patient would choose if the patient were as well-informed as the healthcare provider (Evans & Brown, 1984). In this model, the healthcare provider makes the treatment decision and the patient has less autonomy over decision making.

Informed choice is central to the midwifery philosophy of care and is the way in which midwives engage in decision making with their clients (Thachuk, 2007). It is reflective of "an ideal approach to autonomous decision making as choices rest primarily in the hands of the clients" (Thachuk, 2007, p. 70). The pregnant client is situated as the primary decision maker

and informed choice acts a way to guide them through the process (Thachuk, 2007). Valerio (2001) highlights three essential aspects of informed choice: 1) Autonomy, 2) Responsibility and 3) Accountability.

Autonomy requires more than a simple exchange of risk and benefits. Through the process of disclosure, "effective communication entails providing accurate, objective, relevant and culturally appropriate information that considers each individual client's situation, including values, goals and beliefs" (Valerio, 2001, p. 72). Midwives must spend time with clients to obtain culturally specific knowledge and engage with clients for an ideal understanding of how client beliefs and values play out in their lives (Campbell & Campbell, 1996). Midwives recognize the problematic components that external influences may have on the client's autonomy (Valerio, 2001). Responsibility requires that both midwife and client participate in the process of informed choice with full disclosure. Accountability requires that clients assume responsibility for the plan of care and the acknowledgement that informed choice has occurred (Valerio, 2001). Informed choice requires highly individualized care. "The philosophy of midwifery care aims to enhance women's autonomy competency and offer them the setting to exercise such decision making skills" (Thachuk, 2007, p.73).

Evidence suggests that all of the previously mentioned models of treatment decision making do not explicitly describe a process in which both healthcare providers and patients share in decision making, regardless of the amount of information shared. Models that engage both physician-patient and midwife-client decision making are said to be patient-centred.

Patient-Centred Care

Patient-centeredness is defined as "providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions" (Wolfe, 2001, p. 40). Patient-centred care (PCC) is described as 'treating the patient as a unique individual' (Redman, 2004, p. 11). PCC requires that the patient is the focus of the health care and that activities are performed by the right person at the appropriate time (Pence, 1997). PCC provides ample opportunity for patients to be informed and involved in their decision making for their care (Pelzang, 2010).

Many clinicians and policy makers use the term "patient centered care" to refer to the ideal ways to provide care to patients (Pelzang, 2010).

The OMA definition of patient centred care is as follows:

> *A patient centred care system is one where patients can move freely along a care pathway without regard to which physician, other health care provider, institution or community resources they need at that moment in time. The system is one that considers the individual needs of patients and treats them with respect and dignity (Hanna, 2010).*

Kunneman & Montori (2017, p. 523) report that the goal of patient centred care "should be to seek resolution of the patient's situation in a way that fits their values, preferences and context". Shared decision making (SDM) is often considered a branch of patient centered care (Hoffmann et al., 2014). It is essential to understand the differences between patient centered care and shared decision making. The authors continue to say that shared decision making is worth doing well and should be recognised as high quality care.

Shared Decision Making

There are various definitions for shared decision making. The original term was first defined by the President's Commission for the Study of Ethical Problems in Medicine and

Biomedical and Behavioural Research, in its report, Making Health Care Decisions, which focused primarily on informed consent (United States, 1982).

The most cited definition of shared decision making was put forth by (Charles et al., 1999) which concludes that a shared approach requires that both the physician and patient be involved in the decision making process, and information exchange. Both the healthcare provider and patient decide together with regards treatment preferences, and the healthcare provider and patient agree on the treatment decision. Shared decision making aims to put the patient in the central role in decision making about their clinical care (Towle et al., 1999; Weston, 2001).

Shared Decision Making is traditionally a bidirectional flow of information between patients and providers, which is beneficial in allowing interactive discussion and collaboration. The healthcare provider and patient collaboratively agree about treatment strategy together (Charles et al., 1999). This model is designed to perpetuate collaboration and discussion without making the patient the sole decision maker. Tucker Edmonds (2014, p. 524) reports that "the expertise of both parties is necessary for care to be patient centered, effective and to lead to improved quality of life for the patient."

Shared decision making reaches farther than informed decision making. In addition to providing patients with the risks and benefits regarding their medical care, shared decision making also creates a space for healthcare providers to navigate patient goals, priorities, and values. It also allows time for providing recommendations to help align patients' goals with medical treatment (Shorten et al., 2005).

Three essential elements must be present for shared decision making to occur. First, both the health care provider and the patient must understand that a decision is required. Secondly,

they must both understand the existing best evidence concerning the risks and benefits of each potential option. Thirdly, decisions must acknowledge how the provider is guiding the decision, and the patient's values and preferences must be explicit (Légaré et al., 2013). Since shared decision making is based on the principle of autonomy (Parker, 2001), the goal is to have patients participate actively in their decisions about their healthcare (Coulter, 1997).

As has been mentioned, the evolution of shared decision making has its roots in the importance of patient autonomy. In 1972, Veatch introduced three models of the professional-lay relationship at a time when health care was "a human right, no longer a privilege limited to those who can afford it" (Veatch, 1972, p. 5). These models included the Engineering, Priestly and Collegial models. Veatch (1972) provides insights regarding healthcare provider-patient decision making models at the time. The Engineering model highlights the 'all facts, no values' model. Whereby he likens the physician to a plumber where he cleans pipes but offers little insight to the patients' situation. The Priestly model, called the paternal model, compares the physician to a priest, an all-knowing body who knows best. Finally, he describes the Collegial model as the 'buddy-buddy' model of which Veatch approves as a contractual arrangement between physician and patient. Veatch called for a contractual model of healthcare whereby patients and physicians would share decision making. These models helped to identify four bioethical themes present in healthcare: beneficence, non-maleficence, patient autonomy, and justice.

Feinberg (1986) notes that autonomy occurs when a patient has the ability to choose for themselves without coercion and with adequate knowledge and understanding of the choice. Non-maleficence means 'do no harm' (Ashcroft et al., 2007). The principle of beneficence means to act for the benefit of others. While non-maleficence aims to avoid bringing harm to

patients, beneficence intends to perform duties that will benefit the outcomes for the patients. Justice means "the minimal (formal) principle that like cases should be treated alike or to use the language of equality, equals ought to be treated equally, and unequal's unequally" (Ashcroft et al., 2007, p. 6).

As the medical landscape was changing in the 1970s, Beauchamp (2003) emphasized these four bioethical themes to guide care provided to patients. Informed consent and patient autonomy were then highlighted more in the 1980s. As these bioethical principles were established, shared decision making became an important aspect of healthcare interactions. Emanuel and Emanuel (1992) discussed the various interpretations of the physicians' roles and obligations, and the role of the patients' values and autonomy.

Between the years 2000 and 2013, publications regarding shared decision making in scientific journals increased by 611% (Diouf et al., 2016). Shared decision making has been included in healthcare policy internationally in many countries, including the United States (Sia et al., 2004) and the United Kingdom (Coulter, 1997). Much of the current research focuses on how the interprofessional nature of healthcare teams influences shared decision making (Diouf et al., 2016).

Shared Decision Making Models:

There are a few shared decision making models in the literature including Charles et al. (1999), Elwyn et al. (2017) and Makoul and Clayman (2006). Charles et al. (1999) put forward one of the first frameworks to conceptualize the similarities and differences between the paternalistic, shared and informed decision making models. This model includes three analytic stages in the treatment decision making process, which are shown in Figure 1.

Figure 1

Models of Treatment Decision Making

Analytic Stages	**Models**	**Paternalistic**	**Shared**	**Informed**
Information Exchange	Flow	One way (largely)	Two way	One way (largely)
	Direction	Physician ➡ Patient	Physician ➡ Patient Patient ➡ Physician	Physician ➡ Patient
	Type	Medical	Medical or Personal	Medical
	Amount [b]	Minimum legally required	All relevant for decision making	All relevant for decision making
Deliberation		Physician alone or with other physicians	Physician and patient (plus potential others)	Patient (plus potential others)
Deciding on treatment to implement		Physicians	Physician and Patient	Patient

[a] Illustration for an encounter focusing on the case of (treating) physician-patient dyad.

[b] Minimum required

Note. This figure was produced by Charles et al. in 1999 and it demonstrates the different types of treatment decision making models. Varying from paternalistic to informed patient decision making, from "Decision making in the physician–patient encounter: revisiting the shared treatment decision making model" from C. Charles, A. Gafni and T. Whelan, 1999, *Social Sciences & Medicine*, 49(5), p. 653. Copyright 1999 Elsevier Science Ltd.

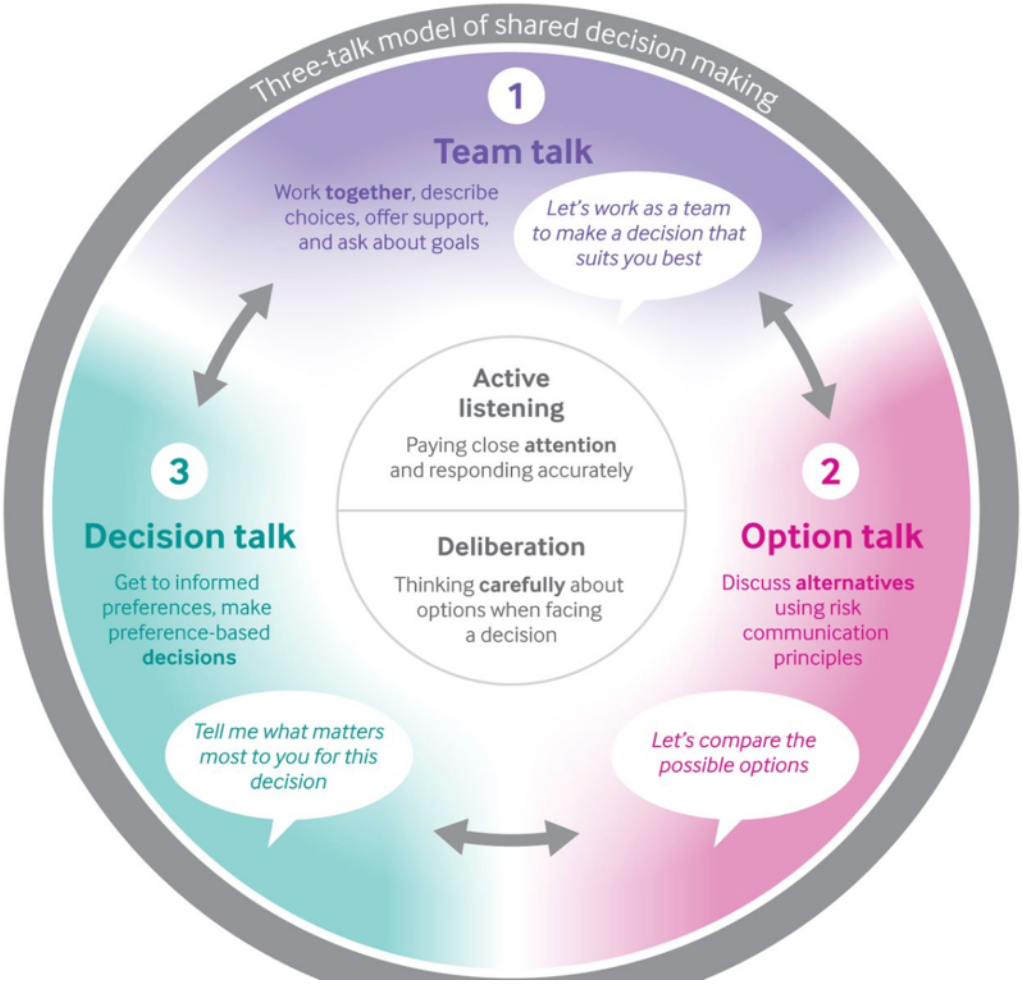
In shared decision making, the exchange is two-way. The healthcare provider must inform the patient of all information that is relevant to making the decision. This information includes treatment options, benefits, and risks of each and potential effects on the patient's psychological and social well-being. The patient should then provide information on the same issues. Following this, both parties need to evaluate these treatment options within the patients' unique situation.

In a 2006 review, Makoul and Clayman (2006) demonstrated that there was no commonly identified definition of shared decision making. The authors' goal was to identify the most frequently invoked elements, qualities, and citations used to define shared decision making, with the intention of integrating the literature to create a clinically relevant model of shared decision making. They were able to identify 31 separate concepts used to analyze the meaning of shared decision making. The authors took their list of compiled elements reported in the literature about shared decision making and separated these into essential and ideal elements that will enhance the decision making experience.

Building on this, Elwyn et al. (2012) proposed a three-step model that is practical for clinicians. Their purpose was to integrate communication skills with the use of patient decision support tools. Elwyn et al. (2017) revised their model to include 'Team Talk, Option Talk and Decision Talk'. This model, shown in Figure 2, incorporates the principles of shared decision making as well as its characteristic elements.

Figure 2

Three-talk model of shared decision making



Note: This figure was produced in 2017 and it summarized the three-talk model of shared decision making. Outlining the process that clinicians should take for engaging with patients in decision making. From "A three-talk model for shared decision making: multistage consultation process" by G. Elwyn, MA. Durand, J. Song, J. Aarts, P. Barr, Z. Berger et al., 2017*, British Medical Journal,* 359: J4891,p.5. Copyright 2017 by the British Medical Journal.

In order to conduct shared decision making, clear healthcare provider-patient communication is essential (American Medical Association., 2006). Effective communication

and its corresponding advantages lead to increased access to care, improved patient knowledge and shared understanding between healthcare provider and patient. The more a patient is involved in the treatment decision at hand, the more likely the decision will be consistent with his or her personal preferences (Briss et al., 2004).

Overall, shared decision making is associated with many benefits, including improved patient satisfaction, treatment compliance, physical and emotional wellness and overall health outcomes (Street et al., 2009; White et al., 2015).

As was previously mentioned, childbirth is laden with decision making and is a unique time in a client's life (Cook & Loomis, 2012). Patients and clients are required to make decisions about where to give birth, what type of health care provider they would like, whether they would like a medicated or unmedicated birth and whether they want to undergo genetic screening. Healthcare providers have a critical role to play in the quality of birth (Hodnett et al., 2011). Health care providers help to guide clients through this decision making process (Politi et al., 2013) and it has been shown that involvement in decision making increases patient satisfaction with their care (Hodnett et al., 2011). This is one important way that clients can obtain external control in their childbirth experience.

There are many types of decision making models in existence that have been used to help guide the interaction between both physician or midwife and patient (Elwyn et al., 2012; MacDonald, 2018; Makoul & Clayman, 2006). Shared decision making is viewed as an ethical imperative which requires clinicians to work in conjunction with patients, informing and involving them whenever possible. Patients want to be involved in their care. There is also

evidence that patients who are involved in managing their health and health care have better outcomes (Coulter & Collins, 2011).

Self-Location and Reflexivity

As the primary researcher, I have been a practicing midwife for nine years and have had a keen interest in research involving maternity care. As I work on an obstetrical unit at a level III tertiary centre, I observe many midwifery students and obstetrical residents engaging in decision making with patients and clients. It has been very interesting watching the similarities and differences in the training of both of these groups. I have always wondered how students and residents have gathered this practical knowledge in how to approach and engage with pregnant clients. I have also observed that obstetrical residents and midwifery students share differing strengths and weaknesses when it comes to decision making.

I have also had two of my own children. During the last four weeks of my second pregnancy, I broke my right leg, requiring surgery and became very affected by this. It greatly impacted my health. For the remainder of my pregnancy, I was under the care of many different types of physicians and my own midwives. The ways in which these care providers engaged in decision making with me both positively and negatively impacted the quality of my care. I was very interested in why some care providers were quite able to engage with me, and why others seemed apathetic to my concerns. This piqued my curiosity and my desire to understand how care providers learn and teach shared decision making. I also consider the potential that childbirth is a unique event for clients and that decision making in this context has potential to have lasting impacts on client care and experiences.

Over the past nine years, I have noticed how important it is to provide clients with as much autonomy as possible. I have found my practice to be consistent with the literature in that clients report better childbirth outcomes when they have been given a sense of control over their circumstance. I would like to explore how health care providers may be able to do this through shared decision making.

I have been a preceptor in the midwifery education program for much of my career and have always been interested in how midwifery students learn valuable ways to work with clients and their families. Education and mentoring of students and new midwives are a passion of mine and I am always looking for ways to improve learning. Shared decision making and informed choice are two fundamental tenets to providing quality client care, it is therefore imperative that their teaching is optimized. I have noticed that students who are given good foundational clinical knowledge seem to provide better decision making to clients. This topic of shared decision making is central to our role as a midwife.

I am a white, Canadian, middle-class, cis-gendered woman who has been privileged to attend graduate school and work as a midwife in a professional job. When reflecting on how my self-location impacts my research, the main social identities that I believe yield the most influence over the research process are being white and being a woman. Completing a social identity map (Jacobsen & Mustafa, 2019), revealed that my identity as a white woman is often a focus in my day to day experiences. As a woman conducting qualitative research in shared decision making, it was important for me to reflect regularly on how my social identity could affect data collection and analysis. I tried to ensure that I minimized the inherent power differential that existed between myself and participants who were one day either going to work

as a midwife or with midwives, many of whom were women as well. I also worked consciously not to allow my gendered desire to avoid making others feel uncomfortable not to prevent me from asking questions essential to my research. I was aware of how, due to my privilege, class and gender, as well as the fact that I worked at the study recruitment site and had connections with other influential people in relationships of power with the target participants it might have been easier for me to gather and analyze data.

I was also reflective throughout the research process on how my personal beliefs and values might influence my process. I approached the research with the belief that the way in which healthcare providers engage in decision making with clients is integral to the quality of the clients' prenatal, intrapartum and postpartum experiences. During data collection and analysis phase, I needed to make sure that the theoretical sampling was done in such a way as to not selectively recruit participants that share the same biases that I have.

As a midwife, I believe that childbirth is a unique time in a client's life and that there is something very special about this event. I have found myself expecting that others who work in this profession feel similarly. I was anticipating that due to the inherent differences between the roles of obstetricians and midwives, perhaps opinions would differ about whether childbirth is a special event. I therefore felt that obstetricians and midwives may perhaps place different emphasis on the importance of decision making with clients and patients. When collecting data, it was important that I sought out obstetrical residents and midwifery students who had an opinion about shared decision making and whether they felt shared decision making was important. I wanted to make sure that I was exploring various perspectives of students and residents to ensure that my biases as a midwife were not guiding my analysis process. As a

midwife, being patient-centred is an inherent part of my practice, which in turn could have impacted how I viewed the data. It was important to have an ongoing reflexive practice to ensure I was interpreting the data as close to what the participant would have wanted me to represent and to avoid interpreting midwifery student decision making as patient-centred when it perhaps may not have been.

I have conducted other research considering the ways in which health care providers foster skin-to-skin contact with clients in cesarean section. This area of research also entails the client making decisions with the health care provider and addresses some of the reasons why healthcare providers may or may not provide shared decision making with clients and patients. I feel that the health care providers' role is integral to the quality of the client's prenatal, intrapartum and postpartum experience.

It is critical to teach physicians and midwives shared decision making in order to provide valuable care to childbearing clients. This thesis explores how midwifery students and obstetrical residents learn about shared decision making.

Literature Review

Evidence of Shared Decision Making

In this chapter we will be reviewing the benefits, facilitators and barriers to shared decision making. We will also review the various teaching methods and frameworks for shared decision making that currently exist as well as how these models pertain to medicine and midwifery training.

Benefits of Shared Decision Making

Shared decision making has been supported by evidence from 86 randomized trials (Charles et al., 2004). These trials show increased knowledge by patients, more confidence in patient decision making, lower anxiety and greater compliance to treatment plans (Branda et al., 2013; Stacey et al., 2011). Shared decision making is beneficial as patients received the treatments and care that was optimal and when patients are involved in decision making, they report higher levels of satisfaction (Baars et al., 2010). Shared decision making also allows clinicians to help patients understand the importance of their values and preferences in making the decisions that are best for them. Barry & Edgman-Levitan (2012) argue that recognition of shared decision making as the pinnacle of patient centered care is long overdue. They argue that if we can view the healthcare experience through the patient's perspective, healthcare providers will be much more responsive to patient's needs and therefore will be better clinicians. They write about how important it is for clinicians to relinquish their roles as the authority figure to become a better coach and give priority to the patient as a 'whole' and not merely just the condition they intend to treat.

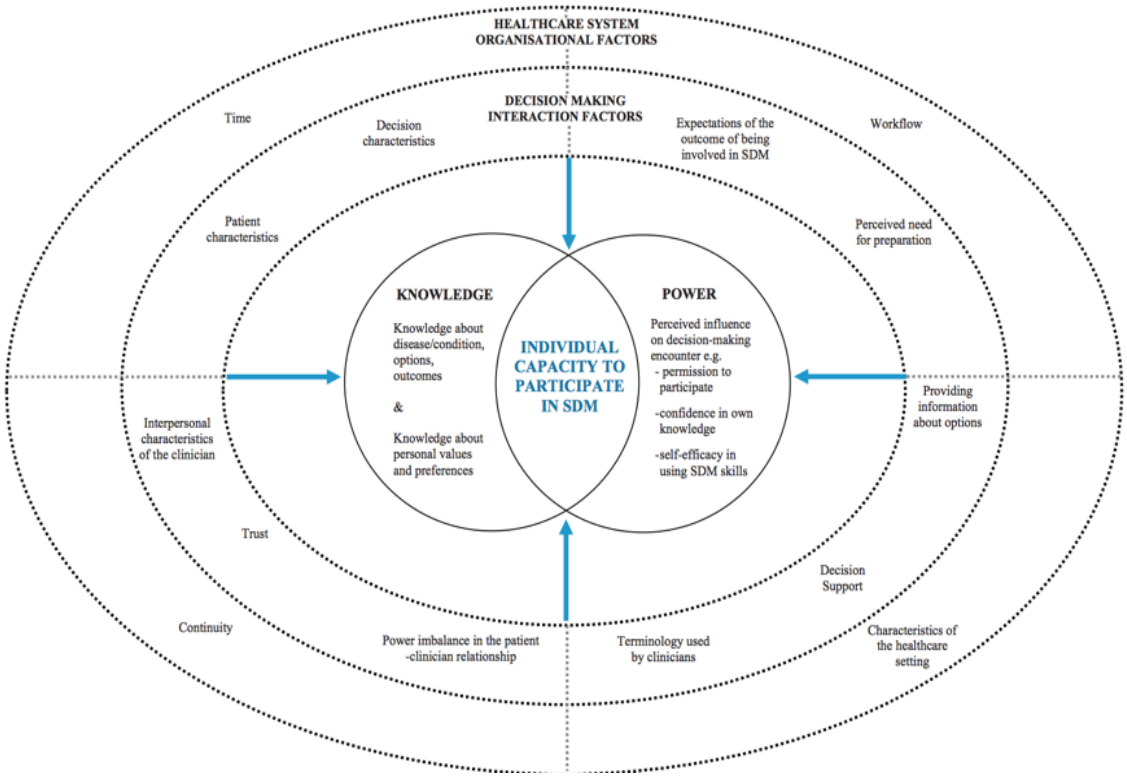
Facilitators of Shared Decision Making

There are three perceived facilitators on the part of the healthcare provider to shared decision making (Légaré et al., 2008). The first facilitator is the amount of motivation in the health professional towards conducting shared decision making. Second, is whether the health professional believes that putting shared decision making into practice will yield better patient outcomes. The final facilitator is whether the healthcare provider believes that putting shared decision making into practice will lead to improved healthcare processes.

Patient, healthcare system and organizational reported facilitators to shared decision making are included in Figure 3. Some of these facilitators include time, continuity of care, workflow, characteristics of the healthcare setting, predisposing factors such as patient characteristics, decision characteristics, power imbalance in the patient physician relationship, patients undervaluing their expertise relative to clinicians, interpersonal characteristics of the clinicians and trust (Joseph-Williams et al., 2014).

Figure 3

Knowledge and Power: Patient-reported influences on individual capacity to participate in shared decision making



Note. This figure was produced in 2014 and it summarizes patient-reported influences on individual capacity to participate in shared decision making. From "Knowledge is not power for patients: A systematic review and thematic synthesis of patient-reported barriers and facilitators to shared decision making" by N. Joseph-Williams, G. Elwyn and A. Edwards, 2014, *Patient Education and Counselling*, 94(3), p.306. Copyright 2014 by Elsevier Ireland Ltd.

Barriers to Shared Decision Making:

Despite evidence to show the effectiveness of shared decision making, there remains some resistance to its prevalence and implementation. Braddock III et al. (1999), reviewed consultations with surgeons and primary care physicians, and found that only 9% met the full

criteria for the use of shared decision making. Godolphin (2009a, p. e187) argues that the effort to achieve shared decision making, "to help the patient become more independent and self-reliant needs to stem from the physician, as the doctor has the 'legal monopoly' and the power of knowledge to take the initiative."

Barriers to shared decision making practice exist within the healthcare provider, the environment and the patient. Many patients do not want to risk damaging their relationship with the physician, so many do not want to be seen as argumentative (Aasen et al., 2012). There is an expected role that patients assume, that "normal" patients are passive and expect clinicians to make decisions. Many patients fear bad outcomes if they are seen as rigid, such as poor care or less attention (Aasen et al., 2012). It is known that patients are generally disempowered in their encounters with physicians and may feel their opinions and questions are irrelevant while in discussion, which is difficult in engaging in shared decision making (Towle et al., 2003).

Clinicians report 'insufficient time' as the most prominent barrier to shared decision making (Gravel et al., 2006). Another barrier includes the fact that the skills and techniques of shared decision making are not taught in health professions education (O'Flynn & Britten, 2006). This is problematic as during this time, providers are consolidating their interviewing and consultation scripts (Godolphin, 2009a). Therefore, clinicians are not getting the necessary training in shared decision making. Furthermore, much of the medical school curricula is centered around creating physicians who must always have the correct answer, which can be unhelpful when engaging in shared decision making (Godolphin, 2009a). Physicians are not only told they must have the correct answer, but this is juxtaposed with the notion that they must now be able to discuss many options and patient choices (Godolphin, 2009a).

Shared decision making can also be compromised by poor continuity of care or fragmented care alongside many clinicians on a care team, by less than ideal informational flow between clinicians (Larsson et al., 2011). Shared decision making may also be negatively impacted by poor environmental conditions (Park & Song, 2005) and by lack of privacy and the need for physical examinations (Doherty & Doherty, 2005). Other barriers include healthcare providers expressing doubts or saying that patients do not want to be involved in decisions, and the idea that patients lack capacity or ability and might make 'bad' decisions (Godolphin, 2009a).

This chapter focuses on the literature surrounding shared decision making training, its barriers, curriculum and evaluation.

Teaching Shared Decision Making

There has yet to be an established, standardized training method for shared decision making (Durand et al., 2017). There is much discussion, and many models presented outlining the essential competencies or elements that are required for students to learn (Towle et al., 1999). However, there is little published evaluating the models for teaching shared decision making to students.

When shared decision making is integrated into the curriculum, it often overlaps with communication skills training. Learning shared decision making techniques has been compared to learning a new language (Godolphin, 2009b). Unfortunately, the focus on skills training has been more on healthcare professionals listening to the patient's story, taking a thorough history, making a diagnosis, prescribing a management plan, breaking bad news and less focused on

shared decision making (Godolphin, 2009b). There is also minimal research outlining the lived experience of the resident or midwifery student as they engage in shared decision making.

Core Competencies for Shared Decision Making

Although there has not been much published on how to 'teach' shared decision making, there is minimal published on how students are 'learning' shared decision making. Even if a clinician wanted to create a shared decision making program, they would still have to negotiate the confusion around which shared decision making core competencies to use (Légaré & Witteman, 2013). As part of an international, interdisciplinary working group, in 2012, a group of 25 participants from Canada, France, the United States, United Kingdom, and Germany participated in a two day workshop to explore many issues relating to shared decision making. However, the group was unable to reach consensus on a standard set of competencies. They reported that there are many "in between" approaches to decision making. There was agreement on two types of competency categories, and they proposed to name these "relational competencies" and "risk communication competencies." These two types of competencies were deemed essential to acquire in order to help their patients be involved in decision making.

Relational competencies are considered essential to creating an environment whereby the patient feels willing and able to discuss their concerns. Such competencies include listening to the patient, encouraging the patients' involvement, providing respect, developing a partnership with the patient, maintaining flexibility in their approach as well as ensuring socioeconomic factors do not influence the encounter.

The risk communication competencies include discussing the concept of uncertainty in treatment outcomes and being able to discuss the risks and benefits of various treatment options.

Participants in the working group agreed that professionals should be able to evaluate the evidence as it pertains to each patient.

Thériault et al. (2019) described the urgent need to teach shared decision making as it is "an inherent part of the communicator role of the CanMEDS competency framework" (Royal College of Physicians and Surgeons, 2015; Thériault et al., 2019). Thériault et al. (2019) furthermore described the core competencies of shared decision making as being: skills in risk communication, eliciting patient preferences and clarifying patient values. They also highlight the importance of the use of specific decision aids.

Shared Decision Making Training Frameworks

Many models are quoted in the literature as being useful in guiding the development of a curriculum for shared decision making (Elwyn et al., 2012, 2017; Makoul & Clayman, 2006; Towle et al., 2003). All models mentioned pertain to the physician patient relationship. However, some of these notable models are more related to how shared decision making can be implemented into hospitals and less about how it can be taught at the individual level. Shared decision making training has mainly been promoted in specific situations such as atrial fibrillation, menopause, infections, and depression (Edwards & Elwyn, 2004; Elwyn, 2004; Légaré et al., 2012; Loh et al., 2007).

As previously mentioned, Makoul & Clayman (2006) reviewed 418 articles and took conceptual definitions from 161 articles on shared decision making and proposed an integrative model of shared decision making. They were able to come up with a set of competencies that should be acquired to provide shared decision making to patients. The author's framework can be used as a guide to developing shared decision making programs.

Two shared decision making models that have been cited in the literature to inform shared decision making curricula include Elwyn et al. (2012) and Towle et al. (1999). As mentioned previously, Towle et al. (1999) introduced a framework for teaching and learning informed shared decision making. The authors defined a set of eight competencies for physicians to acquire to be able to provide shared decision making. These included developing a partnership with the patient, establishing or reviewing the patient's preference for information, establish or review the patient's preferences for a role in decision making, and ascertain and respond to patient's ideas, concerns and expectations. More competencies included are identifying choices and evaluating the research evidence concerning the individual patient, present (or direct to) evidence, and help the patient reflect upon and assess the impact of alternative decisions with regarding their values and lifestyles. Finally, health care providers are to negotiate a decision in partnership, manage conflict, agree upon an action plan and complete arrangements for follow-up. See Table 1 outlining competencies for physicians conducting informed shared decision making for more information.

Table 1

Competencies for physicians conducting informed shared decision making

1. Develop a partnership with the patient.
2. Establish or review the patient's preferences for information (such as amount or format).
3. Establish or review the patient's preferences for role in decision making (such as risk taking and degree of involvement of self and others) and the existence and nature of any uncertainty about the course of action to take.
4. Ascertain and respond to patient ideas, concerns, and expectations (such as about disease management options).
5. Identify choices (including ideas and information that the patient may have) and evaluate the research evidence in relation to the individual patient.
6. Present (or direct patient to) evidence, taking into account competencies 2 and 3 framing effects (how presentation of the information may influence decision making). Help patient to reflect on and assess the impact of alternative decisions with regard to his or her values and lifestyle.
7. Make or negotiate a decision in partnership with the patient and resolve conflict.
8. Agree on an action plan and complete arrangements for follow-up

   Informed shared decision making may also:

   - Involve a team of healthy professionals
   - Involve others (partners, family)
   - Differ across cultural, social and age groups

Note. This table was produced in 1999 and it summarizes competencies for physicians for practicing informed choice decision making. From "Framework for Teaching and Learning Informed Shared Decision Making" by A. Towle, W. Godolophin, 1999, *British Medical Journal,* 319, p. 367. Copyright 1999, by the British Medical Journal.

Elwyn and colleagues suggest separate competencies, skills, and steps for shared decision making as well (Edwards & Elwyn, 2004; Elwyn et al., 2000).

Other training programs available include the Ottawa Decision Support Tutorial and the MAGIC Programme from the NHS (Joseph-Williams et al., 2014). The Ottawa Decision-Support Tutorial is a publicly available online training program in shared decision making (O'Connor et al., 1998). This program has achieved high ratings from health care providers and has shown an increase in patient participation in making decisions and in health professionals shared decision making skills. The Making Good Decisions in Collaboration (MAGIC) Programme from the UK is intended to design, test and identify the best ways to embed shared decision making into routine primary and secondary care using quality improvement methods (Stiggelbout et al., 2012). Another shared decision making training program originated from the Children's Hospital of Eastern Ontario (CHEO). CHEO has introduced a hospital-wide shared decision making program to help with pediatric specific decision aids and training for health professionals (Diouf et al., 2016).

Teaching Methods for Shared Decision Making

There are various methods used to teach shared decision making. There does not appear to be a consensus on the best approach. Diouf et al. (2016) reported that all of the included studies in their review used various methods for training shared decision making. These methods include lectures, workshops, case studies, demonstrations, role play, and small group discussions. Other studies include methods such as modules, discussion, rounds, facilitation practice, video exemplars of high-quality decision making, case vignettes, case studies

(Hoffmann et al., 2014), instructional videos with standardized patients, and role-playing of simulated consultations (Bieber et al., 2009).

Similarly, the duration of the educational intervention has varied across studies. Examples include a six-hour training workshop (Buhse et al., 2015), two four-hour modules administered in two afternoons over four weeks (Bieber et al., 2009).

Studies often use existing shared decision making models and competencies to inform their training. One example includes Loh et al. (2007) which used Elwyn et al. (2012) and Towle & Godolphin's (1999) frameworks to inform their curriculum. Bieber et al. (2009) provide an example of a shared decision making training program. The curriculum of their first of two training sessions covers patient preferences, the theoretical framework, key competencies, effects, indications, limitations and the pros and cons of shared decision making. The second training session is aimed at consolidation by embedding the shared decision making skills into the broader concept of patient centeredness.

There are several barriers to shared decision making training. Aside from the fact that there is little standardization of shared decision making training, one of the barriers to the implementation of shared decision making includes the lack of clinicians who can demonstrate how to provide shared decision making. Clinicians have been taught shared decision making skills, but little is known regarding how these skills are transferred. Shared decision making has yet to be incorporated into routine clinical training (Barry & Edgman-Levitan, 2012; Stiggelbout et al., 2012). There appears to be no consensus on the ideal shared decision making training template, so few have been evaluated (Légaré et al., 2011).

Apart from there being a shortage in clinician educators, shared decision making has often not received much attention because it is considered to overlap with communication skills training. As shared decision making is associated with communication skills training, research shows that shared decision making training should use active, practice oriented strategies, such as small group discussions and feedback as well as be supplemented by modeling, and presentations. Proponents of shared decision making advocate for rhetoric to be adjusted so that shared decision making can be taught in the same way as basic communication skills training (Hoffmann et al., 2014).

Another barrier to the implementation of shared decision making training is of concern amongst clinicians and researchers regarding patients making personal decisions about their care. Fried (2016) discusses how the leeway and responsibility given to the patient for making their own decisions can vary widely and discusses how problematic this can be. The author argues that the role the patient is asked to play is not always appropriately aligned to the clinical circumstances underlying their decisions. The authors continue to argue that "decisions that need to be made without clear information about the likelihood of benefits and harms of various treatment options are the most difficult ones to make and require the greatest input from a clinician" (Fried, 2016, p. 105). Essentially, the author argues that clients are at times given an excessive amount of responsibility, especially in the face of uncertainty. Physicians are more likely to leave decisions to patients when they do not have strong feelings towards the outcome, patients however may benefit greatly from physician guidance when outcomes are uncertain (Fried, 2016). Leaving patients to make decisions solely when risks and benefits are obscure may

be problematic for shared decision making. It proves difficult to train students and residents when the mentor does not buy in to shared decision making.

Another barrier of shared decision making is the hidden curriculum. A hidden curriculum refers to the unspoken behaviors, tendencies and norms that occur in the educational environment (Alsubaie, 2015). The hidden curriculum is the encouraged behaviours and standards existing while students undergo learning the formal curriculum (Godolphin, 2009b; Miller & Seller, 1985). Some of the aspects of the hidden curriculum that impact shared decision making include insufficient numbers of respected role models who practice shared decision making, and an inherent problem with the fact that medical curricula reward confidence, control, and students knowing the "right answer" (Godolphin, 2009b, p. e189).

In order to address barriers towards shared decision making implementation, Légaré & Witteman (2013) reported the need to conduct further research on finding the best approach to changing healthcare professionals' behaviour toward implementing shared decision making in clinical practice. Changing behaviour has been identified as an essential facilitator and driving force behind shared decision making in clinical practice (Légaré et al., 2008).

Shared Decision making and Clinical Training

Education and Training of Shared Decision Making in Midwifery

As the majority of decision making in medicine and midwifery is centered around informed consent and informed choice, there is a smaller body of literature focused on training and providing shared decision making in this context (Durand et al., 2017).

Studies outlining examples of shared decision making training programs for physicians exist, but there is a paucity of evidence in the case of midwives. Much of the midwifery literature

on informed choice and shared decision making is centered around the experience of genetic screening (Dormandy et al., 2006; Potter et al., 2008; Skirton & Barr, 2010). There is minimal information available regarding the use of training models in the education of midwives for shared decision making and informed choice.

Education and Training of Shared Decision Making in Medicine

Despite the evidence to support the benefits of shared decision making in clinical practice, there is little standardized training available that guides educators on how best to teach students. According to an updated international scan by Diouf et al. (2016), there has been a 174% increase in shared decision making training programs. The interest is growing, and clinicians desire to learn about this phenomenon. These authors identified 148 programs from 18 different countries and in 12 different languages. There is variance among which healthcare providers are targeted for these training programs and whether the shared decision making program is geared towards a specialty or general practice (Diouf et al., 2016). Unfortunately, there are few published programs that definitively established systematic approaches to the teaching of shared decision making (Légaré et al., 2012).

There has been little research reported on when to introduce teaching to achieve an ideal effect. Towle et al. (2006) suggest that shared decision making training may be better incorporated into undergraduate educational curriculums so clinicians graduate having had some experience with it, before establishing clinical tendencies. While other studies state that training needs to be embedded in continuing medical education (Durand et al., 2017). Unfortunately, very few programs address pre-licensure healthcare professions. Diouf et al. (2016) recommend that in order to incorporate shared decision making into clinical practice with an interprofessional

focus, training these pre-licensure healthcare professionals in interprofessional shared decision making is essential.

There is minimal literature exploring the experience of residents and midwifery students in helping patients explore decision making. McKeown et al. (2002) conducted a study exploring the amount of control both patients' and physicians may have in making health care decisions. They discovered that patients and residents assume many different roles with respect to decision making and that the roles depend highly on the healthcare scenario.

Summary of Literature

The goal of shared decision making is to create a relationship where decisions are made in line with the patient's wishes. The patient is the driving process. Although there are few models in the literature that outline methods of shared decision making (Elwyn et al., 2012; Makoul & Clayman, 2006; Towle & Godolphin, 1999), there remains to be any formal template for the training of shared decision making (Diouf et al., 2016).

Both obstetricians and midwives attend clients throughout the prenatal, childbearing and postpartum process. Both healthcare provider groups tend to approach decision making in different ways while still incorporating some principles of shared decision making. In the medical model, there are characteristics that can act as both facilitators and barriers to shared decision making as is outlined in the medical experience: the amount of motivation in the health professional, whether they believe that putting shared decision making into practice will yield better patient outcomes and whether the healthcare provider believes that putting shared decision making into practice will lead to improved healthcare processes (Légaré et al., 2008). The

midwifery model of care facilitates decision making with clients through an 'informed choice' framework (MacDonald, 2018).

Despite the research supporting shared decision making in clinical practice, there remains a lack of consensus on strategies for teaching and learning among health professionals (Légaré et al., 2013; Street & Voigt, 1997). Although training models for shared decision making do exist (Härter et al., 2011; Health Foundation, 2018; Stacey et al., 2005, 2009). There are very few programs that have been evaluated for use in training healthcare providers (Diouf et al., 2016). Instead, there remains a stronger focus on communication skills training in medical schools (Hoffmann et al., 2014). As mentioned, shared decision making has not been a significant priority due to some aspects of the hidden curriculum in shared decision making education. These include the lack of respected role models who practice shared decision making, the rewarding of confidence, control and the need for having the "right answer" in the practice of medicine which can make the sharing of decision making with patients more difficult (Godolphin, 2009, p.e189). These barriers to shared decision making practice lie within the physician/healthcare provider, the environment and ultimately within the patient (Légaré et al., 2008).

With increasing awareness surrounding the benefits of shared decision making in maternity care, we require a better understanding of how residents and midwifery students are acquiring shared decision making skills. This information could help to inform the midwifery and obstetrical residency curricula.

The focus of this study was to gather rich data that will elucidate the ways in which obstetrical residents and midwifery students engage in shared decision making in their training.

More specifically, the researchers attempted to help understand how midwifery students and obstetrical residents engage in the social process of shared decision making, their background knowledge about shared decision making, how they learn and apply shared decision making processes, and the influence of their clinical mentors on their relationship with shared decision making. Also, of importance, was the students' understanding of the barriers and facilitators to the practice, and their perceptions of their relationships with the patients and clients and how that influences their engagement with shared decision making.

Methods

Study Purpose and Rationale

Despite mounting evidence for its use, there is minimal evidence focused on how to train health care providers to engage in shared decision making. Also, it is unclear from the current body of literature, how learners experience shared decision making and whether they are prepared to engage with patients during their clinical training. This lack of evidence for approaches to teaching and learning and for learner experiences is even more relevant within the specialty of maternity care.

There is minimal research on the training of maternity care providers in the field of shared decision making. This study aimed to address some of the gaps in the existing literature as well as to illuminate areas for future curriculum development on shared decision making. In light of the fact that shared decision making has established benefits (Stacey et al., 2011), it is important to assess how students and residents are engaging in this decision making and whether they feel their training is sufficient. To our knowledge, this was the first study to explore the obstetrical resident and midwifery student perspectives on learning and applying shared decision making in clinical practice. The question we sought to answer was: How do senior midwifery students and OB residents learn, understand and apply shared decision making?

Research Design

Obstetrical residents and midwifery students' experiences with shared decision making was assessed using Constructivist Grounded Theory (CGT) qualitative methods. CGT was designed for an inductive, comparative, emergent and open-ended approach of Glaser and Strauss's (1967) original statement (Charmaz, 2014). In contrast to Classic Glaserian Grounded

Theory (CGGT) and Straussian Grounded Theory (SGT), Charmaz (2014) used the CGT relativist ontology and subjective epistemology to create a constructive perspective. CGGT has been associated with a positivist/post-positivist position whereby the world exists and can be objectively observed (Denzin & Lincoln, 2000). CGGT also aims to maintain the researcher as separate to the research and attempts to uphold unbiased research and new knowledge (Denzin & Lincoln, 2000). CGT assumes that researchers are not separated from the research and that knowledge is created between the researcher and the participant (Denzin & Lincoln, 2000). CGT acknowledges that the researcher influences the data through interactions with participants (Mulugeta et al., 2017). Unlike CGGT, CGT requires that the researcher undergoes a reflexive process with the use of memo's and CGT can use extant theories to develop theoretical sensitivity (Charmaz, 2014). Furthermore, CGT promotes the use of a literature search to guide the researcher and to create an appropriate research question before the research starts (Charmaz, 2014; Harling & Turner, 2012). Charmaz (2014) describes using intensive interviewing to gather data about participants stories and to help formulate a theory. Unlike the CGGT method, CGT researchers are invested in understanding the participants context (Charmaz, 2014).

Initial coding and focused coding were the two phases of coding used as part of the CGT approach. Initial coding involved labelling data with codes and focused coding occurred when the initial codes reappeared and were deemed significant. Focused codes were used to code and categorize larger amounts of data (Charmaz, 2006). CGT is the only grounded theory methodology that uses abductive logic. This involves identifying potential theoretical explanations for the researcher's initial observations and then trying to see if these ideas create a logical explanation (Charmaz, 2014). Denzin & Lincoln (2000, p. 523) reported that 'the

grounded theory constructs an image of a reality, not the reality'. Charmaz (2006) reported that it is not essential for CGT to have a core category as CGT highlights multiple realities that may not have one specific theme (Charmaz, 2006). CGT was an appropriate study design as the researchers intended to understand processes and build a theory surrounding shared decision making. The primary researcher was also a midwife and considered her own experiences and perspectives while collecting participant data on their own realities.

Population and Study Sample

Both midwifery students and obstetrical residents were chosen as they provided care to clients in the prenatal, intrapartum and postpartum period and both were mentored to engage in decision making with this population of women.

Midwifery students were enrolled in a four-year Midwifery Education Program. The program consists of 18 months of classroom-based preparation before beginning clinical placements. During this time, students receive training in a clinical skills course in preparation for their clinical placements. Over the final two and a half years, students are in clinical placements and complete accompanying weekly problem-based tutorials. In the second and fourth years of the program, students are placed in community midwifery practices. The student is mentored by one or more clinical preceptors, working with clients throughout the childbearing cycle of pregnancy, labour and birth, as well as in the first six weeks postpartum. In their third year, students undergo training in interprofessional settings, including placements supervised by an obstetrician and by a labour and delivery nurse (Wilson, Eva, & Lobb, 2013 p. 580)

OB residents are medical school graduates who complete a residency over five PGY levels. Each level is comprised of various blocks. Each block involves working in a specific

service such as community obstetrics, maternal fetal medicine, gynecological oncology. Residents also have formal teaching sessions once per week led by obstetric and gynecology faculty, a journal club, and they each lead a small research project (Schulich School of Medicine & Dentistry, 2019).

The first group of participants included the senior midwifery students who trained in the London and Hamilton areas. Senior students were included because they had sufficient time training in the Midwifery Education Program to report on the shared decision making process. Therefore, students who had not completed the first three years of study were excluded.

The second participant group consisted of senior obstetrical residents, post-graduate year (PGY) Four and Five levels who were trained in the London and Hamilton areas. This gathered the perspective of residents and their training of shared decision making. Once again, senior residents were selected for their theoretical increased exposure to shared decision making in clinical practice and residents who were of PGY One to Three levels were excluded.

Charmaz (2014) reported that initial sampling in grounded theory gets you started while theoretical sampling guides where you go. For initial sampling, the authors established sampling criteria for people, cases, situations and/or settings before entering the field. Initial sampling relied on establishing criteria and planning how we accessed the data.

Recruitment

The researcher first contacted the department heads for both the residency program at London Health Sciences Centre and the Midwifery Education Program at McMaster University. See Appendix A for the request for recruitment email to the department heads. It was through these contacts that referrals to the OB residents were made in the McMaster Obstetrical

Residency Program and at London Health Sciences Centre. Posters were distributed by email and social media to potential participants at these centers. See Appendix B for a copy of participation email request. The Midwifery Education Program Director agreed to forward the recruitment email to all midwifery students in their final year of training. The primary researcher also approached eligible residents at London Health Sciences Centre for recruitment at the Obstetrical Care Unit. See Appendix C for the Facebook recruitment advertisement. See Appendix D for a copy of the recruitment poster. Once participants agreed to participate, they were asked to make referrals of other participants. Participants were no longer confidential if they referred other participants for the study. They were notified of this. Once the participant contacted the researcher, the researcher described the study and provided a letter of information and consent. See Appendix E for a copy of the letter of information and consent. If the participant met eligibility criteria and was still interested, the researcher arranged for a meeting to obtain informed written consent and to complete the interviews either in-person or by phone. Although participants were contacted at Hamilton Health Sciences Centre and London Health Sciences Centre, participants from London Health Sciences Centre only were willing to participate.

See Appendix F for participant demographic information that was collected after consent was obtained. This demographic survey facilitated the use of purposeful sampling and allowed the researcher to identify whether participants met inclusion or exclusion criteria. Snowball sampling was used at the end of the interview, the participants were asked if they knew of any other residents or midwifery students who may have had experience with shared decision making and whether they thought they were willing to be contacted for participation in this study (Street & Voigt, 1997).

These multiple methods were used for participant recruitment: convenience sampling, purposeful sampling, snowballing and theoretical sampling. The initial method imposed was convenience sampling. Convenience sampling is a nonprobability sampling strategy where participants are selected based on their accessibility and/or proximity to the research (Bornstein et al., 2013). It was convenient to recruit participants from London Health Sciences Centre, Hamilton Health Sciences and from the McMaster Midwifery Education Program as the researcher was affiliated with all sites.

The second method consisted of purposive sampling. Members of a sample were chosen with a 'purpose' to represent a type in relation to key criterion (Ritchie et al., 2013, p. 113). Bryman (2012) reported that with purposive sampling, sample units are chosen due to their features and characteristics which will perpetuate further exploration of the identified themes and questions that are intended to be discovered. Maximum variation sampling is a form of purposeful sampling and is a way in which diverse individuals are chosen who are expected to hold different perspectives on the central phenomenon (Cresswell & Clark, 2017). Once participants were selected through convenience sampling and initial data analysis had commenced, purposeful sampling was used to help identify other characteristics such as sex, gender, year of study, previous degrees obtained and age. Maximum variation sampling was used to recruit participants with diverse clinical experiences in regard to shared decision making.

The researcher commenced interviews with midwifery students and used theoretical sampling to ensure appropriate ongoing data collection. The definition of theoretical sampling originated in Barney Glaser and Strauss (1967, p. 45) and is described as "the process of data collection for generating theory whereby the analyst jointly collects, codes and analyses his data

and decides what data to collect next and where to find them, in order to develop his theory as it emerges."

The purpose of theoretical sampling, as was reported by (Charmaz, 2014) is to obtain data to help you explicate your categories. Charmaz (2014) reported that theoretical sampling is used as data are being analysed and concepts and categories are emerging to aid in the conceptual and theoretical development of the analysis. The author further reported that it is not about representing a population or increasing the statistical generalizability of your results. Corbin & Strauss (2008, p. 143) indicated that theoretical sampling involves selecting data "from people, places, and events that will maximize opportunities to develop concepts regarding their properties and dimensions, uncover variations, and to identify relationships between concepts." The author commenced with initial data coding, constructing tentative ideas about the data, then examining these ideas empirically (Charmaz, 2014). Once participants had provided data and categories had been created, theoretical sampling commenced. Once the data was coded, comparison of these codes occurred with previously developed codes, and emerging categories. An iterative process of data collection and analysis was conducted for this grounded theory study; as theoretical sampling is a strategy to narrow the focus on emerging categories and is a technique to develop and refine them. Theoretical sampling also helped to check, qualify, and elaborate the boundaries of categories and specified the relations among categories (Charmaz, 2014, p. 205).

Theoretical sampling helped to capture the trainees who had adequate exposure and experience with decision making models in patient care as well as ensured that data and themes were adequately explored. There are on average five obstetrical residents enrolled in each

obstetrical residency program at both London Health Sciences Centre and McMaster University Medical Centre per year. There are on average 25-30 senior midwifery students enrolled per year in each Ontario Midwifery Program. The obstetrical and midwifery supervisors were not interviewed as the focus of this study was on the student and resident understanding and application of shared decision making.

Data Collection

The method of data collection in this study consisted of semi-structured interviews, the collection of field notes, and memo writing. The midwifery students and obstetrical residents were interviewed until theoretical saturation was reached and no new themes emerged (Denscombe, 2014). A priori hypotheses were not developed for this study as grounded theory methodology requires the theory to be 'grounded' in the data as it is collected and analysed (Kennedy & Lingard, 2006).

Semi-Structured Interviews

The interview guide was created for the purposes of collecting data on midwifery student and obstetrical residents' experiences with learning shared decision making. See Appendix G for the interview guide questions. The guide comprised of fourteen questions. The content validity was ensured by clarifying some items, removing unnecessary or redundant questions and for obtaining expert opinions prior to the administration to participants and the collection of data (Dorussen et al., 2005). The interview guide was piloted with a newly graduated obstetrician and a newly graduated new registrant midwife prior to commencing extensive interviews to assess for areas in need of clarification.

Interviews were conducted over the phone. Telephone interviews were useful when trying to gather data from participants who were geographically remote (Musselwhite et al., 2007). Phone interviews also saved both time and money compared to in-person interviews (Smith, 2005). There is increasing evidence to suggest that phone interviews are just as useful as other methods of qualitative data collection (Sturges & Hanrahan, 2004). Using phone interviews ensured that students and residents were comfortable to participate when they were able. All interviews were collected, audio-taped and transcribed. Data was anonymized so that learners spoke freely and confidentially.

A semi-structured interview is "literally an interview, an interchange between two persons conversing about a theme of mutual interest, where the researcher attempts to understand the world from the subjects' point of view, to unfold the meaning of people's experiences" (Kvale, 1996, p. 1-2). Semi-structured interviews made it possible to focus on the issues that were meaningful for the participants, allowing diverse perceptions to be expressed (Cridland et al., 2015). These types of interviews are also appropriate when participants have a low level of awareness of the subject or when there are issues that participants are not used to talking about, such as values, intentions, and ideals (Åstedt-Kurki & Heikkinen, 1994).

The interviews were approximately 30-90 mins in length. Questions were "directed to the participant's experiences, feelings, beliefs, and convictions about the theme in question" (Welman & Kruger, 1999, p. 196). The researchers used open-ended questions with probes in an attempt to elicit rich data and were conducted in a conversational style to promote the sharing of experiences.

Some of the topics discussed throughout the interviews included how midwifery students and residents engaged in the social process of shared decision making, their background knowledge about shared decision making and how they learned and applied shared decision making processes to the obstetric and midwifery patient and client populations. Other topics included the influence of resident and midwifery student clinical mentors on their relationship with shared decision making, their attitudes and skills pertaining to shared decision making and the barriers and facilitators to their practice of shared decision making. Finally, researchers also assessed participant perceptions of their relationships with the patients, and how they influenced patient engagement with shared decision making.

In addition to the interview data, the researcher collected field notes. Field notes are commonly defined as written records of observational data produced by fieldwork (Hammersley & Atkinson, 2007). The process of memo-writing was utilised to formulate and develop new theory at increasing levels of abstraction. Writing memos required researchers to theoretically code to see how a particular category is related to other categories that have been discovered already (Glaser, 1978). Memos were used to help clarify the properties and characteristics of themes and categories, to elaborate processes and patterns identified within the categories to help create new theoretical constructs (Kennedy & Lingard, 2006). Glaser (2005, p. 42) reported that "about 90% of the theoretical codes found in a study are identified through the sorting of mature memos". Therefore, the researcher created extensive field notes and memo's as part of the data collection and reflexive processes.

The data was stored on a secured electronic drive in password protected files and folders with restricted access by the research team only. The participants were able to view all the

information given by them if they requested this. A question was included on the consent form indicating whether the participant would like to review their data and codes for clarity and transparency. A document outlining all of the participant themes and codes that emerged out of the data was distributed to all participants to audit. Participants identified any inconsistencies in the data.

Data Analysis

Data collection and analysis was conducted iteratively starting with the process of coding. The data analysis started as soon as the first set of data were collected. Once the first set of data from interviews, field notes and memos had been collected, the first phase of initial coding, otherwise known as open-coding commenced, followed by more focused coding. Charmaz (2014, p. 113) reported that "coding is the pivotal link between collecting data and developing an emergent theory to explain these data". It is through coding that we defined what was happening in the data and started to tackle what it means. Coding shaped an analytic frame from which we created the analysis (Charmaz, 2014).

In the initial coding phase, the researcher named each word, line or segment of data. The goal of initial coding was to be open to all potential theoretical directions individuated by participant interpretations of the data. Prior to commencement of the focused coding stage, the researcher convened with the research team to discuss codes and findings as part of the process of refinement. The researcher and supervisor met at various stages throughout the coding process.

In the focused coding phase, the researcher used the most significant or numerous initial codes to sort, synthesize, integrate and organize large amounts of data into themes and categories

(Charmaz, 2014). Focused coding expedites your analysis as well as sharpens and condenses what you have already done because it will illuminate what you have determined to be important in your evolving analysis (Charmaz, 2014). Finally, in order to uncover the main problem or theme identified in the focused coding process, the researcher utilized theoretical coding. In this latter stage, theoretical integration began and proceeded through all the subsequent analytic steps.

Theoretical coding was used as a sophisticated level of coding that followed codes we had selected during focused coding. The purpose of theoretical codes was to help the researcher theorize data and the focused codes (Charmaz, 2014). Stern (1980, p. 23) reports that theoretical coding 'simply means applying a variety of analytic schemes to the data to enhance their abstraction'. They are integrative and help combine the focused codes that have been identified. Theoretical coding is where much of the grounded theory analysis takes form (Charmaz, 2014). The researcher referred to theories from shared decision making and potential concepts from other fields to inform theoretical coding. It is worth noting that Glaser (1978) highlighted the fact that coding processes are not mutually exclusive, nor do they occur synchronously. Glaser (1987) further reported that both theoretical, substantive and focused coding occur simultaneously. The researcher revisited and gathered more data when new categories or unrefined themes emerged, and the theory was unclear. As has been mentioned, this process of theoretical sampling was used to allow for greater depth and to ensure that no new data emerged that altered the synthesized theory (Charmaz, 2014). See Appendix H for a review of the study's open and focused codes, as well as the themes created.

As is true to grounded theory methodology, constant comparative methods were used regardless of whatever unit of data was being coded. Constant comparative methods were used to establish analytic distinctions and to make comparisons at each level of analysis (Glaser & Strauss, 1967). These comparisons should exist between codes, between statements and incidents within the same interview and with incidents in different interviews. Comparing data in earlier and later interviews of the same individuals or across different times and places was also essential to this comparative method. A top priority for the researcher was challenging ideas and remaining engaged in comparisons within the data (Charmaz, 2014).

Trustworthiness

Trustworthiness in qualitative research is similar to the concept of validity in quantitative research. It aims to support the argument that the inquiry's findings are worth considering (Lincoln & Guba, 1985). Lincoln and Guba have also proposed four aspects of assessing the trustworthiness of qualitative research: credibility, dependability, confirmability, and transferability. These four aspects help to determine rigour in qualitative research (Lincoln & Guba, 1985). Attempts were made to address each of these four elements throughout the study.

Credibility describes the degree to which the study findings correctly reflect reality (Lincoln & Guba, 1985). Credibility was assured by promoting honest information gathered from participants, using question probes and iterative questioning, adapting well-established research methods, debriefing with supervisors, data and method triangulation and member checking (Shenton, 2004).

Triangulation has been viewed as a qualitative research strategy to test validity through the convergence of information from different sources (Carter et al., 2014). Method triangulation

involves the use of multiple methods of data collection about the same phenomenon (Polit & Beck, 2012). The researcher combined data from semi-structured interviews with field notes and memos to help inform the theory. Data source triangulation "involves the collection of data from different types of people, including individuals, groups, families, and communities, to gain multiple perspectives and validation of data" (Carter et al., 2014, p. 545). Data was collected from two separate groups of clinicians including obstetrical residents and midwifery students, to gain multiple perspectives regarding shared decision making and its application to the maternity care population. The two groups of participants were asked to describe their experience with shared decision making, their exposure to training in shared decision making and any challenges they may have faced. Furthermore, the groups were asked to identify any barriers and facilitators to shared decision making training and practice. The interview guide was designed by the principal investigator as well as an experienced researcher to ensure questions were relevant and appropriate.

Lincoln and Guba (1985, p. 314) described member checks as "the most crucial technique for establishing credibility" in a study. This involves taking data and interpretations back to the participants in the study so that they can confirm the credibility of the information and narrative account. The researcher included a question on the consent form asking participants if they wanted to review their interview data and any emerging research themes. Participants were sent a summary of the emerging themes by email and were asked to review and provide any feedback or comments. This participant feedback and the comments received served to inform the interview guide and allow for elaboration for subsequent participants on the

emerging themes that have been reviewed by previous participants. Contradictions in responses from participants were clarified at the time of the interview (Shenton, 2004).

Transferability is commonly compared to external validity in quantitative research and refers to 'the extent to which the findings can be transferred to other settings or groups' (Polit & Hungler, 1999, p. 717). In order to ensure transferability, it was essential to give a clear and distinct description of the culture and context, selection and characteristics of participants, as well as data collection and process of analysis (Graneheim & Lundman, 2004). To promote transferability, the researcher provided demographic information for the participants and an in-depth description of the context in which obstetrical residents and midwifery students are learning about and practicing shared decision making with patients. The use of member checking strategies allowed for an opportunity to verify if the data were typical for these populations of students (Krefting, 1991).

Dependability, compared to reliability in quantitative research, is the "degree to which data change over time and alterations made in the researcher's decisions during the analysis process" (Lincoln & Guba, 1985, p. 299). Dependability also relates to the consistency of findings. Due to the lack of methodological shorthand descriptions (i.e., interrater reliability) in qualitative research, a full description of data gathering, analysis, and interpretation in qualitative research was described (Krefting, 1991). Dependability was ensured by reporting the study processes in detail, thereby enabling a future researcher to repeat the work, if not necessarily to gain the same results (Shenton, 2004). Dependability was also enhanced by providing the list of interview questions used to gather empirical data (Wahyuni, 2012). Once again, the use of field notes used to document impressions and observations following interviews allowed the

collection and analysis to be auditable as is described by Lincoln and Guba (1985) which is shown to increase dependability. Memos were used to monitor changes that arise throughout the study. Formulating an audit trail with documentation of changes made during the research project ensured that any significant changes that occurred were as a result of data collection or analysis processes of the study (Lincoln & Guba, 1985). Regular meetings with the thesis committee and supervisor allowed for necessary methodological changes that arose throughout the research process.

The concept of confirmability is the qualitative researchers focus on objectivity. To achieve confirmability the researcher must ensure that the findings are the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher (Shenton, 2004). It also refers to the extent to which the data is being shaped by the respondents or by the researcher's bias or personal interest (Patton, 1990). Constructivist grounded theory requires that the researcher acknowledges their perspectives and subjective involvement on the analysis throughout the research process. Therefore, reflexive journaling and triangulation were conducted to promote confirmability as well as involvement from other team members (Lincoln & Guba, 1985). Research team members audited the research process as well as "the product, data, findings, interpretations and recommendations" to ensure confirmability (Lincoln & Guba, 1985). In addition to the audit trail, triangulation as it has already been stated, was a strategy used to ensure confirmability. In the case of this study, data were collected from separate groups and assessed the experience of students and residents with shared decision making.

Reflexivity

Reflexivity is considered an essential step in the process of generating knowledge in qualitative research (Ahmed et al., 2011) and is a useful way to ensure that the researcher is aware of his or her influence on the data (Krefting, 1991). Bradbury-Jones (2007) report that reflexivity is an important internal dialogue that occurs to establish the researcher's position and whether this position may affect the research process or outcomes of the study. Essentially, reflexivity is the self-appraisal in research. It is important to turn the researcher lens "back onto oneself to recognize and take responsibility for one's situated-ness within the research and the effect that it may have on the setting and people being studied, questions being asked, data being collected and its interpretation" (Berger, 2015, p. 220).

Strategies promoted to enhance reflexivity included member checking, triangulation, consultation with an experienced researcher throughout the research process, keeping a diary or research journal for self-supervision and creating an audit trail of researcher's reasoning, judgement, and emotional reactions. The researcher also conducted two pilot interviews with a newly certified midwife and obstetrician attempting to assess the flow of the interview guide and to ensure the questions were clear and logical. These pilot interviews allowed the researcher to engage reflexively with the interview and participants while also acknowledging her own position as a registered midwife, clinical preceptor and as someone who has collaborated with obstetricians and colleagues in shared decision making. See the previous section on the primary researcher's background as a clinician and her role as a midwife.

Ethics and Human Subjects Issues

This study commenced only after ethical approval was obtained from the Hamilton Integrated Research Ethics Board. Many principles were considered to ensure no harm came to participants. It was important for the research study findings to benefit and cause no harm to the participants and society. Privacy and confidentiality were maintained at all times, with no personal or identifiable information recorded or printed in the study. Audiotaped interviews were transcribed verbatim, and no names were recorded during the interviewing process.

The researcher ensured informed verbal and/or written consent was completed before carrying out any of the interviews. All participants were reassured that the option to withdraw from the research at any time without penalty or repercussions would be upheld. No false information or accusations were included.

Results

Description of Participants

Ten maternity care learners participated in the semi-structured interviews. The average interview was 43 minutes in duration. The participants were 90% female, and 10% male. Fifty percent of participants were obstetrical residents in their post-graduate year (PGY) four or five. The remainder were midwifery students in their final year of training. All OB residents were placed at the same tertiary care center, and midwifery students were placed at various locations around Ontario. Table 1 shows the individual demographic characteristics of the participants. Each participant was given their own pseudonym in an effort to protect the participants' anonymity. All participants responded to the demographic survey with the exception of two OB residents.

Table 2

Demographic Characteristics for Qualitative Interviews

PSEUDONYM	AGE	SEX	GENDER	PROGRAM	YEAR OF TRAINING
KATIE	25	Female	Woman	Midwifery Education	4
ALISON	25	Female	Woman	Midwifery Education	4
ASHLEY	21	Female	Woman	Midwifery Education	4
KAYLA	33	Female	Woman	Midwifery Education	4
MICHAEL	31	Male	Man	OB/GYN	5
MELISSA	21	Female	Woman	Midwifery Education	4
JESSICA	35	Female	Woman	OB/GYN	5

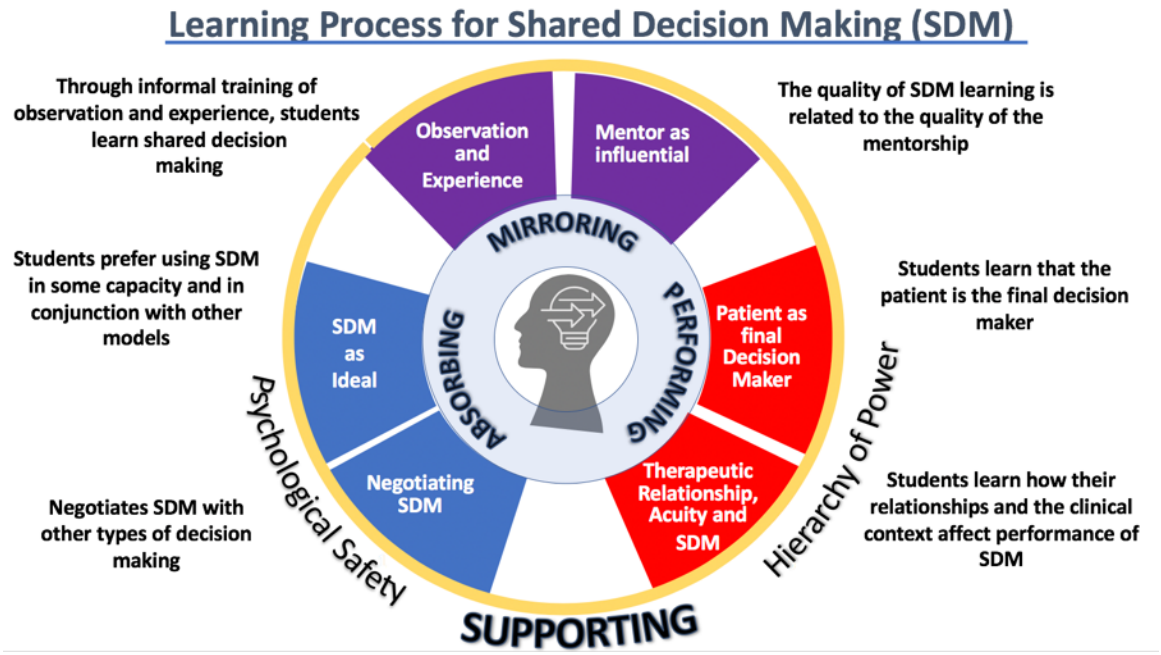
PSEUDONYM	AGE	SEX	GENDER	PROGRAM	YEAR OF TRAINING
NATASHA	30	Female	Woman	OB/GYN	4
TARA	-	-	-	OB/GYN	-
SARAH	-	-	-	OB/GYN	-

Interview Findings

Our research question explored the ways in which midwifery students and obstetrical residents understand, learn and apply shared decision making. Analysis of the interviews revealed four main themes: Absorbing, Mirroring, Performing and Supporting. The first theme, Absorbing, outlines how students understood and absorbed information relating to shared decision making. This theme described students and residents common understanding of shared decision making and how they described shared decision making as ideal decision making. The second theme is Mirroring. This theme outlines the importance of clinical mentors, observation and experience in the learning of shared decision making. The next theme, Performing, outlines how students learned to perform shared decision making in their everyday lives. The final theme is called Supporting. This theme describes how influential psychological safety and the hierarchy of power are to the students and residents' ability to absorb, mirror and perform shared decision making. These themes and their sub-themes will be described in more detail below using illustrative quotations. See Figure 4 for a schematic illustrating the results of the study.

Figure 4

Participant Learning Process for Shared Decision Making



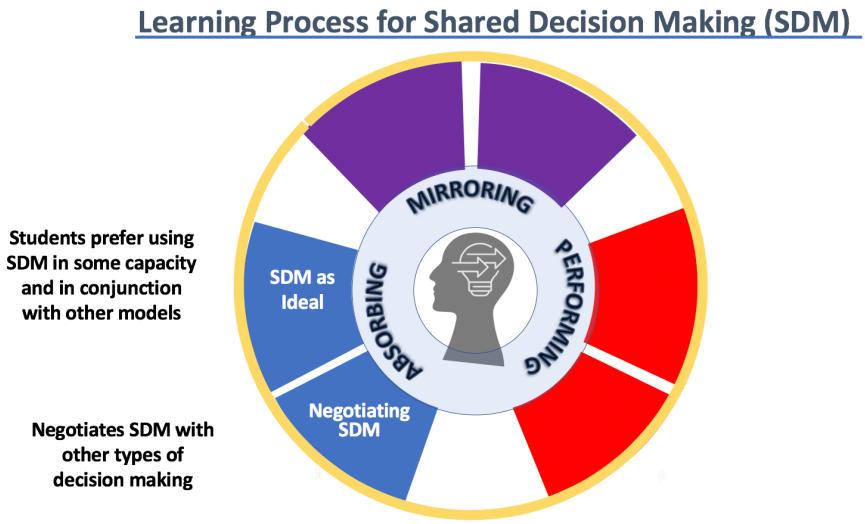
Note. A schematic of study findings, themes and sub-themes. Four themes emerged, how students absorb, mirror and perform shared decision making. How mentors can support learners through this process.

Theme One: Absorbing

Midwifery students and obstetrical residents described how they understood and conceptualized shared decision making. They described how they felt shared decision making compared to other models of decision making. See Figure 5 for a schematic on the participant learning process for absorbing shared decision making.

Figure 5

Participant Learning Process for Shared Decision Making- Absorbing



Common Understanding of Shared Decision Making

It was clear through the data that midwifery students and OB residents had a similar understanding of shared decision making despite using different language to describe it. All midwifery students and senior OB residents discussed shared decision making in similar ways and expressed a similar understanding of shared decision making. Furthermore, they described shared decision making as an ideal method of decision making. All of the OB residents reported that shared decision making was their dominant method of decision making with patients. Many residents contrasted this model with the formerly used paternalistic model of decision making with patients and reported shared decision making as being superior.

Midwifery students were more mixed on their decision making approach. Although midwifery students described informed choice as being their preferred method of decision making and what they do, they described the shared decision making process as an ideal part of

their decision making in addition to informed choice. Midwifery students described shared decision making and informed choice similarly. They described them both as decision making models that they use, but when asked which they prefer, they stated that informed choice was what was meant to be used as per the College of Midwives of Ontario. They reported that they conducted shared decision making as a part of the decision making process, but they "do informed choice." The interviews revealed that there is some confusion for midwifery students regarding the differences between shared decision making and the informed choice process.

Midwifery students viewed shared decision making as part of the informed choice process whereby shared decision making was what you do to arrive at a decision. They described informed choice as the process of giving the client ownership over their informed decision. According to the midwifery students, the client comes to an informed choice decision through the process of shared decision making. Some of the midwifery students reported that they essentially used shared decision making throughout the process of decision making with clients but maintained that the client should have the final say in the decisions being made. The midwifery students described ideal decision making as both informed choice and shared decision making. See Table 3 for a description of ideal decision making characteristics as reported by midwifery students.

Table 3

Midwifery Student Descriptions of Characteristics for Ideal Decision Making

Ideal Midwifery Decision Making Characteristics
Client engagement
Midwife having some level of background knowledge on the subject
Client making an educated decision
Describing the risks and benefits pertaining to the decision
Clients having the opportunity to ask questions
Having a back and forth discussion
A decision that both client and midwife are comfortable with
The midwife being supportive of client decisions
Clarifying client's perspective
Building trust
Altering language to meet the client's level of understanding
Giving space for the client to process
Promote knowledge to engage in the decision making process

Note. Midwifery students described characteristics that they felt were important to ideal decision making

One midwifery student reported:

> *Ideally, you want a client that is engaged in the decision as well. So, you bring up a topic and the client has some ability to answer those questions or has some background knowledge. They are engaged in the discussion, they want to hear about the risks and benefits, they ask questions about it, and then having the midwife with the ability to answer those questions. Alison (Midwifery Student)*

Both OB residents and midwifery students were fairly accurate with the correct definition of shared decision making. When asked about their definition of shared decision making, the participants described a back and forth conversation resulting in listening to the other persons perspective and compromising on a decision that everyone agrees with. Ideally, the healthcare provider offers information to the client and the client makes decisions that everyone is

comfortable with. One midwifery student explained the importance of having a mutual understanding and compromise regarding decision making:

> *For the most part for me, what that would look like would be providing as much information as possible to the client, having them make a decision and if it was something that I didn't feel comfortable with, mentioning the fact that I didn't feel comfortable with it. Seeing if we could change the management or change the care in a way that we both feel comfortable in the end in some sort of way.*
> *Melissa (Midwifery Student)*

An OB resident described how the patient and resident made decisions together in a shared approach:

> *Well it's that idea that you try to lay out what you feel are the best options for the patient. Oftentimes you try to make recommendations based on your knowledge and experience, and then you try to make a decision together as to what the best outcome would be to reach the goals of the patient. So that's what I think shared decision making is. Michael (OB Resident)*

Another OB resident discussed the importance of making the decision together with the patient instead of making the decision for them or alternatively, leaving the decision up to the patient to decide individually.

> *It really means involving the patient fully in that discussion, so having the discussion, to help them be the boss of their own care, truly they are at the end of the day, to allow them to understand your perspective, and then make an informed decision together as a team, rather than being a paternalist figure, or just kind of telling them the information, and letting them make their own decisions. You can work together through their individualized situation to find the best outcome for them. Tara (OB Resident)*

One midwifery student proceeded to discuss the use of anticipatory guidance as part of a shared decision making model:

> *And it's not necessarily the midwife making the decision for the client but I'd say, if the client is asking for it, providing a bit more, "well I know last time you had sticky shoulders" and helping them a little bit more in an informal way I guess. I think that's what I would think about shared decision making" Ashley (Midwifery Student)*

Participants also reported that shared decision making also allowed them to help the client process many aspects of their personal situation relating to their care. One midwifery student described:

> *…it's a combination of you as a health professional and as somebody who has seen what could happen, you kind of bring the base knowledge and the lived experience into the conversation, and then you let the client also bring their lived experience and kind of morals and judgements and personal, physical and spiritual beliefs in. It's kind of that 'what's the most important to you?' 'how do you feel about this?', 'what are the implications of this decision?', 'How does it apply to your life?' and letting them think about that. So, it's kind of the sharing of info and then making the decision together. It's not just the healthcare professional saying this needs to happen. Which I think doesn't happen in lots of cases which I think it shouldn't.*
> *Kayla (Midwifery Student)*

OB residents and midwifery students identified the process of shared decision making as when the patient presented with a clinical concern, and the decision making took place over either one or many appointments.

Midwifery students mentioned that alongside shared decision making, they conducted informed choice discussions whereby they presented all of the information about what the topic is, brought forth all of the client options, discussed community standards, and recommendations, followed by the client making the final decision. Katie, a midwifery student explained:

> *In terms of informed choice, I provide the information, you go through it and why, the client comes back to you saying, "I'm deciding this based on what we talked about." So, kind of like, I'm not making the decisions for you, but I am coming along through your process with you. Katie (Midwifery Student)*

Another midwifery student highlighted the process of informed choice:

> *We present all the information about what exactly the test is and what the topic is. We are testing for 'X' bacteria. Then we bring forward all of the options. Then typically we will give them the community standard, our recommendations and then ultimately, they would make the decisions. Ashley (Midwifery Student*)

Students agreed that shared decision making entailed more of a back and forth exchange of information than informed choice; however, informed choice allowed for the client to be the final decision maker, which they reported as ideal.

A midwifery student reported on how frequently she used shared decision making:

> *I think for the most part we call it informed choice but at the end of the day, it is a discussion, everybody in the care team and the client and the family and whoever else is involved, I'd say we use shared decision making 95% of the time.*
> *Ashley (Midwifery Student)*

Another facet of shared decision making that students learned includes the midwife's role. Students reported that with shared decision making, midwives had to be aware of how they presented information since it impacted how people make decisions, being conscientious about wording, keeping biases in check, and helping boost confidence in the client prenatally to create confidence in the postpartum and with breastfeeding. Students reported that providing good shared decision making included the idea that they must discuss emergencies in advance of clients needing to make emergent decisions. OB residents also agreed that discussing emergencies in advance was essential.

One midwifery student articulated that midwives should state what they were and were not comfortable with, to ensure open communication and transparency.

> *What is special about midwifery is that you build rapport with clients and so you can have those honest conversations to say "I don't agree with you, I'm not going to ditch you as a healthcare provider, I'm not mad at you, but I need you to know that I don't agree." Whilst still maintaining the fact that you don't want to break that relationship because you want those people returning to your care and you want them to feel safe in your care. Katie (Midwifery Student)*

Midwifery students and obstetrical residents also shared common knowledge and understanding around the benefits of shared decision making. See Table 4 for a list of these benefits.

Table 4

Participant Reported Benefits of Shared Decision Making

OB Resident and Midwifery Student Reported Benefits of Shared Decision Making
● Increased patient autonomy ● A deeper understanding of the clinical situation ● Allows for deeper trust and understanding between client and clinician ● A more positive experience for the client ● Allows for a shared responsibility between healthcare provider and client/patient ● Builds confidence in the patients' body ● Decreases anxiety

One midwife described *"…shared decision making is beneficial in the way that it allows for trust, and it allows for communication, if done respectfully." Melissa (Midwifery Student)*

Another midwifery student reported on the benefits of shared decision making:

> *Shared decision making helps to build confidence and when you build confidence in people prenatally, they can make decisions for their body and are the gatekeepers of what happens to them. It builds confidence on the parental side that they are ultimately going to make good decisions for their children.*
> *Katie (Midwifery Student)*

Ideal Decision Making as Shared Decision Making

Both midwifery students and OB residents described their ideal decision making approach as the process of shared decision making. They both agreed that paternalistic decision making should be avoided. They reported ideal decision making to include: a decision that the

client and care provider are agreeable, an explanation of what is happening, establishing the client's awareness and understanding, providing the client options, and discussion of risks and benefits of each option. This was captured by one midwifery student who discussed her ideal decision making as a shared approach:

> *In an ideal scenario, the decision making is something that the client is 100% comfortable with. But I also wanted to feel like the midwife was also comfortable with it. It's a decision that the client is making in an educated manner. Everybody in the care group is comfortable with the decision being made.*
> *Ashley (Midwifery Student)*

An OB resident described how shared decision making was conducted in an ideal situation:

> *Ideally, you would want to kind of explain what is happening. What's your understanding of their awareness? Assessing whether they are understanding what we're saying to them. Essentially tell them kind of different options. How are they feeling about it? What is part of that process, what are the risks and benefits of each one? And then ideally, reaching a decision that is kind of safe as well.*
> *Tara (OB Resident)*

An understanding of patient's personal backgrounds and concerns was seen as a component of ideal decision making:

> *I think it's understanding their background and perspectives, and where they are coming from. Maybe why a certain decision might be different for them versus the next person. I think ideally, trying to establish a basic level where you guys are speaking on the same terms, where they can understand what you're really saying to them, and understand what their decisions really are. Understanding what all the options are, all the risks and benefits are. Why you're making the recommendation that you're making and allow them to ask questions about each of those options and where you are both coming from. You should be able to navigate through that situation together. Tara (OB Resident)*

Obstetrical residents unanimously reported that shared decision making was the model of choice when it came to decision making with patients:

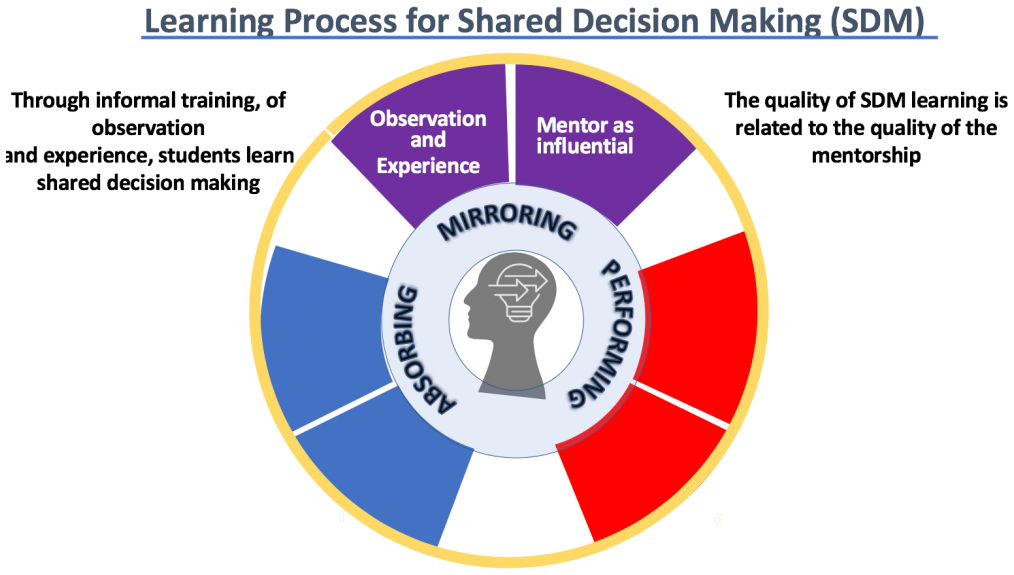
> *Shared decision making is by and large the only way that we do things. Because in obstetrics, where ownership by the client over the decision making is so important, because it's such a litigious specialty, by and large it is shared decision making. Michael (OB Resident)*

Theme Two: Mirroring

Midwifery students and OB residents found that mentors were highly influential to the learning of shared decision making. Mentors both positively and negatively impacted learning. Also, participants reported that observation and experience was critical for participants to learn shared decision making. See Figure 6 for a schematic on the learning process for participants mirroring of shared decision making.

Figure 6

Learning Process for Shared Decision Making- Mirroring



Shared Decision Making Learning is Affected by Mentor

Midwifery student and OB residents spent much of their interviews focused on different aspects of shared decision making mentorship. Midwifery students reported that their primary source of mentorship was from their midwife preceptors. The midwifery preceptor-student relationship was described as very influential. They also provided factors that impacted student learning both positively and negatively and offered suggestions for how preceptors could impact their learning. OB residents discussed the impacts of who mentored them, and the type of feedback they received, whether it was OB resident peers or on-call staff.

a) Midwifery Students:

Students reported spending extended periods of time with the same preceptors learning various skillsets. They discussed the importance of having observed multiple different preceptors making decisions with clients. This sharpened their own skillset. The relationship between the student and the preceptor was explained to be pivotal in the learning and use of shared decision making:

> *I think your relationship with your preceptor heavily influences shared decision making. Once you sort of figure out what your preceptor is comfortable with and what she isn't, that will largely steer how you have conversations with your clients especially around decision making. Is this actually 100% the client's choice or is this something that we highly recommend or is highly discouraged? Or how to phrase this in a manner that's fitting with the care that the midwives' practice. So at least as a student, it's heavily dependent on your preceptor and what they are okay with and your informed choice discussions and conversations you have with your clients will largely change depending on that.*
> *Melissa (Midwifery Student)*

The midwifery students went on to describe aspects of preceptor behaviour that were unhelpful for training in shared decision making. See Table 5 for Factors Impacting Midwifery Student's Learning of Shared Decision Making. One midwifery student reported:

> *As a student, trying to do shared decision making with somebody if you have a preceptor that makes you feel really nervous or is prone to cutting you off, that also impacts your ability to do the shared decision making. Also, how the client feels about you as the learner and I find that being cut-off in that way or the midwife disagreeing with you, not because you're wrong but just for whatever reason can impact how the client thinks about you. Then if you're trying to do shared decision making with them in the future, it's really difficult because they are just looking to the preceptor because they see you more as a student rather than a midwife you make decisions with. Alison (Midwifery Student)*

Students also discussed that preceptors often changed their decision making behaviours. This tendency to change, or to vary where they fell on the decision making spectrum made it difficult for some students to navigate their own decision making conversations. This was also due to the fact that the preceptor-student relationship was reported as dynamic and influential on the students learning. Students reported that midwives made some decisions with a more shared decision making approach and other decisions were more closely aligned with an informed choice process. Students saw decisions on a spectrum, sometimes more shared, sometimes less shared, and described that midwives varied on their use of shared decision making. One midwifery student described how mentoring changed based on how aligned the preceptor and the student's decision making preferences were:

> *There are some midwives who prefer one end of the spectrum to the other. Either informed choice at one end or shared decision making at the other. Preceptors will ask for you to present information their way as well. In that case you might have preceptors that hover over you a lot more and are heavily supervising you if they find you don't fall towards the model of decision making that they personally use in their day-to-day practice. Melissa (Midwifery Student)*

The participants had also experienced examples of unhelpful preceptor behaviour which included rigid preceptor expectations for student involvement in decision making. Students described they were often expected to mirror or parrot their preceptor in decision making conversations. This expectation was more challenging when the student had multiple preceptors during the same placement. This required the student to modify the content or script of their counselling and informed choice discussion for each person so that it mirrored the individual preceptor.

Other aspects of learning that students found problematic included the ways in which they learned their informed choice discussions. Students used informed choice discussions to help them engage in shared decision making. They reported that they were required to learn individual informed choice discussions that are reviewed and finally approved by their preceptor. Because these discussions were often nuanced to be preceptor-specific, they were often adjusted with each subsequent preceptor and placement. Students also felt pressured to perform their informed choice discussions exactly as practiced, even if the client was overloaded and overwhelmed with information, rather than tailoring the discussion to each individual client.

Table 5

Factors Impacting Midwifery Student's Learning of Shared Decision Making

Factor	Descriptions
Relationship Quality Between Preceptor and Student	When the relationship quality for the student and preceptor was positive, students reported that their learning was improved

Factor	Descriptions
Preceptor Behavior	**Helpful preceptor behaviour includes:** ● Ensuring psychological safety for students to learn SDM ● Giving students space to bond and build confidence with decision making ● Being consistent with their own decision making ● Making students feel a part of the decision making team ● Reviewing informed choice discussions and student knowledge base prior to SDM discussions ● Discussing own biases regarding decision making with students **Unhelpful preceptor behavior includes:** ● Interrupting students with clients ● Questioning students in front of clients ● Having rigid expectations for how students deliver informed choice discussions and engage in decision making ● Pimping students with questions the preceptor knew the student didn't have the knowledge to answer

Taking time and building trust with clients was seen by the students as essential to shared decision making. Students found it very helpful when preceptors gave them space to engage with clients in shared decision making to help build this trust. Students reported that once they had a good foundation of knowledge on the subject, a 'hands-off' precepting approach was useful for building confidence:

> *Preceptors that let you have that space to engage with clients and make decisions on your own and then allow you to do that shared decision making with clients, I find that's a helpful environment. Alison (Midwifery Student)*

The students also reported that they learned as much as they could about shared decision making from their preceptors. They learned ways to practice that were ideal and they paid attention to ways of practice that they felt were not ideal. Students discussed how they learn shared decision making by watching their preceptors and by collecting helpful methods and ignoring the rest. This was best described by one midwifery student:

> *In general, you aren't going to disagree with someone who has years of experience and is practicing. As a student, that is not your place really. You take everything as learning, for better or for worst. You keep what you want, and you let go of the learning from your preceptor that is not as helpful. You decide how you are going to practice based on that.*
> *Katie (Midwifery Student)*

The same student offered suggestions on how to optimize the student informed choice discussion learning and approaches:

> *I think a really good tool, is that it should be standard that we go through all our ICDs with our preceptors. I wish that we could make it an assignment or requirement for midterm that you've gone through this list of ICDs with your preceptor, so they know the info that you know to build that trust between the both of you. Then I think it takes off the pressure of being in clinic because if the only time the preceptor is going through the ICDs with you is in clinic when things are rushed, that doesn't build capacity for students good learning.*
> *Katie (Midwifery Student)*

Some helpful things described by participants that preceptors have done included: making students feel like a member of the team and reviewing ICDs and their knowledge base prior to shared decision making discussions. Other helpful things include discussing client personal preferences with respect to where they fall on the shared decision making spectrum as topics come up. Also not placing student performance of ICDs as a priority over client needs. One midwifery student explained:

> *In consulting with OBs, that's when I really see my preceptor come out and do shared decision making, but for the most part, I will usually take the lead and if it's an appointment and my preceptor comes in early, my preceptor still makes sure I feel like a*

> *member of the team. I'm still part of the patient's decision making. Ashley (Midwifery Student)*

b) Obstetrical Residents:

During the shared decision making learning process, residents were expected to figure out how to handle situations and lean on co-residents for information and support. When asked who they relied on for mentoring, one resident explained:

> *You rely on your seniors, actually, to do a lot of that shared decision making training. On-call you do because if you have more complicated patients, as long as you don't rush to the OR, you call your senior, and they kind of review the case with you first and review decision making strategies. Sarah (OB Resident)*

The OB staff also played a role in teaching shared decision making on the labour and delivery unit and in clinic:

> *OB staff often go through shared decision making with patients, every decision to C-section, forceps, vacuum; this process is visited, and staff will model shared decision making to the residents. Shared decision making skills are also taught in clinic in a more controlled setting with complex cases. Michael (OB Resident)*

Another resident explained how staff consultants provided more mentoring in a clinic setting:

> *You do also see shared decision making modelled while following on antenatal as well as a junior. It would be the MFM staff, they come and round on all of their MFM patients. Those patients are usually the high-risk patients. So, I usually go in and kind of check on all the patients and see how they're doing. And you know, check on their ultrasounds, their blood work, everything like that, non-stress tests or whatever. Then you update the staff when they come in. And then they kind of talk to you about what the plan should be, most of them will let you go room to room with them. And then they talk about everything. Sarah (OB Resident)*

The residents reported that the amount of support they received during on-call periods in their training regarding decision making with patients depended on the staff obstetrician on-call.

Some staff were happy for residents to confer with them for information, while others did not want to be asked for clarification at all.

They reported that they learned shared decision making and its associated characteristics from various people over the course of their residency training. Similarly, to the midwifery students, residents acquired useful and decision making skills from staff and senior residents and avoided adopting unfavourable decision making behaviours. Residents reported primarily learning shared decision making as they progressed through training and witnessed it. This was best captured by one resident:

> *Definitely I see different staff utilize shared decision making in different ways. You can pick up or leave different skills at the door, depending on who you see and different ways that other people use it or do not use it. There are some staff that are a little bit more old school and don't utilize it as much. You can see the impact on their patients, it doesn't always work out in the way that you think it would and some people maybe would prefer that but it's difficult to know until you are in that situation. That is one of the benefits of being a resident, you can kind of see in difficult or urgent situations, or how your seniors have used different techniques to deal with difficult patients. In general, dramatic situations that are not uncommon in the delivery room. You can see different individual approaches and trying to pick up or leave certain things behind that you think would be useful to you as a staff in the future. Tara (OB Resident)*

Another resident described the importance of being selective in the lessons they learned:

> *You see people who model it well, and you see people who model it poorly, and what you take from all your preceptors is what you think is useful. And then you, you turn that in some way into your practice. And then you see things that are not useful, and you internalize those and hopefully try to avoid it. But I mean, that's the same for all aspects of practice. Natasha (OB Resident)*

The residents were not directly responsible for patients, so they typically engaged in a staged shared decision making process which included a discussion with the patient, followed by the resident having a discussion with the staff, followed by a further discussion with the patient once the staff have finalized the care plan. Similarly, to the midwifery students, the residents

modified their shared decision making conversations based on which staff was on-call. In this way, the resident learning experience was strongly associated with the mentorship relationship with either their staff or their resident peers.

Observation and Experience as Essential to Learning Shared Decision Making

The majority of midwifery students and OB residents reported that they learned shared decision making in an informal way with clients and patients over the course of their training. They described learning it through observation and experience in decision making with clients and patients. One OB resident reported: *"There is no one person or level of training that teaches shared decision making, it is something that you absorb more through osmosis." Natasha (OB Resident)*

Students reported having had no exposure to didactic lectures on shared decision making, however, they all reported that they used shared decision making in their daily decision making with clients:

> *So, for us, hopefully, your shared decision making is happening 80% to 90% of the time. It can be seen in different forms, in terms of how strictly people adhere to shared decision making. I think unless you're somebody who is getting people who are unconscious most of the time, I think, hopefully it's happening the majority of the time. Natasha (OB Resident)*

Both groups reported having learned shared decision making informally in similar and yet different ways:

> *I feel like it's talked about a lot and implied in what we do. Do I think shared decision making has ever been explained that this is what you do, and how you do it? Not really. Kayla (Midwifery Student)*

One OB resident explains:

> *Most of the training is informal. Then it's also taking your own initiative to highlight a situation that maybe you've never seen before and have the senior resident on be informed. Tara (OB Resident)*

When asked about whether staff consultants and senior resident's modeled shared decision making well, the same resident explained:

> *Yes, definitely, there are some staff that model it very well. Actually, there are lots of people that I learn from such as my senior resident. Each one of them has their own way of employing it and learning from them has been very useful. They all have their own gestalts with difficult situations and there is much more debriefing that you do together as junior and senior residents. Tara (OB Resident)*

Some residents discussed that they had learned to be personable and engage in the back and forth of information sharing with patients through observation with staff:

> *Yes, I would say Dr. A is really good at it. She's one of the most personable staff there. All the staff is good in that way, but, yeah, in terms of really going through things with the patient, Dr. A is really good at going through that. Dr. B I've seen is really good at that also. There are other doctors that give their two cents, and I don't think there is anything necessarily wrong with that, speaking with that really shared decision making kind of way, I would say Dr. A is someone I really try to model. Michael (OB Resident)*

One resident described how observation helped them in their own learning of shared decision making:

> *I can remember one of our staff obstetricians walking in and staying confident and asking open-ended questions initially. They allowed the patient to express what they were going through and how they were feeling in that moment and asked them what they wanted to do. Allowed them to say whatever they needed to say and let them say their piece. Then give them the necessary information and just walked through it and be patient. They listened really, as listening is the most important thing. Ask appropriate questions and help them find a decision. Even if it wasn't what they recommended, they just worked with them through it and made sure the patient understood what they are going through. Tara (OB Resident)*

One participant highlighted the typical way that midwifery students learned shared decision making:

> *I don't think we really get taught how to do it, it's more you're supposed to learn by role playing, watching your preceptors and mimicking them, and watching their style. Then seeing other people's styles and approaches and then creating your own style. I think there has been times when we've talked about different things in the intensives. We have done a couple of different things with the obstetric teams, but again they are not frequent enough.*
> *Kayla (Midwifery Student)*

Midwifery students started learning about informed choice decision making in their first-year course 'Midwifery the Profession' and their first clinical placement, 'Normal Childbearing'. Our participants recounted not necessarily learning about shared decision making specifically in these courses, but rather some associated skillsets such as active listening and providing patient-centred care. One midwifery student described:

> *It was kind of interesting that the words 'Shared Decision Making' were never really used, but the different kind of aspects you would need to put into a discussion were there. You need to be an active listener, get to know your clients and we learned how to cater the information to their level-sort of thing.*
> *Alison (Midwifery Student)*

Another participant referred to the notion that midwifery students inevitably supported informed choice, whereby the client gets the final say in the decision, however; they reportedly used shared decision making throughout the process of decision making with clients. She stated:

> *I don't think we actually ever really learn about shared decision making. All the terminology that we use is for informed choice. I think sometimes we go into every situation thinking about informed choice. And sometimes we're met with shared decision making. You do have some clients that force you to have a bit more of a discussion and want to have more of that type of discussion, but I don't think that we really learn about it [SDM]. Katie (Midwifery Student)*

Students reported learning how to formulate and engage in informed choice discussions during their first clinical placement, Normal Childbearing. Specifically, they learned how to engage in discussions with clients that focus on the risks, benefits, and alternatives to treatment

options; relevant information regarding midwifery scope of practice and College of Midwives of Ontario's standards, relevant community standards, relevant research evidence; and the midwife's bias. One midwifery student described how the emphasis on what content needed to be covered initially overshadowed the personalized and interactive elements of the process:

> *So, we're kind of taught to do it more as a speech to give people and so I think that mindset around shared decision making and informed choice teaches us that its really all it is. It is spewing as much information as you can to someone and then as you get more comfortable with that speech that you've created, I think you're more willing to put the person into it. But at first, I found myself being very much like, 'okay, what was that thing I had written down? Or what are my cue cards saying' instead of seeing how the person was or thinking about their history and asking them about that, including my informed choice discussion.*
> *Alison (Midwifery Student)*

Students described this process as difficult as they felt they would be more prepared if they were required to create their informed choice discussions prior to the start of their first placement. Katie, a midwifery student explained:

> *In order to successfully teach students to do ICDs and shared decision making before they go off into placement, they have to have more clinical knowledge. So, I just think if you gave people the opportunity to write ICDs over the year and half before Normal Childbearing, and then have a shared decision making framework of what do decisions and choices mean, then it would give people more success in shared decision making.*
> *Katie (Midwifery Student)*

They also felt uncertain of the quality of their informed choice discussions as they reported no formal informed choice discussion teaching and on how to provide discussions with clients. Participants discussed how informed choice discussions are scripted, and how they felt they cannot be authentic in their decision making. The expectation was to learn this skill "on the job" in clinical placement. Again, the midwifery students felt they had a minimal base

knowledge in normal childbearing, their first clinical placement. One midwifery student explained:

> *I don't even know if I do them well. Part of it is we don't even get taught; we have to look up information and then we get taught about it in tutorial. To some degree, A) you don't ever know if you have all of the information, then B) you don't really get taught flow and what some of the different delivery styles are. So, I honestly don't know if mine are any good. I think I have all of the basic information but like, it's something I actually feel very uncomfortable with because I don't think there has been much training at all. Ashley (Midwifery Student)*

There was more supervision for midwifery students earlier on and reportedly less supervision in their final year of placement. Students agreed that this was ideal since earlier on in training, the preceptor was available to ask questions in the moment and to model how decision making should be achieved. One student explained:

> *I think my preceptor leads by example. They do it and they engage with it, and then you watch it happen and see how shared decision making can look like in various situations, such as at a labour versus at a prenatal appointment.*
> *Alison (Midwifery Student)*

Like the OB resident experience, in the final year of placement, midwifery students reported that the student engaged with the client in an iterative decision making process, first on their own with the client, then they often stepped out of the room to discuss with the preceptor, and then returned back to the client. Students found this approach helped to build autonomy in decision making. One midwifery student described this process:

> *Maybe initially and early on it's useful to have supervised conversation and decision making processes. Just to make sure you are covering all of your basis and providing as much information as possible. …after a while, it's more beneficial to be unsupervised so you can have conversations in a way that you allow for the right amount of autonomy without having someone's personal beliefs or their practices impede on that. Melissa (Midwifery Student)*

Students appreciated independence in their final year so they could develop their own style of shared decision making. Students also began to discern which conversations should be informed choice-like and when instead they should draw on a shared decision making approach:

> *It definitely is preceptor and practice dependent. I am not very supervised right now but earlier on I have checked as to when conversations should be informed choice-like and when they should be more shared decision making-like.*
> *Melissa (Midwifery Student)*

Similarly, to obstetrical training, midwifery students reported that self-directed learning was expected:

> *The Midwifery Education Program is also good at self-directed learning which I think is good in multiple ways, but there is little actual direction from the program, and sometimes you could be out in left-field and they could say that's good. They kept saying that. We are all adult learners and so you should know 'I don't know what I don't know'. I wasn't giving a good enough whatever they wanted…and every time I asked for more help, they would think I wasn't capable…. I really just wanted to make sure I was doing this right.*
> *Kayla (Midwifery Student)*

The students also explained that their preceptors heavily influenced their learning in clinical practice:

> *It would be ideal to learn about shared decision making in the classroom, but what you often see in placements in the practical aspects of learning is quite different. It's very much midwife dependent, a huge part of the students learning and how they will eventually practice is impacted by what they see.*
> *Alison (Midwifery Student)*

They reported that they especially appreciated seeing midwives' model shared decision making in labour situations and clinic appointments:

> *As a student sometimes, especially in a labour situation, you can get very caught up in like "Okay I need to take vitals this often" and she's pushing, so, "what I would do is X, Y and Z", then I find it's helpful to see somebody who can think while they're managing a*

> *labour. I think you need to see it happen, to see how it's done to really understand it versus in an appointment. It's very easy to understand. I realize I can do shared decision making discussions with people when I am sitting across from them in a controlled state but in the labour, it's been helpful to see how the midwives do that. Alison (Midwifery Student)*

Students discussed that although they had not received any didactic lectures on shared decision making, they felt this would be beneficial. They also articulated ideas for methods of integrating this more extensively into the curriculum. See Table 6 for participant suggestions for shared decision making teaching and learning strategies.

Table 6

Midwifery Student and OB Resident Suggestions for Teaching and Learning Strategies for Shared Decision Making

Suggestions Regarding Future Approaches to Teaching and Learning Shared Decision Making
Lectures
Observation
Role playing and debriefing
Decision aids
Communication skills training
Shared decision making teaching for urgent and non-urgent scenarios
More thorough informed choice discussion training
Formal shared decision making training for obstetrical academic half-days
Shared decision making training between senior and junior residents
Standardized patients
Hearing from patient and physician perspectives on shared decision making
Mock scenarios

One student mentioned the use of lectures, observations and role playing to help learn shared decision making principles. This would be useful as there is often a discrepancy amongst preceptors regarding what is taught in each placement. Students are often influenced by what they see, so having a foundation for shared decision making may help students be better prepared for learning shared decision making in the clinical placement setting.

> *You could introduce the concept in a lecture scenario. Include things like, this is what shared decision making is, and here is an example of what that looks like. You can bring it up theoretically in a lecture or formal teaching style. In terms of actually learning it, I think that it needs to be encouraged that it's something that you do. Ashley (Midwifery Student)*

Other students advised the importance of additional training related to communication and counselling approaches, such as how to provide information, how to phrase information,

how to frame questions so they aren't leading, and how to provide unbiased conversation. One midwifery student stated:

> *Shared decision making starts in the classroom, from the get-go, in your first year. We are taught how to phrase info that is acceptable, or how to frame the questions so it's not leading, or how to provide unbiased conversation. So, training happens pretty early on, with that practice, with that training you get to apply it, in the practical placements. From there, everybody's training gets a bit different depending on who you practice with. Melissa (Midwifery Student)*

Students also reported needing more time to consolidate these skills and to have these conversations with clients. Students specifically raised the need to learn more about how to approach shared decision making in urgent scenarios, and how to build client trust quickly. Other suggestions included having students spend more time with midwives having real conversations about how they make decisions with women. One midwifery student highlighted suggestion's for improvement:

> *I think being trained more formally would be a plus, I don't know if it's just me but in my personal educational experience, I don't think we were ever taught a systematic, formal way or had a lengthy conversation about how to do shared decision making, period. So that would be valuable, in any sort of education.*
> *Ashley (Midwifery Student)*

Participants describe the importance of being taught the associated skills required to engage in shared decision making:

> *When I am going over the nuances that are included in shared decision making: not only the phrasing, how you listen, what's important, how to develop trust, what are the things that you should be keeping in mind in terms of the psychology of the client, what's going through the mind at that time, what should you be thinking of, going over all the smaller aspects of that process and going over what to do in an emergency. These would all be very valuable. These would be good to see in teaching shared decision making. Alison (Midwifery Student)*

Similarly, the residents shared a desire for more formal learning related to this approach:

> *I suppose formal learning could be done because we have academic half days. So, we can get consultants to come in and sort of kind of talk to us as a group.*
> *Sarah (OB Resident)*

One strategy that was suggested was to create a list of concepts and content, including shared decision making, to review and teach for your buddy system between PGY One's and PGY Three's. It was also suggested that using standardized patients in a one-to-one session with an assigned mentor might be useful. Adding a formal assessment of this skill set at some point during residency and formal mentoring on the topic were also articulated as beneficial strategies:

> *They had something like that at University of Toronto when I was a medical student. You would have sessions and standardized patients, and the student would actually go through a one-on-one session with a mentor they were assigned. To work on a deficit skill. Their thing was kind of like "empathy can be taught", but I think what they were really getting at was shared decision making and empathy is part of that. I remember seeing one of my co-medical students, he went through that and seeing him interview before the intervention and seeing him interview after was such a substantial change that I was surprised it worked that well. So, I guess really going through that again, individually going through the issues with the person and working with them to help them figure out a shared decision making model that they are able to employ with their own individual skill set would be very useful. Natasha (OB Resident)*

Having training with formalized and structured feedback, as well as obtaining input from the patient and physician perspective on shared decision making were mentioned as helpful ways to learn shared decision making:

> *I think formal training would be really nice, just to outline what works well and having patients talk to you who have been through those difficult decisions. Understanding what worked for them would be really helpful. We do see that a lot of the beginnings of where the breakdown began was because of poorly done shared decision making. The patient wasn't informed and it all kind of broke down. So, having an actual patient perspective and a physician perspective would be really helpful in a standardized way. Tara (OB Resident)*

One resident discussed the option of engaging in a shared decision making simulation:

> *What we did there was we kind of modelled or did a mock scenario. In our case, we actually did real scenarios in front of each other, with patients sort of behind a black wall. And the patients were aware that this was part of a training program. And I found that really helpful. It would have to be a small group environment where we would bring up the common types of scenarios you'd encounter, that would be challenging. Then maybe you'd have somebody more senior mock pretending how they would deal with this scenario, you could have some of the juniors trying to have these conversations, and then having discussions as a group about things that went well, and suggestions for ways to change the way that people interact. Jessica (OB Resident)*

Finally, midwifery students and OB residents reported that confidence in shared decision making comes with increased knowledge about the topic being discussed. They described how increased experience in shared decision making comes with practice. One midwifery student expressed:

> *In your first couple of years, you know a little bit about everything, but it's more superficial. And then as you get deeper and deeper into the various courses that we do, you learn about different things more thoroughly. And your ability to do the back and forth or respond to the more specific type questions that people are going to ask you becomes a bit more seamless as you are able to answer it a bit better. So, I find that the more confident you are in being able to approach any of those types of questions, which comes with more of a knowledge base makes you more willing to do shared decision making. Then I think your actual ability to practice it comes with actual practical experience. Katie (Midwifery Student)*

OB residents reported that they engaged in shared decision making and yet felt that the patient should have had the final say in decision making. This would suggest that OB residents engaged in informed consent, however, used shared decision making throughout the decision making process. Michael, an OB resident says: *"We all use shared decision making while discussing options with patients, however in the end you still have to get consent to do something to do the patient."*

OB residents reported receiving no formal training on shared decision making with the exception of associated skills in medical school, including on the MCAT exam. They reported receiving communication skills and empathy training in addition to learning how to break bad news. One OB resident recounted:

> *I'm sure I did have sessions, that were in some ways formal teaching of decision making. You know, I'm trying to think back to med school now, they might not have called it shared decision making, but essentially, they were about kind of getting buy-in from the patient and not just presenting them with facts.*
> *Natasha (OB Resident)*

The shared decision making training was mostly informal, and it was up to the resident to seek out situations and opportunities to observe or practice shared decision making.

OB residents, unlike with midwifery students, felt they did most of their shared decision making conversations unsupervised. Often residents were on their own making decisions with patients, with junior residents having more supervision than senior residents. The staff consultant was often not present during shared decision making processes in the labour scenario. One resident revealed:

> *Usually, it's hard to say whether the staff or senior residents' model or give feedback to us because a lot of the time they are not there. It depends on the moment. The majority of the time they are not. You say, 'I think this patient needs a cesarean section' or they are at the desk and they are like 'okay, why don't you go counsel them?' Most of the time that I was witnessed were either by my seniors when I was buddied initially. Sometimes you would ask a staff to come with you. Usually you are actually alone or with another junior. Tara (OB Resident)*

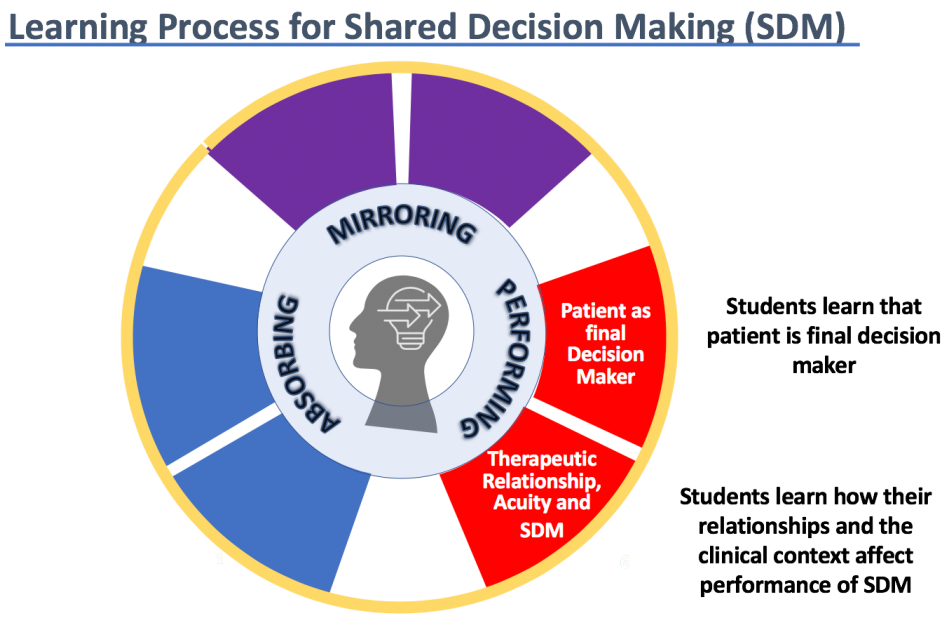
Sometimes staff were present when residents interacted with patients and residents sometimes received direct feedback. It is in this review process that coaching, and mentoring took place.

Theme Three: Performing

Performing pertains to the ways in which OB residents and midwifery students performed shared decision making. OB residents and midwifery students described that when they performed shared decision making, they positioned the patient as the final decision maker and identified how the quality of the therapeutic relationship and the acuity of the clinical situations were both factors that influenced the ability for OB residents and midwifery students to perform shared decision making. See Figure 7 for a schematic on the learning process for participants performing of shared decision making.

Figure 7

Learning Process for Shared Decision Making- Performing



Patient as the Final Decision Maker:

Both OB residents and midwifery students identified that they used shared decision making, but when they performed shared decision making with patients and clients, they ensured

the patient or client was the final decision maker. It was this belief that lead midwifery students to report that they conducted informed choice. The concept of client as decision maker is an inherent aspect of informed choice. Both OB residents and midwifery students felt that the power remained with the woman regarding decision making.

Ashley, a midwifery student expressed:

> *No, I feel strongly that the client should make the decision, but the midwives can help with that decision, or advise with that decision. But the client should be the one to make the decision. Ashley (Midwifery Student)*

Similarly, this was echoed by an OB resident:

> *It is the bottom line, whether I feel it's the bottom line or not is almost irrelevant, that's what the law is. Its patient controlled. In 99% of cases, the patients are the ones who make the decisions. We try to guide them to the right decisions, but what we feel is the right decision in the end, is irrelevant, they have control, not us. Michael (OB Resident)*

Midwifery students reported that they felt when they performed shared decision making, this created greater autonomy for the client. One student described how important it was for women to be able to make decisions about their own bodies:

> *I think that people like to feel they know what's going on in their body and feel autonomous in the decisions that they are making about their bodies. So, I find through a process of shared decision making discussions and informed choice, it's allowing people to kind of get that understanding and a bit of autonomy in their own health, especially because now their health care decisions also involve the health of another soon to be human being. Alison (Midwifery Student)*

OB residents and midwifery students reported various answers when asked if patients or clients were capable of making their own decisions. All midwifery students reported clients were capable of making their own decisions as long as they were fully informed. OB residents felt the same way, except they felt that the patient capacity should be more individually considered. They looked at factors such as: whether the patient has been through this decision making before,

how well they were counselled in the past, if they were dealing with something more chronic, and their background context. They did not feel patients were as capable when they shut down and were not willing to let the obstetrician talk with them. One OB resident described the important role the OB performed in shared decision making:

> *I think patient capacity for decision making varies greatly, depending on the patients and their level of education. Their kind of social background, cultural background, religious background, like all of that comes into play. So, if you explain it well, and try to address it at that person's level of understanding, then that makes them more capable, because they have a better understanding. If you explain things poorly, and you use medical jargon, and you're rushed, or for whatever reason, you're not getting through to that patient, that, in turn makes them less capable to make a decision. Natasha (OB Resident)*

Impacts of a Good Therapeutic Relationship and Acuity on Shared Decision Making

Midwifery students and residents identified the importance of a good therapeutic relationship in supporting their ability to engage in shared decision. This involved a midwife-client or physician-patient relationship that was built upon mutual trust and respect. Students highlighted some essential things that were required when building trust in the relationship. Such things included: asking how clients would like to receive information, making clients feel comfortable, providing accurate information, helping the client feel open and honest about when they don't understand something, the length of their relationship, establishing a connection, responding when the client asks "what would you do" and affirming the clients own beliefs. A midwifery student reported:

> *So I find that if people trust you enough for you to let them be a part of the decision and you respect them enough to give them the information so they can make their own decisions, they will respect you and trust you even more. That doesn't work for everybody, there are some people who just want to be told what to do, and that's fine. People come to midwifery care for different reasons, but I find for the most part, that's what people feel like has been missing in their health care and what they really want. So,*

I think it really benefits the relationship.
Katie (Midwifery Student)

One OB resident highlighted the difference in decision making that occurs when the obstetrician had a good therapeutic relationship with the patient:

I think when an OB already has a good relationship with a patient, and that rapport is already established and so is that basic level of trust, the client usually feels comfortable expressing their own wishes off the get go. Maybe sometimes you don't even need to prompt them and they'll kind of mention it right away. When the staff may make a recommendation too, the patients are very receptive to that. They may actually have less questions than usual when there is a good relationship, or they may trust the staff a little bit faster instead of if it was somebody they didn't know. Whether or not they agree with it or not, it's more about having that relationship and it is less jarring for the patient, I guess.
Tara (OB Resident)

OB residents and midwifery students both recounted that the acuity of the clinical situation had a direct impact on the quality of shared decision making they provided. Specifically, the degree of urgency directly impacted the extent to which they could provide shared decision making. They had longer shared decision making conversations when the situations were less urgent. One OB resident reported that shared decision making was similar in urgent vs non-urgent scenarios:

It's effectively the same thing, you're just trying to speed it up. You're trying to make the decision easier for the patient, so, you're trying to boil down the decision. In the end you still have to get consent to do something to the patient, but you're just trying to address the main things and try not to waste time. It's effectively the same process, just done much quicker. Michael (OB Resident)

Some of the things that were highlighted when providing shared decision making in an acute situation included: presenting the information appropriately in a succinct way and providing enough information to be able to consent. One midwifery student highlighted the nuances of shared decision making in an urgent scenario:

> *Then in terms of if the urgency is more emergent, such as in labour, when things move south quite quickly, it's presenting the information in very digestible, small bits, I think. Like this is what is happening, this is what this means for you and your baby, this is what we are recommending and suggesting, these are the pitfalls and consequences. Then do you have any questions based on what I presented to you? Just because time is more sensitive in those moments but making sure it's clearer and trying to maintain calm. If you're panicked, the client is panicked. Katie (Midwifery Student)*

One OB resident elaborated further:

> *Usually you abbreviate things and say, what is going on. We recommend this, we need to act quickly. And that's harder. Sometimes the conversations we want to have don't get to happen as quickly, we can't do anything against peoples will. But at the same time, sometimes we're acting and getting consent at the same time." Jessica (OB Resident)*

All residents and students reported that discussing emergencies in advance with patients/clients did make shared decision making easier in the acute emergencies. This was captured best by a midwifery student:

> *What we try to do is to have conversations about urgent scenarios ahead of time when it's not urgent, about giving a heads up so there is a knowledge base, so nothing is a surprise for the most part. For situations like that, it's a matter of mentioning what it is, briefly, what needs to happen, what are potentially their options, and then with the consent, doing what has to be done.*
> *Melissa (Midwifery Student)*

One OB resident reported:

> *I guess it depends how urgent it is. And if you're still able to hold a conversation of any kind with the patient, you should. And then if the patient is unable to have that conversation, for whatever reason, try to hold it with their next of kin or substitute decision maker. In the case of a life-threatening event or something, your recommendations tend to be stronger. There's less time for conversation, but if you are able to have a conversation with a conscious, consenting patient with capacity, you should still do so. Natasha (OB Resident)*

Residents and midwifery students alike identified non-urgent scenarios as ideal for shared decision making:

> *It's obviously a big difference right, because if there is a non-urgent scenario, not only can you take the time to provide them with the information, but they take the time to take a moment, think about it themselves. If they want to do their own research, they are welcome to, or talk to other people or family members. Then being able to go through their questions one by one and talk them through but also provide your perspective on why this would be something you would recommend or why you wouldn't recommend another procedure or whatever it is that you're doing. Tara (OB Resident)*

There were some identified challenges to providing shared decision making with patients and clients. Some of the biggest challenges included: a lack of time, especially as a student, the fact that some patients or clients do not want to participate in decision making, and clients sometimes asking, "well what would you do", which can make decision making more difficult. Finally, it was challenging when the patient or client and care provider were not able to come to a decision together.

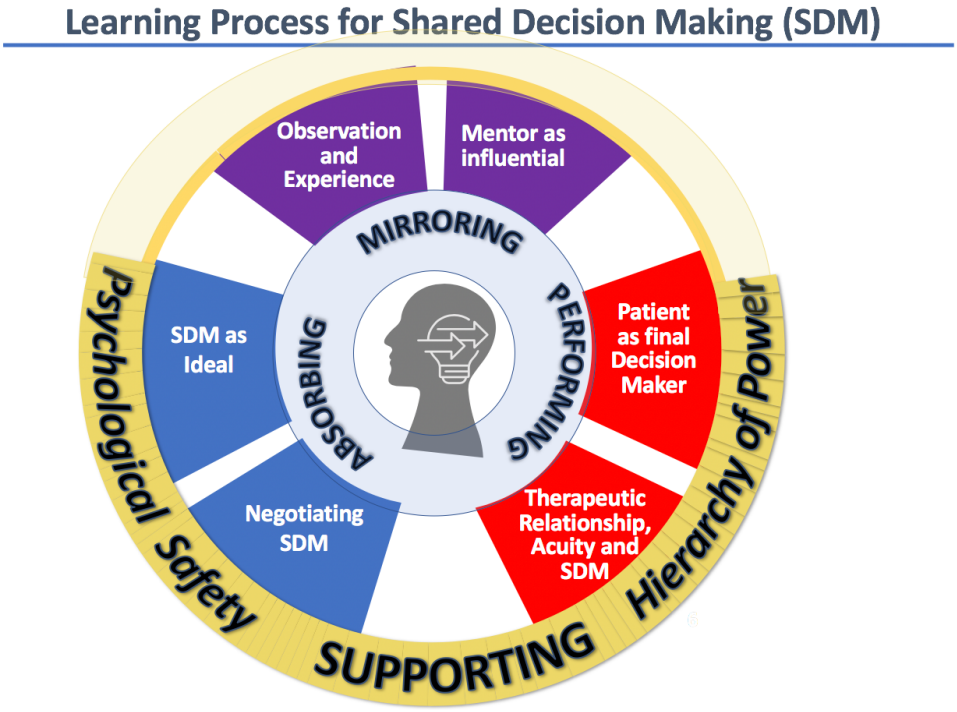
Theme Four: Supporting

The Impacts of Psychological Safety and the Hierarchy of Power

Participants described the overall impact of the support they received on shared decision making learning and performance. Participants described challenges they faced with working within the mentorship model in the presence and absence of support. Some of the challenges included working within a power imbalance between the mentor and the learner, as well as the inability to challenge their mentors in care plans for decision making. See Figure 8 for a schematic on the learning process for supporting learners in shared decision making.

Figure 8

Learning Process for Shared Decision Making- Supporting



Note. A schematic of knowledge consolidated by participants during the Supporting process. Supporting is essential to the process of the other three themes, absorbing, mirroring and performing are built.

Learners discussed the impacts of psychological safety on learning. Some felt they were not able to engage in decision making with clients because of the effects of the mentor. Participants reported an inability to feel vulnerable or being unable to dispute or question the preceptor's methods or recommendations, negatively impacts the decisions made between the client and student. One midwifery student described her experience:

> *My preceptors this term would say 'well we want you to make mistakes' and my response was 'I made a mistake a month ago and you are still talking about it'. Once I messed up, they were even questioning whether I had the base knowledge I needed. This really affected me, so, words last a really long time. I felt like I couldn't make any mistakes,*

> *otherwise, my preceptors wouldn't trust me. Psychological safety is possible, and it would be nice if all students didn't have to feel like this. Kayla (Midwifery Student)*

Although it was noted prior that a lack of psychological safety was problematic for student learning, some students reported that few preceptors sometimes provided a space for psychological safety or a space whereby students felt safe to be vulnerable and engage in decision making with preceptors, each other or clients without fear of being incorrect. This included the ability to disagree with the preceptor's care plan which students reported was not currently possible.

> *In this placement currently I don't think there is a lot of room for disagreement. Maybe in the past there might have been. I don't think it has to be like "Hey I think your wrong" but even suggesting something alternatively wasn't well received. It could be because of the level that I am at right now, maybe six months down the line that might change but as of right now, the role that I play and with the relationship I have with my preceptors, I don't think that there would be a lot of room for disagreeing. If I did, then I would be penalized for it. I definitely do think that there would be repercussions for openly disagreeing, especially in front of a client. Melissa (Midwifery Student)*

Some midwifery students and OB residents described how preceptors were receptive to a more active role for learners when requested. Further, some staff were harsh in their feedback while others were more supportive. During the feedback process, residents were at times coached on which options to offer, and how to counsel the patient. Residents explained that they were almost always met with support from their senior residents or colleagues, but the support varied according to which staff obstetricians were on-call.

When asked whether the resident would be met with support when managing a clinical scenario that was new to them, one resident responded:

> *I would be met with support from the residents, it would be fine, but from the staff, it would depend on who you are asking. There are some people who would love to explain*

> *it to you, and other people who would not even want to hear that question. Tara (OB Resident).*

Midwifery preceptors that came into the clinic room and ultimately repeated everything that was already discussed by the student or felt they needed to have the informed choice discussion all over again in their own way, was reported by students to compromise decision making between students and clients. Midwifery students described feeling like their preceptors had more power over their performance than they had appreciated. Students felt like they needed to change their decision making with clients based on their preceptor's preferences and biases. One midwifery student explained:

> *…Which I think comes along the lines of power dynamics between students and preceptors because how I would have certain conversations would be different depending on my preceptors' own biases. They might say, "well why are you giving all this information, we know she isn't going to do this". Well, actually, I don't know she isn't going to do this. Katie (Midwifery Student)*

The power imbalance between the student and preceptor, particularly the need to please the preceptor was a challenge:

> *We have such an intense relationship with our preceptor, and that power dynamic exists. We spend all of this time with our preceptors, who are responsible for whether or not they pass us, sometimes we find that they aren't providing accurate information because you have the most up to date information but that's not your place to correct them. It's the power dynamic, as a student, the focus is on making your preceptor happy versus knowing you are providing the correct information. Katie (Midwifery Student)*

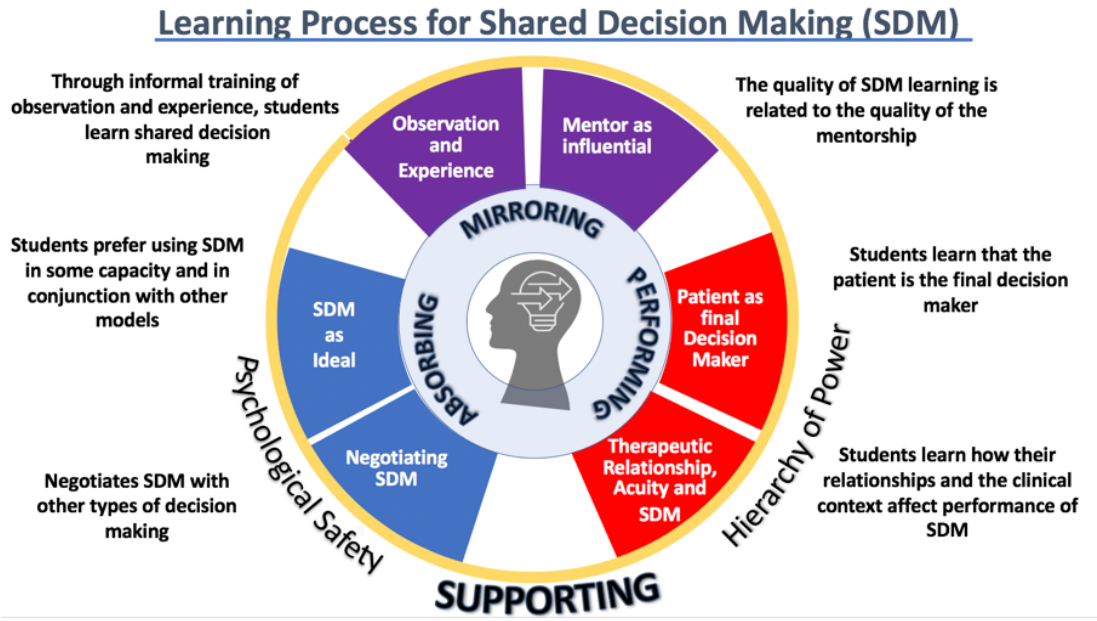
Participants described their learning of shared decision making as influenced by the amount of support they received in their learning. As psychological safety and the quality of their mentorship relationship increased, their learning also improved.

Discussion

Overview

This research adds to the literature on shared decision making by providing a novel examination of the perspectives and experiences of senior midwifery students and obstetrical residents in Ontario, Canada with respect to shared decision making. We aimed to understand how students and residents came to understand, learn and conduct shared decision making. Figure 4 illustrates the learning process for shared decision making for OB residents and senior midwifery students in our study.

Figure 4



Through the use of grounded theory, our theory describes how shared decision making is learned through an unstructured, informal learning process that consists of OB residents and midwifery students negotiating the same eight factors throughout training. OB residents and

midwifery students absorb, mirror and perform shared decision making in various clinical scenarios throughout their training. The eight components that form the basis of our theory described how participants learn and understand shared decision making. Learners navigate the following eight considerations in an iterative process, resulting in a refined skill set at the culmination of their training.

The first and second aspects of the learning process describe how participants absorb shared decision making in the early years of their training. The first component characterizes how OB residents and midwifery students learn about shared decision making amongst other pre-existing decision making models.

In the second component, participants described a realization that shared decision making is ideal and valued in the obstetrics and midwifery models. The third component expresses how participants attempt to mirror shared decision making, learning informally, through observation and experience.

The fourth includes seeing various types of mentors perform shared decision making, and participants fumbling their way through the process, consolidating skills as training proceeds. Participants then begin to realize how important their mentors are to the quality of their training in shared decision making. They begin to identify helpful and harmful methods of teaching shared decision making and start to isolate ways that training could be better. Participants also start to evaluate and reflect on the quality of their training and how well they are able to make decisions with clients and patients.

The fifth component describes participants as being committed to shared decision making; they prefer the back and forth interaction and information sharing with clients and

patients. However, they value patient and client autonomy above all else. The sixth component describes participants starting to recognize how their performance of shared decision making is influenced by external factors such as patient and client acuity and the quality of the healthcare provider and patient or client relationship. Participants describe developing a more objective understanding of the variables that help or hinder their ability to perform shared decision making.

The final theme describes how support for OB residents and midwifery students in the learning process, is an underlying factor that influences the understanding, learning and performance of shared decision making by students. The learning of shared decision making, as it is such an important part of patient and client care involves some level of vulnerability on the part of the resident and student. This learning process is heavily influenced by the hierarchy of power and the level of psychological safety encountered in their clinical training.

Although midwifery students and OB residents arrive at a point by the end of their training where they feel they can manage decision making with clients and patients, they cannot confidently speak about how they arrived. Shared decision making results in a type of gestalt that is created in OB residents and midwifery students' final year of training. They describe a culmination of many skills that create an overall ability to engage with patients and clients in shared decision making. In this chapter we examine how the findings of our study relate to the existing literature on the learning, understanding and application of shared decision making.

Similarities and Differences Between OB Residents and Midwifery Students

Midwifery students and OB residents had many aspects of understanding, learning and applying shared decision making in common. They had few differences. Much of the similarities

involved their understanding of shared decision making and their focus on patient and client autonomy as ideal. As was mentioned previously in chapter one, shared decision making has evolved from the need for more patient autonomy. Participants also described the importance of their mentors in learning shared decision making. Many discussed a desire for more training for mentors in teaching shared decision making, as well as more formalized training and structured feedback for learners.

Both OB resident and midwifery student participants described a similar process of informal learning whereby they discussed decision making options with the client or patient, then proceeded with a discussion with the mentor followed by a final decision made with the client based on mentor feedback and recommendations. Both groups of students described accumulating knowledge about shared decision making over time and provided insights into potential ways training shared decision making could be optimized for future learners. Participants described the need for them to be self-directed in their learning and the need to provide shared decision making in similar ways as their mentor, in order to be successful in reaching an ideal decision with the client or patient. Participants described a similar way of performing shared decision making and highlighted few key aspects of shared decision making that they felt were integral to its delivery. Such aspects include learning how to navigate shared decision making in various levels of acuity, as well as the importance of a good therapeutic relationship with clients and patients.

There were a few key differences between the OB residents and midwifery students regarding shared decision making. Some of these key differences included that the midwifery students identified with the informed choice philosophy, but used shared decision making as part

of that delivery of care. OB residents reported that they predominately used shared decision making. OB residents used co-residents as mentors as well as staff consultants. They tended to see various mentors for shorter periods of time. Midwifery students had fewer mentors and for longer periods of time and did not receive any formal training from other midwifery students. Midwifery students felt they had a gap in their knowledge base at the start of their first clinical placement. They felt their first clinical placement would be better utilized if they had gathered information for shared decision making topics in advance. See Table 7 for a list of the similarities and differences between midwifery students and OB residents for absorbing, mirroring, performing and supporting in shared decision making.

Table 7

Similarities and Differences Between Midwifery Students and OB Residents and Shared Decision Making (SDM)

Characteristic	**Similarities**	**Differences**
Understanding SDM	Both groups provided similar understandings and definitions of shared decision making. Patient and client autonomy were considered crucial to decision making regardless of the model used.	Midwifery students described informed choice and SDM as ideal. OB residents described SDM as ideal.
Mentor Influence	Mentors were pivotal to learning. Hands-off precepting in senior years was helpful	Midwifery students offered more description of how mentors are helpful and harmful to learning SDM.

Characteristic	Similarities	Differences
Mentor Influence	Participants needed to alter behaviour in decision making to suit and appease their mentor. Participants appreciated seeing preceptor's model SDM at various levels of clinical acuity. Learners wanted a more systematic approach to teaching SDM and structured feedback from mentors. Learners requested more training for mentors on how to teach SDM to learners.	OB residents relied on co-residents for mentoring and some staff consultants. Not all staff were willing to teach SDM skills. OB residents described obtaining more support from co-residents than from staff OB consultants
Learning Process for SDM	Learning was informal and unstructured. Learning occurred primarily through observation and experience. Learners followed a process of discussion with the patient or client, followed by a review with a mentor, followed by the final decision being made with patient or client. No exposure to didactic or formal training	Midwifery students spent long periods of time with the same mentor(s). OB residents spent shorter periods of time with different mentors in this study. Midwifery students described a desire to learn clinical information prior to their first clinical placement.

Characteristic	Similarities	Differences
Learning Process for SDM	Learned through role playing, mimicking and modelling. Learner developed own style over time. Participants reported more supervision early in training, less in senior years. Both learned when to apply SDM and in which clinical scenarios. Similar recommendations for future teaching and learning of SDM. Increased knowledge of SDM comes from increased experience.	Midwifery students reported that their informed choice discussions felt scripted and too rigid at times to make for an appropriate SDM discussion. OB residents offered the potential to use academic half-days and standardized patients as ways to increase learning SDM. OB residents felt most of their SDM conversations were unsupervised or with co-residents. Midwifery students did not formally train under other midwifery students.
Midwifery Student and OB Resident Role in Learning SDM	Learners needed to take initiative to identify learning needs. Could not always be authentic, needed to perform like their mentors to be accepted. Required to be self-directed in their learning. Make care plans that are in line with the mentor's preferences, not necessarily what the learner felt was best.	OB residents report that how they conducted SDM was less important to their mentors than ensuring the correct information was exchanged. Midwifery students reported that mentors prioritized how students exchanged information with the client as more important than how the decision was being made.

Characteristic	Similarities	Differences
Performing SDM	Participants described a decision making process similar to Godolphin's (2009a, p. e189) three-talk model of shared decision making. Used SDM almost all of the time. Wanted to discuss emergencies in advance with patients and clients. Used effective communication skills in conjunction with SDM. Agreed that paternalistic decision making should be avoided. Needed to understand clients background and perspectives. Participants appreciated the importance of a good therapeutic relationship with their patient or client. Participants agreed that capacity was essential to conducting appropriate SDM.	OB residents reported using informed consent and SDM in decision making with patients. Midwifery students reported using informed choice and SDM in decision making with clients Midwifery students described the SDM process as being very scripted and the need to perform correctly was mentor specific. Midwifery students felt client capacity was present if the client was informed enough to make a decision. OB residents felt that capacity was more nuanced than being fully informed.

Characteristic	Similarities	Differences
Supporting Students in Learning SDM	Participants agreed that they didn't always feel psychologically safe to make mistakes and try new ways of decision making. Participants discussed that the hierarchy of power that exists between mentors and learners can make it difficult to understand, learn and perform shared decision making.	Few midwifery students reported that they felt safe enough to disagree with care management plans with their mentor. OB residents felt that the impacts of the hierarchy of power were easier to navigate with co-residents instead of with staff consultants. Residents helped each other find ways to avoid calling staff consultants.

A More Relational Approach

In the early phases of participants training, learning included a common understanding of the definition of the shared decision making process between both OB residents and midwifery students (Charles et al., 1997). The participants had a common understanding of shared decision making. This was important to highlight as it demonstrated that OB residents and midwifery students shared similar values about the use of shared decision making. The participants all described the importance of shared decision making and the desire to use it most of the time. There was some confusion about the language used to describe their decision making process. As is evident in chapter one, there is much overlap between the informed choice, informed consent and shared decision making practices. Students had difficulty describing the differences between

these processes. Midwifery students were confounded by the differences between informed choice and shared decision making. The midwifery students and OB residents reported that they often used shared decision making, but the client always had the final say when making decisions. Residents and midwifery students all felt that autonomy was paramount. This notion became more prominent as training progressed.

Upon taking a closer examination of shared decision making and informed choice it would prove useful to highlight some similarities and differences to each of these models of decision making (Elwyn et al., 2017; McKenzie, 2009). One of the surprising findings of our study showed that although midwifery students and OB residents reported that they valued shared decision making, the midwifery students preferred the process and focus of autonomy in the informed choice model. OB residents reported that they also felt patients should have the final say in decisions made, which is not consistent with the true definition of shared decision making (Charles et al., 1997).

OB residents and midwifery students in our study discussed the importance of capacity. The OB residents were in agreement with Brooks and Sullivan (2002) when they reported that capacity was considered adequate when the client or patient discussed the proposed treatment or procedures, the indications, risks and benefits in their own words. For consent to be valid, it must: be given voluntarily (with no coercion or deceit), be given by an individual who has capacity and given by an individual who has been fully informed about the issue (Beauchamp & Childress, 2001). OB residents spoke more about capacity than midwifery students in relation to shared decision making. OB residents felt that it was very important for patients to demonstrate capacity when making their own decisions. OB residents felt that the degree to which patients

were willing to listen to their recommendations and acknowledge them was also tied to capacity. If patients were not willing to hear their recommendations and thoughts regarding decisions to be made, residents reported that they had not achieved capacity. This is not in line with the traditional use of the term capacity and may be more of a reflection of residual paternalism. Midwifery students enforced the premise that if midwifery clients were given sufficient information to understand the decision they were making, then they had achieved capacity to make the decision. OB residents and midwifery students appeared to view capacity in different ways. This may perhaps be because obstetrics is rooted in informed consent models and midwifery is grounded in the informed choice process. Obtaining capacity is a part of the informed choice process, and the College of Midwives of Ontario does not explicitly state that capacity is a part of the consent process (*Consent | College of Midwives of Ontario*, *2020)*. Acknowledging this distinction in the way the OB residents and midwifery students approached capacity may be important to the understanding of how these participants engaged in shared decision making.

Our findings indicate that the approaches to decision making between trainees in these professions may be closely aligned. There has not been any confirmation of this in the literature.

Charles et al., (1997) provided nine different types of shared decision making. The OB residents and midwifery students in our study subscribe to using the Shared Rational Deliberative Patient Choice approach. In this approach, the professional and patient engage in a shared rational deliberation, but in the end the patient autonomy prevails. This type of shared decision making is a hybrid of the original shared decision making definition and insists that the patient be the final decision maker which is consistent with what our participants reported.

Physicians may be focusing more on autonomy than was previously done in other methods of decision making (Charles et al., 1997). Our study participants described that they came to understand that shared decision making was a nuanced process, requiring them to think critically about how best to relate to and work with the pregnant patient.

The OB residents and midwifery students reported a vested interest in the outcomes for their patients and clients and the need to connect with them more on a social and cultural level. They demonstrated a more relational approach to decision making with patients that has been previously associated with informed choice (Handa & Donovan Sharpe, 2015). This relational approach seeks to diminish the hierarchal boundaries between patient and caregiver and actively empower women to enable them to make meaningful choices (Spoel, 2004). The residents and midwifery students in our study acknowledged their position of power in relation to decision making. This is corroborated by Sherwin (2000) who described that a relational approach calls for us to see the power dynamics at play in the health care system and how these power dynamics reflect and reinforce themselves in the broader social landscape.

Learning Through Observation and Experience

Our theory describes how the learning process of shared decision making is primarily made up of observation and experience. Our participants described that they learned shared decision making through observing and through deliberate practice. Kolb (1984) discusses experiential learning theory (ELT) as a way to understand the various phases of learning and the ways people obtain and process new information through experience and reflection. Kolb's theory may perhaps explain the processes by which residents and midwifery students learn shared decision making, alongside much of their other clinical training. Kolb (1984, p. 21)

continues to report that experiential learning is a 'holistic integrative perspective on learning that combines experience, cognition and behavior.' Knowledge is created as new information and experiences are assimilated. Participants in our study describe how they proceed through the experiential learning cycle in Kolb's theory. Kolb describes how students first appear to obtain concrete experience, then undergo reflective observation, abstract conceptualization and active experimentation. He reports that one can enter the learning cycle at any point and the stages are followed in sequence. Kolb's theory can be used to describe the participants "fumbling through" process of learning shared decision making.

According to Kolb's theory, the learners also undergo what is called a 'learning spiral' whereby they progress through the cycle many times. The learner reflects, thinks, and acts again. This may explain the day-to-day learning process for many OB residents and midwifery students. They may observe a colleague or mentor engaging in shared decision making, and then may be required to conduct their own attempts. Through the reflective process they continue to proceed through the cycle repeatedly as residency and training continues. Although Kolb's theory may help us to understand how students and residents are learning shared decision making, it does not explain what is being taught or learned. Residents and students may be undergoing the learning spiral that is needed to consolidate information however, they may not necessarily be obtaining the correct information without the influence of a good colleague or mentor. Kolb's theory can nonetheless be a starting point for understanding how residents and midwifery students learn shared decision making.

The participants requested further training on shared decision making. It may perhaps be worthwhile to incorporate training for mentors on how students can learn better through

observation, experience and reflective practice, as reflection is so useful in clinical teaching and learning. The Bass Model of Holistic Reflection is used in the Australia Midwifery Education Programs to guide the development of critical reflection and reflexivity for learners (Sweet et al., 2019). This model provides students with a formalized approach to evaluate and reflect on their clinical experiences "beyond description to deep personal learning" (Sweet et al., 2019, p.120). The model involves developing the ability to critically evaluate clinical scenarios from multiple perspectives. The model entails the belief that reflective practice involves self-awareness, reflection, critical reflection and reflexivity. By developing reflexivity, "the learner reflects at a deeper personal level on the values, beliefs and assumptions that influence experience" (Bass et al., 2017, p.229). The Bass Model incorporates six inter-dependent phases embedded within a circular design that reflects all dimensions of reflection. Each phase is designed to promote reflection on a superficial and deeper personal level. This integrates new learning into practice (Mann et al., 2009). It may be advantageous for midwifery students and OB residents to adopt a model for reflective practice to help promote improved learning of shared decision making through experience and observation.

We found that participants valued their experimentation and practice of shared decision making once they felt they had a solid foundation of its process. Van de Wiel et al., (2011) agrees that physician learning is also largely guided by clinical experience as it arises rather than being deliberately sought after. Our findings are supported by Stok-Koch et al. (2007) who articulated that residents and physicians learn from patient cases and through their working alongside colleagues and other specialists. We found that our participants were in agreement in feeling that deliberate practice was essential to their learning of shared decision making. Ericsson

(2004) states that in order to obtain expertise, health profession learners need to engage in deliberate practice. Van de Wiel et al (2011, p. 82) describes deliberate practice occurring when experts "repetitively practice tasks that allow them to refine their knowledge and skills, based on specific goals to improve performance." This theory also corroborates Kolb's ideas around the benefits of spiral learning and engaging in the same learning cycle repeatedly. Our results support the theory that midwifery students and OB resident's knowledge and practice of shared decision making occurs over time through informal observation and experience.

Participants described a need for mentors to obtain more training in teaching shared decision making. Participants described how beneficial it was for mentors to discuss cases with them, and to debrief and provide clarity on clinical management. One such method of teaching that may be applicable to midwifery students and OB residents could be storytelling.

Storytelling has been used in clinical teaching as a way to facilitate qualitative inquiry (Hunter & Hunter, 2006). Nurse researchers have been using storytelling as a way to facilitate knowing and telling for many years (Sandelowski, 1991). Storytelling helps bring to light the richness of experiences and allowing listeners to reflect and consolidate the story into their own values, beliefs and experiences (Greenhalgh, 2001). Hunter and Hunter (2006) describe a study they conducted which evaluated the method of storytelling in clinical learning over four years. This method of teaching was well received by students and faculty alike. Students described how storytelling improved their cognitive learning and consolidating of decision making skills with patients. They reported improved decision making abilities and that discussion of benefits and risks of care management improved their problem-solving abilities. Students also reported that they felt storytelling allowed them to vent feelings in a supportive and safe environment.

Students in our study, described storytelling as facilitating their transition to midwifery practice in a more optimal way. They reported that stories had been an important part of role acquisition, and many learned how to listen during their sessions.

It may prove beneficial for midwifery students and OB residents to engage in storytelling with their fellow classmates, as well as with their mentors, as a way to improve reflective practice.

There is minimal research in Canada specifically examining the role of the midwifery preceptor for teaching and learning, but literature from other professions such as nursing, aligns with our findings. Our study found that participants felt that their mentors had an influence over the quality of their training and their confidence in providing shared decision making. Preceptors have been shown in other studies to promote confidence and self-esteem (Edwards et al., 2004) in their students, to aid in role modelling (Donaldson & Carter, 2005) and to expose students to ideal learning opportunities (Khomeiran et al., 2006). Participants described how their relationship with their mentor and the quality of their learning environment affected their learning, which is evident in the literature (Licqurish & Seibold, 2008).

The Learner-Mentor Relationship

Participants described the mentorship relationship as being highly relevant. Students in our study, discussed the importance of a good relationship for their learning. Shahsavari et al. (2013) agree that a positive clinical teacher-student relationship parallels a positive learning environment. This finding was unsurprising as in nursing research, of all factors that can influence a student's clinical learning experience, the importance of the relationship between

clinical teacher and student is most crucial (Rebeiro et al., 2015). Khajehei et al. (2011) also confirmed the findings in our study that students need to carry out their expected duties mainly to please their mentors and not themselves. Residents did not necessarily describe a lack of formal relationship with their staff consultants but closer relationships with their co-residents. This is unfortunate as Boor et al. (2008, p. 47) describes the notion that "interaction with and personal interest in residents can lead to more content residents on the one hand, and to more proficient clinical teachers on the other".

Midwifery students described having a unique mentor situation as they spent longer periods of time with their preceptors. Students described having longer placements as feeling less desirable. Mannix et al. (2006) reports just the opposite, that longer placements can be more favourable as students waste less valuable time trying to fit in during each rotation. Nolan (1998) describes how students spend much of their rotations needing to re-familiarise themselves to faculty and the clinical environment every time they switch placements. This is consistent with midwifery students and OB resident's descriptions of having to become attuned to their mentor's preferences prior to engaging in shared decision making, suggesting that longer placements may be beneficial.

Chan et al. (2017, p. 177) reports that "the teacher-student relationship was always perceived as involving trust, understanding, caring, interaction and clear guidance, which were described as factors that facilitated this relationship." This may explain why the participants reported that their relationships with clients and shared decision making were improved when their relationships with their preceptors were better.

Quality of Mentorship

Much of the participants learning was impacted by the quality of the mentoring that they experienced. Specifically, this depended on who was mentoring and how the mentoring was carried out.

Senior residents in our study were a valuable resource to each other as well as to junior residents. Our findings demonstrated that that one way senior residents consolidated knowledge pertaining to shared decision making was through the process of teaching, while junior residents learned about shared decision making through watching their peer residents. Residents reported that they enjoy learning from their co-residents. Studies exist in the literature explaining why medical residents make excellent teachers (Thomas et al., 2002) even though many of the physicians who teach have no formal training in teaching (Gibson & Campbell, 2000). Some residents acquire their teaching tendencies in practice, through experience and the reflexive process (Mcleod & Harden, 1985). It remains unclear as to whether teaching positively influences knowledge acquisition for the teacher resident (Busari & Scherpbier, 2004), however, residents have reported that teaching medical students influenced their critical thinking and helped them to be better clinicians (Busari & Scherpbier, 2004).

Residents teaching each other and their junior students can yield benefits for the learner. Some benefits for the learner include satisfaction with near-peer learning, ability to understand clinical reasoning, improvement in clinical and patient care skills, increased willingness to admit deficiencies, increased receptivity to feedback, cognitive congruence and social congruence. Tolsgaard et al. (2007) reports that students often view residents as more approachable which allows them to be more vulnerable, admit mistakes and be more open to constructive feedback.

It is unclear from participant responses why staff do not always want to teach or be available for questioning, but a large part of this mentality may be due in part to the model of self-directed learning that residency and, possibly midwifery training subscribes to (Murad & Varkey, 2008). The expectation for self-directed learning is another pedagogical underpinning that shaped the learning of shared decision making for our participants. Participants described this "fumbling through" process that occurs while learning decision making. The expectation for self-directed learning may explain why some mentors provide less time and impart less knowledge. Although OB residents and midwifery students describe working within a self-directed learning model, the residents do not report that staff obstetricians facilitate learning in the way self-directed learning would require (Murad & Varkey, 2008). Despite being trained through exposure to clinical experience, medical trainees rarely obtain instruction in how to navigate their own learning (Murad & Varkey, 2008). This was true of students and resident's exposure to learning shared decision making. OB residents and midwifery students identified the role of their mentors as a fundamental contributor to the learning of shared decision making.

The Effects of Acuity and the Therapeutic Relationship

Our theory describes how students and residents come to understand how performance of shared decision making is affected by external factors. Two of these factors include the degree of acuity in the clinical environment, as well the quality of the therapeutic relationship between healthcare provider and the client and patient. Freeman & Griew (2007) published a Shared Decision making concept model- a 'shared endeavour.' This model encourages a collaborative style in decision making. The midwife and the client both contribute to the relationship by discussing and agreeing on individual and mutual responsibilities within the decision making

process. One interesting aspect that their model offers which is unique from other shared decision making models is the differentiation between shared decision making and how it relates to low, medium and high-risk decision making. In this model, the authors discuss the importance of outlining risk prior to birth happening. The authors discuss how the differentiation of risk in decision making "can assist in the challenge of achieving partnership through exploration of the conceptual framework" (Freeman & Griew, 2007, p.14). Discussion of both the midwife and the clients' responsibilities allows for the process of decision making to be clear. Freeman and Griew's (2007) model compliments feedback from the residents and midwifery students in our study, as they wish to have a discussion about risk before emergencies occur as well.

The authors define clients who are low-risk, medium and high-risk as it pertains to their pregnancy. Low-risk decisions are unlikely to affect the physical outcome for the client or baby. Medium risk decisions are defined as decisions that may affect the outcome to both the client and her baby because of side effects that could occur. High-risk decisions have been determined as decisions that may potentially impact the outcome for the client or her baby. When discussion about risk, roles and responsibilities are done before hand, it allows for medium and high risk situations to be handled quickly. This also reduces the risk of client dissatisfaction in decision making. This model allows for a clearer decision making process as roles and responsibilities of clients and midwives are outlined in advance with the understanding that midwives will play a greater role in decision making as the risk level of the decision making becomes greater. Establishing risk is an essential aspect of providing shared decision making in a perinatal context (Freeman & Griew, 2007).

The learning of shared decision making is impacted by the role of the mentor, the quality of the mentorship relationship and the clinical context. Underlying all of these factors is the importance of the hierarchy of power and the level of psychological safety.

Impacts of the Hierarchy of Power

Our theory highlights the importance of the hierarchy of power and the role of psychological safety in the experience students and residents have in learning shared decision making. Participants find that their learning is optimized when mentors decrease the effects of the hierarchy of power and increase psychological safety. The hierarchy of power was always a part of the hidden curriculum (Bould et al., 2015). Hidden curriculum refers to the "processes, pressures and constraints which fall outside... the formal curriculum, and which are often unarticulated or unexplored" (Cribb & Bignold, 1999, p.195). Hierarchy can have negative impacts that lead to humiliation (Gardeshi et al., 2018)

Our study findings suggest that the quality of shared decision making training can be impacted by the power differential that exists between mentors, students and residents within the hierarchy of power. In our study, the preceptor is described as being at the top of the hierarchy and the student is located towards the bottom. This hierarchy was reported to be both beneficial and problematic.

Begley (2002) corroborates our findings that a hierarchical system and a lack of caring shown to learners can be difficult and can lead to decreased confidence, and fear of making a mistake. Participants in our study were aware that preceptors and mentors had the power to influence their learning both positively and negatively. Some positive effects of this influence

included making the student feel like a part of the healthcare team and providing a net of psychological safety, both of which may be helpful in promoting autonomy (Miles, 2008). Midwifery students described being frustrated with their lack of power which is not fully consistent with the nursing literature. Chan et al. (2017), in their study discuss how the majority of nursing students felt that clinical teachers should have more power than students. Many nursing students felt appreciative of their teacher's greater power, as it served as safety for students, and protected students from causing any harm to patients (Holt et al., 2010).

According to Bould et al. (2015) in their study examining how hierarchy influences residents' reluctance to challenge authority, the authors found that residents reported a culture with a "steep" hierarchy within the perio-operative team. The authors reported that "hierarchy appears to be a fundamental part of the informal curriculum at both the undergraduate and the postgraduate levels" (Bould et al., 2015, p. 579). In our study, hierarchy was cited as integral to many teaching moments. Midwifery students and residents reported negative effects of the hierarchy on the trainees, on learning and patient safety. This is valuable knowledge as it highlights the difficulties some learners may face when learning how to engage in decision making with patients. Participants also did not always explicitly state that the hierarchy of power was problematic, however, they did describe the importance of being at the bottom of the hierarchy and how difficult that can be for learning.

The Effects of Psychological Safety

Participants in the study described how important it was for the learning culture to include psychological safety. In addition to the vital role of the preceptor or mentor in learning

shared decision making, our study found that the learning environment needs to be a safe space for the learner to take risks. Students in our study described the vulnerability they felt in the learning process with shared decision making.

Psychological safety refers to the learners understanding that there are no negative impacts to the self or career for taking interpersonal risks or for the admission of error (Edmondson, 1999; Torralba et al., 2016). Our findings affirmed that psychological safety is also an often overlooked aspect in learning environments (Colbert-Getz et al., 2014). Many residents and midwifery students referred to the need for psychological safety in order to learn shared decision making. Midwifery students highlighted how detrimental a lack of psychological safety was to their learning. Residents described leaning on their co-residents or senior residents as a result of not always being able to use their staff obstetricians for guidance due to fear of appearing vulnerable. This may in part be explained by the fact that residents often teach in a different complementary way to physicians. As near-peer teachers, they often teach some of these skills, such as patient management and bedside skills (Seely et al., 1999).

There is minimal literature on the effects of psychological safety in midwifery training. Midwifery students in our study, described how there may be a relationship between psychological safety and relationship quality between mentor and learner. Participants reported that psychological safety was improved when relationships with their preceptors improved. This is consistent with the finding that a psychologically safe work environment will foster team and individual learning (Newman et al., 2017).

Although there is a distinct hierarchy of power that exists between preceptor and student, the lengthy time spent together throughout the learning process may situate the preceptor and

learner in a unique position related to psychological safety. Research shows that when students feel able to be themselves without fear of consequence, student learning behaviours are multiplied (Carmeli et al., 2009).

OB residents reported that psychological safety was not an obvious focus or was ensured during their training and on their teams. OB residents worked as members of a team throughout their training and there is valuable research conducted on psychological safety in teams. Edmondson (1999, p. 351) presents a model of team learning that "supports an integrative perspective in which both team structures, such as context support and team leader coaching, and shared beliefs shape team outcomes" (Edmondson, 1999, p. 351). According to Hackman (1987), organizational work teams exist within the context of a larger organization, they have a defined membership and shared responsibility for a team product or service. This definition is easily applied to the residency program and recruitment sites for this study. As part of learning behaviour, students may seek feedback, share information, discuss errors, ask for help and try to manage patients through trial and error. It is through these activities that these residency teams can improve their learning and be made aware of unexpected consequences of their behaviours (Edmondson, 1999). Edmondson (1999) highlights that those who initiate these learning behaviours may feel that they are putting themselves in a vulnerable position by asking for help, or admitting their mistakes, as well as risking appearing incompetent. The authors furthermore discuss how this may make students feel more at risk if their staff obstetricians or senior residents have social expectations or power over their subsequent learning opportunities (Edmondson, 1999). This may explain why residents are often reluctant to disclose mistakes (Donald, 1976). The OB residents and midwifery students both explained how they must

perform well in their role as learner rather than risk making a mistake and appearing incompetent. Similar to how participants described altering their behaviour if they didn't feel their mentor would provide psychological safety. Argyris and Vecchio (1983) described how people tend to behave in ways that limit learning when they face the potential for threat or embarrassment.

The OB residents and midwifery students often described feeling the most vulnerable in their junior placements and much more knowledgeable in their senior placements. Junior participants reported that they experienced less psychological safety compared to their senior counterparts. Torralba et al. (2016) however reported that there was no association between psychological safety and academic level after adjusting for confounding factors. Part of the reason residents may experience a lack of psychological safety may be due to the fact that attending physicians describe "strong" residents as being ones that require less supervision and can manage more intense workloads (Kennedy et al., 2009). As a result, residents may fear asking for help because they don't want to be seen as 'weak' or be granted limited autonomy. As was mentioned by the OB residents in our study, supervisor approachability has previously been found to be a determining factor in whether OB residents sought help and supervision (Kennedy et al., 2009). OB residents described leaning on co-residents for mentoring in support as a way to not appear vulnerable. All of these factors can impact the residents' ability to engage with patients in decision making.

Our findings demonstrate that psychological safety is an integral part of training for residents and midwifery students. Supervisors and mentors play an influential role. It is essential that supervisors provide mentoring and feedback so learners can engage with patients and clients

in shared decision making. There are different types of mentoring that are proven beneficial such as the model of cognitive apprenticeship (Collins et al., (1989), Woolley & Jarvis (2007)). Techniques for mentorship in this model include modelling, coaching, scaffolding, fading, articulation, reflection and exploration. Residents and midwives did not identify specific instances when preceptors or mentors engaged in these types of mentoring techniques, except to mention that mentor's modelled shared decision making. Weston (2012) mentions the importance of midwifery preceptors imparting knowledge through story telling. In our study, midwifery students agree that they benefit from their preceptors providing anecdotes and reflection on their own clinical practice. This approach could be beneficial for teaching shared decision making and could be built into formalized training for preceptors regarding strategies for mentorship. The need for a more formal shared decision making curriculum was echoed by our participants to help facilitate better training for students and residents. Training for preceptors would be aimed at promoting better relationships with students, minimizing negative impacts of the hierarchy of power and creating ways to be more available for questioning and mentoring.

Limitations

Limitations to this study include the inability to obtain obstetrical resident participants from both hospital sites (London Health Sciences Centre and McMaster University Medical Centre). There were no responses of expressed interest or willingness to participate from McMaster University Medical Centre. The intention was to interview participants from obstetrics from both sites. The results of this study are therefore limited to the decision making conducted

at London Health Sciences Centre. However, since the participants were interviewed until saturation, which is the point at which all questions have been explored, and no new concepts or themes emerge (Boulder & Research, 2010), we feel confident that the experiences described here represent the experiences of residents working in this health care setting.

A second limitation was the fact that senior midwifery students were interviewed in the first three months of their final year of training. Midwifery students obtain considerable amounts of experience in clinical practice during their final year of training. It may have been more advantageous to interview the students in the final three months of their training so that the participants had more experience with shared decision making in the clinical practice, however, this timing was not congruent with the timeline for completion of the researcher's master's program. Despite this limitation, it was apparent throughout the interviews that participants still had considerable experience to draw from when discussing shared decision making.

A final limitation is that the primary researcher conducting the interviews and analysis is a midwifery preceptor and many of the questions asked as part of the interview guide were centered around students' perceptions of shared decision making as it is taught by preceptors and experienced by students. The fact that the researcher is a preceptor may also have affected the students desire to be forthcoming about their perceptions of preceptors. This would represent a form of social desirability bias, defined as:

> *The tendency to present oneself and one's social context in a way that is perceived to be socially acceptable, but not wholly reflective of one's reality. In research, the bias denotes a mismatch between participants' genuine construction of reality and the presentation of that reality to researchers*
> *(Bergen & Labonté, 2020, p.783).*

Social desirability bias can be problematic because it can cause participants to over emphasize the positive and reduce heterogeneity, resulting in confusion around the general beliefs about the topic at hand (Bergen & Labonté, 2020). In future research, it might be beneficial to ensure the researcher is not a midwifery preceptor.

Summary

It is evident that decision making is complex in healthcare between midwifery students, obstetrical residents, and the people they provide care to. The shared decision making model as described by our participants, is akin to the Shared Rational Deliberative Patient Choice approach which includes an emphasis on patient autonomy (Charles et al., 1997). Participants also emphasized a shared decision making model that was intertwined with other decision making models such as informed choice and informed consent. In our study, OB residents and midwifery students identified ways that they absorb, mirror and perform shared decision making as part of the learning process. Participants reported learning a more relational approach to decision making, and acquired these skills primarily through observation and experience, and with the help or hinderance of mentors. The learning of shared decision making was affected by the amount of support given by their mentors through psychological safety and by the degree of minimizing the effects of the hierarchy of power in clinical practice between mentors and learners.

Conclusion

Overview of Key Findings

With the importance and prevalence of shared decision making as being at the forefront of clinical practice, it is essential that there is an understanding of how best to teach the next generation of health care providers in maternal child health.

Learners have highlighted the fact that their learning of shared decision making is not concrete but more of an informal "fumbling through" process of trial and error, consisting of observation and experience. OB residents and midwifery students described that their understanding of shared decision making was consistent with the original definition, but they subscribe to a specific type of shared decision making: The Shared Rational Deliberative Patient Choice approach as cited by Charles et al. (1997). Residents and midwifery students report that they are performing shared decision making, and in the case of midwifery students, informed choice as well.

Participants described how their skill set of shared decision making was formed as they progressed through an iterative process of navigating eight factors facilitating learning and understanding. This process is influenced heavily by the quality of their mentors and their mentor-learner relationship,

The quality of student and resident learning hinges furthermore on the degree of psychological safety experienced by the learner and their location within the hierarchy of power. Most of the learners interviewed reported feeling less psychological safety, and that their position within the hierarchy was generally low, as has been seen in previous studies (Vanstone & Grierson, 2019). Failing to provide mentors with appropriate training, inadequately addressing

the issue of psychological safety, and the impacts of the hierarchy of power will prevent learners from maximizing their learning potential.

Implications

This research has helped to describe and clarify the informal process by which OB residents and midwifery students learn and perform shared decision making in this study setting. This study may be used to support further research and curriculum development for shared decision making. It is evident that much of the learning culture in the health sciences is ridden with poor support for learners (Weurlander et al., 2019). The results may be used to guide discussions at the faculty level on how best to support students and residents when engaging with clients and patients in shared decision making. This study has also illustrated the importance of studying psychological safety, the hierarchy of power and preceptor-student relationships on the learning of residents and midwifery students in shared decision making. It would be worth studying the effects of participants suggestions for teaching and learning in the future. This study will provide mentors some insight into some of the factors affecting adequate student learning and some suggestions for clinical teaching. The study findings may be used to guide preceptors and mentors on both understanding how their behaviours are helpful or harmful to student learning.

Future Research

More research is needed to explore how preceptors teach shared decision making skills and how to teach this skill set in obstetrical and midwifery practice. For example, it would be useful to see which clinical scenarios necessitate either shared decision making or informed

choice. It would also be helpful to understand which methods of teaching shared decision making are most effective in the knowledge and skill acquisition to support shared decision making. Finally, further understanding is needed related to how preceptors can best support a psychologically safe environment for learning in midwifery and obstetrics.

The dearth of evidence related to midwifery teaching and learning in Canada was highlighted in our research. Topics for future research include exploring whether midwifery students can benefit from teaching and mentoring other midwifery students in clinical practice, similarly to how residents guide co-residents, and whether Ontario midwifery placement quality and length can be improved to better support preceptors and students throughout their placements with regards learning shared decision making.

The results of this study help illuminate the ways in which OB residents and senior midwifery students understand, learn and apply shared decision making to their clinical practice. The results demonstrate a strong need for a more formalized, structured method of teaching learners shared decision making as preserving the pregnant client's sense of control over their circumstance is paramount for optimizing the childbirth experience.

There were several similarities between both groups of learners, and it was evident that many participants approach shared decision making with clients similarly and promote it as an ideal method for decision making. Although the language OB residents and midwifery students used to describe their decision making with clients may be different, the overall approach was much the same. It is evident that learners were not able to consolidate a shared decision making skill set well, without the support of their peers and good quality mentors. Promoting more resources to facilitate learning of shared decision making to OB residents and midwifery students

could allow for consolidation of the appropriate skillsets required to adequately make decisions with patients and clients

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Appendix A

Request of Department Chiefs for Distribution of Study Recruitment

Hello Dr._____

I am a registered midwife in London and am conducting my master's thesis exploring how OB residents and Midwifery students learn about shared decision making with patients. Ethics requires me to obtain department approval to recruit OB residents and midwifery students. I was hoping you could grant me approval to recruit up to either 5 PGY 4 and 5 residents or midwifery students for my study as well as disseminate a recruitment email to the eligible participants.

I have attached the letter of information and consent outlining this qualitative grounded theory study looking to interview 5 OB residents (from both McMaster and London Health Sciences Centre) as well as 5 senior midwifery students on the topic of shared decision making.

This study has been reviewed by the Hamilton Integrated Research Ethics Board (HiREB) under project # 7165.

Thank you very much for your consideration,

Meagan Furnivall RM
Talbot Creek Midwives

Masters Candidate, Health Sciences Education, McMaster University

McMaster University
Inspiring Innovation and Discovery

MACMIDWIFERY

Appendix B

Request for Participation Email

Email Recruitment Script

Meagan Furnivall, RM, BHSc, BA, Masters Candidate

Shared Decision Making in Obstetrics and Midwifery Practice: The Perspectives and Experiences of Senior Midwifery Students and Obstetrical Residents

Email Subject line: McMaster Study- Obstetrical residents and midwifery students experience with shared decision making with patients.

As part of the requirements of the Master's in Health Sciences Education program, I am conducting a study to examine the perspectives and experiences of senior midwifery students and obstetrical residents in the learning, understanding and application of the shared decision making process with patients. I am planning to conduct interviews with senior midwifery students (currently in their final year of study), and senior obstetrical residents (PGY 4 and 5). You are invited to participate in this study on shared decision making.

More specifically, the purpose of this study is to examine how students are trained in shared decision making to inform existing curricula. We are hoping to understand the barriers and facilitators to shared decision making and how students engage in decision making with patients.

The interviews are either in-person or by phone and will be approximately 30-60 minutes.

I have attached a copy of the letter of information regarding this study that shall provide you with further details. This study has been approved by the Hamilton Integrated Research Ethics Board (HIREB). If you have any questions or concerns about rights as a participant, please contact:

Hamilton Integrated Research Ethics Board

293 Wellington St. N, Suite 102

Hamilton

L8L8E7

Thank you in advance for your consideration

Meagan Furnivall

RM, BHSc, Masters Candidate- Health Sciences Education Program, McMaster University

meaganfurnivall@gmail.com

519-902-6964

Appendix C

Facebook Recruitment Advertisement

MCMASTER UNIVERSITY RESEARCH STUDY

PARTICIPANTS NEEDED

Obstetrical Residents (PGY 4 and 5) and Senior Midwifery Students are being asked to participate in our study on shared decision making.

This study aims to answer the question:

What are **the perspectives and experiences of senior midwifery students and obstetrical residents in the learning, understanding and application of the shared decision making process with patients?**

Purpose of this study: To assess how senior midwifery students and senior obstetrical residents engage with shared decision making with their patients. This study is gathering information to better inform the obstetrical and midwifery curricula.

Students and residents will be asked to participate in approximately 30-60-minute interviews either by phone or in-person. Residents must be either a PGY 4 or PGY 5 level, and midwifery students must be enrolled in their final year of training. Both residents and midwifery students are eligible if they are currently practicing or in placement in the London and Hamilton areas.

If you agree to participate:

- You will be asked to complete an online demographic survey.
- A researcher will contact you to discuss a best method for interviewing as well as a suitable location.
- You will be asked a series of questions about your clinical training and experiences as they relate to shared decision making.

If you are interested in participating:

- Please comment on this page, or send a message through this Facebook page or
- Follow the link to complete the demographic survey

Email the researcher at meaganfurnivallgmail.com

Appendix D

Recruitment Poster

RESEARCH STUDY
SHARED DECISION MAKING IN OBSTETRICS AND MIDWIFERY PRACTICE: THE PERSPECTIVES AND EXPERIENCES OF SENIOR MIDWIFERY STUDENTS AND OBSTETRICAL RESIDENTS

WE ARE LOOKING TO EXPLORE THE WAYS IN WHICH YOU LEARN AND ARE TRAINED IN PROVIDING SHARED DECISION MAKING WITH YOUR PREGNANT PATIENTS.

There will be a 30-60 minute interview about the student and resident experience. OB residents must be a PGY 4 or 5, and midwifery students must be in their final year of the midwifery program to be eligible to participate.

This study has been reviewed by the Hamilton Integrated Research Ethics Board (HiREB) under project # 7165.

If you are willing to participate or would like more information, please contact: Meagan Furnivall at meaganfurnivall@gmail.com

Appendix E

Letter of Information and Consent Form

LETTER OF INFORMATION/CONSENT

SHARED DECISION MAKING IN OBSTETRICS AND MIDWIFERY PRACTICE: THE PERSPECTIVES AND EXPERIENCES OF SENIOR MIDWIFERY STUDENTS AND OBSTETRICAL RESIDENTS

Co-Principal Investigator:
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McMaster Midwifery Research Center
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Principal Investigator:
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McMaster Midwifery Research Center
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Purpose of the Study:

You are invited to take part in this research study to examine how midwifery students and obstetrical residents learn and engage in shared decision making with patients. I am conducting a study as part of my master's thesis. The objective of this study is to understand what, if any, training is available to students in learning shared decision making with patients, as well as how

the obstetrical and midwifery clinical educators influence student engagement with shared decision making. Other objectives include exploring the barriers and facilitators to engaging in shared decision making, as well as resident and midwifery student perspectives on the impacts of decision making in the maternal childbirth experience. Primary research questions include: "What are the perspectives and experiences of senior midwifery students and obstetrical residents in the learning, understanding, and application of the shared decision making process with patients?" and "What are the barriers and facilitators to engaging in shared decision making with patients."

Procedures Involved in the Research:

Your involvement would include a single interview, approximately 30-60 minutes long, where the interviewer asks you a series of questions. These questions will be open-ended, so your response can be as long or as short as you desire.

Potential Harms, Risks or Discomforts:

You are not required to answer questions if you feel uncomfortable in doing so. We can stop the interview at any time you feel necessary. There are no known associated harms with participating in this study.

Potential Benefits

The research will not benefit you directly. The intent of this research is to address some gaps in our knowledge about how decision making occurs between obstetrical residents, midwifery students and patients during the prenatal, birth and postpartum experience. We are hoping to identify the areas that prevent and facilitate residents'/students' involvement in shared

decision making. This information will hopefully help us to make improvements to training in shared decision making.

Payment or Reimbursement

There is no reimbursement for this study.

Confidentiality

You are participating in this study confidentially. I will not use your name or any information that would allow you to be identified. The research team, as well as I, will be the only ones to know whether you were in the study unless you choose to disclose this. It is important to note that due to the small numbers of obstetrical residents and midwifery students in each academic year, it is possible that direct quotations provided from you may become recognizable. You may wish for the researcher to exclude direct quotations if you are concerned that your response is unrecognizable.

Participation and Withdrawal

Your participation in this study is voluntary. It is your choice to be part of the study or not. You are able to remove yourself from the study, even after the interview has started, or after signing the consent form or up until approximately **September 1st, 2019**, when we expect to begin dissemination of study results.

If you decide to withdraw, there will be no consequences to you. In cases of withdrawal, any data you have provided will be destroyed unless you indicate otherwise. You do not have to answer all of the questions to be a part of the study.

Information about the Study Results:

We expect to have this study completed by approximately **Sept 1st, 2019**. If you would like a brief summary of the results, please let me know how you would like it to be sent to you.

Questions about the Study: If you have questions or need more information about the study itself, please contact me at:

Meagan Furnivall:

meaganfurnivall@gmail.com,

This study has been reviewed by the Hamilton Integrated Research Ethics Board (HiREB). The HiREB is responsible for ensuring that participants are informed of the risks associated with the research, and that participants are free to decide if participation is right for them. If you have any questions about your rights as a research participant, please call the Office of the Chair, HiREB, at 905.521.2100 x 42013

CONSENT

- I have read the information presented in the information letter about a study being conducted by Meagan Furnivall, Masters student and Dr. Liz Darling of McMaster University.
- I have had the opportunity to ask questions about my involvement in this study and to receive additional details as requested.
- I understand that if I agree to participate in this study, I may withdraw from the study at any time or up until approximately **September 1st, 2019.**
- The interviewer will take notes if I do not agree to be audio recorded
- I have been given a signed copy of this form.
- I agree to participate in the study.

Name of Participant (Printed): _____

Signature: _____**Date:** _____

Name of Researcher (Printed): _____

Signature: _____ **Date:** _____

1. **I agree that the interview can be audio recorded.**

[ ] Yes

[ ] No

2. [ ] Yes, I would like to receive a summary of the study's results.

Please send them to me at:

Email address: _____

OR

Mailing address: _____

[ ] No, I do not want to receive a summary of the study's results.

Appendix F

Participant Demographic Survey- Survey Monkey

Demographics

1. Full Name:
2. Telephone Number:
3. Email Address:
4. How old are you?
5. What is your sex?
6. What is your gender?
7. What is your ethnicity?
8. What school and program are you currently enrolled in?
9. Can you please list all previous degrees if you have any?
10. Please list any previous occupations or professions prior to midwifery or obstetrics
11. What year of study are you completing?
12. Have you or your partner ever given birth?
13. Have you or your partner had any illness or health conditions that have caused you to have prolonged contact with health care teams or be hospitalized?

Appendix G

Semi-Structured Interview Guide

Semi-Structured Interview Guide for Senior Obstetrical Residents:

1. **Can you tell me about how you make decisions with patients? About what the process looks like?**

   Probe: What does decision making look like in an acute, urgent clinical scenario?

   Probe: What does decision making look like in non-urgent scenario?

2. **What does decision making look in an ideal scenario**?
3. **How do you make decisions with patients when they want to make a decision that you feel is not within their best interests?**
4. **Are you familiar with Shared Decision Making?**
5. **Can you tell me what shared decision making (SDM) means to you?**

   Probe: What are the benefits and disadvantages of SDM?

   Probe: How do you, or don't you use SDM with patients?

   Probe: How frequently do you use SDM with patients?

6. **Do you think decisions should be shared between patients and physicians?**

   Probe: Why or why not?

   Probe: How capable do you think patients are in making decisions about their care?

Probe: How capable and confident do you think you are to engage in shared decision making with patient's?

7. **How can decision making between women and their obstetricians impact women's pregnancy and childbirth experience?**
8. **Can you tell me about your experience as a resident in clinical practice engaging in SDM with patients?**

   Probe: How might your SDM conversations be different when you are a supervising physician and no longer in training?

   Probe: Can you think of any reasons why you don't engage in shared decision making in your training as a resident?
9. **Can you describe how you've been trained in shared decision making?**

   Probe: What is your supervision like from your staff while training?
10. **How does the interaction with your supervisor influence your decision making with patients?**
11. **Can you tell me more about any mentors that have been important to you with regards SDM and what you've learned from them?**
12. **Can you tell me more about any mentors that have been important to you with regards SDM and what you've learned from them?**
13. **How are residents trained to engage in decision making with patients during acute higher risk situations (i.e., unplanned emergency cesarean section) and**

non-urgent decisions (i.e., Planning an elective repeat cesarean section or a vaginal birth after cesarean section)?

14. **In an optimal scenario, how would you train future clinicians in SDM?**

    Probe: How might residents learn SDM best?

15. **Do you have any other thoughts or ideas to share**?

Semi-Structured Interview Guide for Senior Midwifery Students:

1. **Can you tell me about how you make decisions with clients? About what the process looks like?**

   Probe: What does decision making look like in an acute, urgent clinical scenario?

   Probe: What does decision making look like in a non-urgent scenario?

2. **What does decision making look like in an ideal scenario?**
3. **How do you make decisions with clients when they want to make a decision that you feel is not within their best interest?**
4. **Are you familiar with shared decision making?**
5. **Can you tell me what shared decision making (SDM) means to you?**

   Probe: What are the benefits and disadvantages of SDM?

   Probe: How do you, or don't you use SDM with clients?

   Probe: How frequently do you us SDM with clients?

6. **Do you think decisions should be shared between clients and midwives?**

   Probe: Why or why not?

   Probe: How capable do you think clients are in making decisions about their care?

   Probe: How capable and confident do you think you are to engage in shared decision making with clients?

7. **How can decision making between women and their midwives impact a women's pregnancy and childbirth experience?**

8. **Can you tell me about your experience as a midwifery student in clinical practice with SDM?**

    Probe: What role does your preceptor have in helping you with SDM with patients?

    Probe: How might your SDM conversations be different when you are no longer in training and are a registered midwife in clinical practice?

    Probe: Can you think of any reasons why you don't engage in shared decision making?

9. **Can you describe how you've been trained in shared decision making?**

    Probe: What is your supervision like with your preceptor with SDM while training?

10. **How does the interaction and environment with your supervisor influence? your decision making with clients?**

11. **Can you tell me more about any mentors that have been important to you with regards SDM and what you've learned from them?**

12. **How are midwifery students trained to engage in decision making with patients during acute higher risk situations (i.e., unplanned emergency**

cesarean section) versus non-urgent decisions (i.e. planning an elective repeat cesarean section or a vaginal birth after cesarean section)?

13. **In an optimal scenario, how would you train future midwives in SDM?**

14. **Do you have any other thoughts or ideas to share?**

Appendix H

Study Codes and Themes

Theme	Focused Codes	Initial Codes
Absorbing	-Student understanding of SDM -Student definition and descriptions of SDM -SDM and other decision making models -Perceptions of SDM -Midwife role in SDM -Ideal decision making as a process -Decision making definition and description -Challenges of SDM -Benefits of SDM	-Common vs different understanding -Informed Choice -Informed Consent -SDM as Ideal -Patient Autonomy -Problems with SDM -History of decision making models -Providing info -Knowledge Gaps -Risks and benefits -Community standards -Long and short term implications -Alternating options -Answering questions -Client making own decisions -Supporting client -In one session or over multiple sessions -Slower paced -Providing time -SDM is more nuanced -Discuss all relevant information

Theme	Focused Codes	Initial Codes
Absorbing		-Answer questions -Draw conclusion with the client -Obtain result that the client and family are happy with -Assess client knowledge -In OB care, decisions are already made -Patients pay more attention when a decision is being made
Mirroring	SDM training timeline -SDM training -Preceptor/ mentor expectations of students -Preceptor examples of positive or negative decision making -Future Curricula -Effects of preceptor on student -Cognition	-Clients wanting more info on emergencies -Finding comfort in knowledge in advance -Training is preceptor/mentor dependent -No formal or structured training curriculum for SDM -How they learn SDM is impacted by what they observe Decision making is learned as existing on a spectrum ranging from paternalistic to shared decision making to informed choice. -Classroom is different from placement -Learners get more supervision early on than in senior years -Fourth year midwifery students may proceed through decision making with clients by themselves

Theme	Focused Codes	Initial Codes
Mirroring		-OB residents and midwifery students often start making decisions with clients, followed by checking with preceptor before finalizing plan of care -Learners need to identify what preceptor/ mentor values in decision making -Learn to have an unbiased conversation -Training diversifies in clinical placement -Diversifies depending on preceptor -Training diversifies depending on community Learn by seeing shortcomings in mentors -Decision making is heavily influenced by preceptor -Informed choice discussions change based on preceptor -Preceptors can negatively or positively influence student relationship with client(s) -When preceptors don't let students walk through the management and decision making with client, a negative experience -Helpful preceptors give students space to make mistakes and learn -Learn how to actively listen -Learn how to engage in 'harder' conversations -Learn how to phrase important discussions

Theme	Focused Codes	Initial Codes
Mirroring		-Learning how to deal with stigma and prejudice -Learning how to frame so as to not marginalize -Passive learning through observation -Learning through exposure to different styles -Consolidating SDM skillsets by end of training- "gestalt" -Learners appreciate mentors modelling SDM -Learning through experience -Learning to be systematic in your decision making -Wanting to learn how to develop trust with clients and quickly -Learning the psychology of the pregnant client -Learning what to be thinking about in an emergency -Didactic lectures -Standardized patients -Mock Scenarios -Academic half-days -Buddy system -Learning from hearing from healthcare provider and client/patient perspectives

Theme	Focused Codes	Initial Codes
Performing SDM	-SDM and acuity -When patient disagrees -Variables impacting SDM -Decision making as a process -SDM as a new clinician -Patient as decision maker	-Process emergencies in advance -Presenting info impacts patient's decision making -Being conscientious about wording and bias -Less conversation in acute scenarios -Ask about concerns or questions -Provide knowledge -Presenting info small dosages in acute scenario -Clarification -Time sensitive -Maintain calm -Identify patient needs briefly -Make recommendations -List the options -Obtain consent -Provide treatment -Ask permission to have conversation -Give basic definitions -Conversational -Exchange of info -Client feeling comfortable -Clients trust care provider -Client trust in information given -Clients feel safe -Midwife answers questions

Theme	Focused Codes	Initial Codes
Performing SDM		-Midwifery students conduct informed choice with an SDM process -Give risks and benefits -Have many informed choice discussions -Provide info, research and evidence -Get client to sign "against medical advice" -Describe what midwife is comfortable -Accepting client's decision -State recommendations explicitly -State when healthcare provider disagrees -Midwife will support client decision even if disagrees -Back and forth exchange of information]
Supporting	-Hierarchy of power -Psychological safety -Mentor impacts on participant learner	-Preceptor that cuts you off -Preceptor that doesn't allow you to challenge the clinical decision making -Preceptor who engages in power struggle with learner with or without client present -Hard to learn when learners don't feel supported by mentors

Theme	Focused Codes	Initial Codes
Supporting		-OB residents and midwifery students feel supported by colleagues and peers -Students on lower rung of hierarchy of power -Quality of mentor/preceptor- learner relationship is key