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Shared Decision Making and Decisional Conflict in Women with Postpartum Depression

Leslie Binford

leslie.binford@psychmedsolutions.com

Elizabeth Morse

Belmont University

David Phillippi

Belmont University

Emily Pardy

Ready Nest Counseling, LLC, emily@readynestcounseling.org

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Shared Decision Making and Decisional Conflict in Women with Postpartum Depression

Leslie W. Binford

Scholarly Project Advisor: Dr. Elizabeth Morse

Scholarly Project Team Members: Dr. David Phillippi
Emily Pardy

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SHARED DECISION MAKING

Abstract

Despite well documented adverse outcomes related to untreated postpartum depression, many women face difficulty accessing care. A woman's experience of conflict related to appraising treatment options that align with both her needs and her values can contribute to delays or barriers to seeking and accessing effective treatment. Shared decision making is the cornerstone of a collaborative patient-provider relationship and has been shown to decrease patient's experience of decisional conflict. This cross-sectional web-based survey examined the relationship between shared decision making and decisional conflict for postpartum women experiencing depressive symptoms at an urban counseling center in Nashville, TN. Data were collected between October and December 2019. Decisional conflict was measured using the Decisional Conflict Scale. Perception of shared decision making was measured using the Shared Decision-Making Questionnaire (SDMQ-9). A total of 169 women completed the online survey. Of the 121 women who reported symptoms of postpartum depression, less than half were currently engaged in care for PPD, Of the 48 women who were engaged in care, there was a significant negative correlation between shared decision making and decisional conflict, $p < .05$, Pearson's $r = -.287$. Results of this study confirm finding of existing research that many women who are experiencing symptoms of PPD are not engaging in care. However, when women engage in care that reflects the principles of shared decision-making, they experience less decisional conflict. Providers who practice shared decision making in their care of women with postpartum depression may improve treatment engagement as well as myriad health outcomes for women and children.

Keywords: Postpartum Depression, Women, Decisional Conflict, Shared Decision Making

Introduction and Background

Nineteen percent of new mothers experience postpartum depression and in 2017, it was estimated that one in nine women in the United States experienced depression sometime during the post-partum period (Centers for Disease Control, 2017; Keefe, Brownstein, & Rouland Polmanteer, 2016).). Suicide is a leading cause of death in postpartum women, accounting for approximately five percent of maternal deaths in the first year postpartum (Grigoriadis, Wilton, & Kurdayek et al., 2017). Risk of death from suicide increases month to month during the first year postpartum (Grigoriadis et al., 2017). Notwithstanding the significant impact on maternal morbidity and mortality, postpartum depression is associated with a host of poor health outcomes for infants as well; contributing to increased incidences of pre-term birth, post-natal growth complications, impaired attachment, and stunted cognitive and emotional development (Becker, Weinberger, Chandy & Shumuckler, 2016).

The decision to seek guidance and treatment for post-partum depression involves the consideration of value-sensitive treatment options that may vary considerably depending on the unique needs, circumstances and preferences of each individual woman (Brehaut et al., 2003). Despite well documented adverse outcomes related to untreated postpartum depression, many women face difficulty discerning and accessing treatment options that align with their needs and values (Battle, Salisbury, Schofield & Ortiz-Hernandez, 2013). Internal conflict or ambivalence created while sifting through care options, also known as decisional conflict, can have a direct impact on a woman's mental health status during the transition to motherhood.

When assessing treatment options for postpartum depression, women must balance their felt need for treatment, any accompanying risk associated with electing treatment, and the effects of their treatment choice on their child. Similarly, the option to delay treatment may carry

personal health consequences for the woman but be weighed against her desire to prevent fetal exposure to medication in utero or while breastfeeding (Nygaard et al., 2015). This constant appraisal creates or increases decisional conflict which can contribute to delays or barriers to both seeking and accessing timely, effective treatment (Battle et al., 2014; Battle et al., 2008; Bonari et al., 2005; Misri et al., 2013; Nygaard et al., 2015; Stepanuk et al., 2013; Walton et al., 2014).

The patient-provider relationship offers women an opportunity to actively engage in shared decision making, or dialogue around available treatments within a safe therapeutic space where conflict related to decision making can be explored (Nygaard et al., 2015). A collaborative patient-provider relationship supports women by openly discussing both risks and benefits of treatment, along with patient-centered treatment goals, leading to decreased decisional conflict, confidence with selecting and initiating a treatment plan and then feeling more satisfied with their treatment choices (Randall & Briscoe, 2018; Nygaard et al., 2015; Patel & Wisner, 2011; Stepanuk, 2013). When women feel validated for their experience of symptoms and then supported by their provider to make a treatment choice that feels sustainable and congruent with their values, they experience improved health related outcomes (Brehaut et al., 2003; Chan et al., 2016; O'Connor, 1995; Zeelenberg et al., 2000; Nygaard et al., 2015; Randall & Briscoe, 2018; Patel & Wisner, 2011; Stepanuk, 2013).

Problem Statement

Shared decision making is the cornerstone of collaborative patient-provider relationships and has been shown to decrease decisional conflict in a variety of cases involving complex medical decisions. Although the postpartum period is replete with decisional conflict, little

research is available regarding the effects of shared decision making on the healthcare experience of women seeking care for depressive symptoms.

Purpose

This study will evaluate how women accessing care for symptoms of postpartum depression perceive shared decision making with their providers and how this perception influences decisional conflict.

Hypotheses (and/or Research Questions)

The project leader hypothesizes that women seeking care for postpartum depression will report an experience of high decisional conflict. Additionally, the project leader hypothesizes that women's perception of shared decision making will be negatively correlated with their decisional conflict.

Review of Evidence

Decisional Conflict and Complex Medical Decisions

Decisional conflict (DC) is defined as the “uncertainty around treatment options present where individuals are faced with trade-offs (balancing risks and benefits), lack of understanding, differing expectations, conflicting social norms, poor social supports, and lack of resources” (O'Connor et al., 1998). Patients must often balance the risks and benefits of multiple treatment options with limited understanding, differing expectations, conflicting social norms, variable social support, and limited resources. Each decision is also cast in the light of each patients' individual preferences and values alongside the clinical judgement and guidance of the provider (Brehaut et al., 2003; Graham et al., 2018). Previous studies in the management of vestibular schwannomas, hypospadias repair, patients considering diagnostic thyroidectomy, and pediatric

otolaryngology support the notion of increasing decisional conflict in the presence of complex medical decisions (Chorney et al., 2015; Graham et al., 2018; Taylor et al., 2016; Lorenzo et al., 2012).

Health services research has demonstrated the effectiveness of decision support to mitigate conflict and promote informed decisions in women facing complex medical decisions. Decision aids are tools that operationalize concepts of shared decision making and can be used during a clinical encounter to help navigate medical decision making between a patient and her provider identifying the need for medical decision making, providing information about treatment options and risks and benefits of each, as well as providing individual values clarification (Elwyn et al., 2006). A randomized controlled trial of 165 post-menopausal women considering HRT compared the use of decision aids in mitigating conflict and promoting value congruent treatment (O'Connor et al., 1998a). Women engaged in decision support through use of a decision aid reported reduction in their decisional conflict, more realistic treatment expectations, and reported that they felt they had enough information to decide compared to women who received general education around HRT use (O'Connor et al., 1998a). In a study of 632 women from two health care institutions, the use of a decision aid assisting provider and patient engagement promoted knowledge and improved understanding around risks and benefits of tamoxifen prophylaxis for the treatment of breast cancer (Fagerlin et al., 2013). Despite improved knowledge and understanding, shared decision making did not result in increased uptake of tamoxifen prophylaxis (Fagerlin et al., 2013). In a study of 441 women contemplating various prenatal testing, including amniocentesis, decision aids employing concepts of shared decision making were found to improve overall knowledge scores, reduce decisional conflict scores, and more actively involve patients in decision making (Thornton et al., 1995; O'Connor

et al., 1999). Providers and patients engaging in shared decision making found this useful in evaluating complex medical decisions and noted improved outcomes through reduced conflict and value-congruent, informed decisions.

Decisional Conflict in Pregnancy and Postpartum

Without support to move through the process of decision making in the context of complex medical decisions, women may experience poor health related outcomes related to protracted illness, delayed care seeking, avoidance, or the impulsive election of value incongruent treatment. Women's decisions around the treatment of depression in the postpartum period require the consideration of not only a woman's need, but that of the infant and family (Walton et al., 2014).

Women must often balance their own perceived need for treatment and accompanying risks against the potential adverse outcomes to their unborn or newborn child, which increases the experience and severity of decisional conflict (Walton et al., 2014). In a study of 40 women considering antidepressant therapy in pregnancy, researchers utilized the Decisional Conflict Scale to examine their decision-making process (Walton et al., 2014). 21 women reported experiencing moderate to high decisional conflict (Walton et al., 2014). Women who elected to take an antidepressant in pregnancy reported feeling more informed and clearer about their values, and further supported the role of risk perception, support, and knowledge in their decision-making process (Walton et al., 2014). An expectant mother's appraisal of the risk involved in treating her mood disorder against the benefit she is likely to experience is associated with her adherence to a given treatment (Misri et al., 2013). Misri et al., 2013, evaluated acceptance or declination of antidepressant therapy in 50 pregnant women between 18-34 weeks gestation. They found a significant difference in illness trajectory among women who continued

antidepressant therapy throughout pregnancy and one month postpartum, identifying risk perception and concern around fetal exposure as significant barriers to the decision-making process (Misri et al., 2013). When women's perception that the benefits of taking antidepressants do not outweigh the risks, they are more likely to reject treatment with an antidepressant, but if they perceive the benefits as greater than the risks there is improved medication adherence; indicating the significance of risk perception in the decision-making process (Misri et al., 2013). This evidence supports the significant role of risk perception and value in how women negotiate treatment choices during and after pregnancy. The decisional conflict that comes with evaluating the risks and benefits of various treatment options is compounded for women during pregnancy and postpartum as they experience this conflict through the lens of motherhood and the instinct and desire to protect their child (Nygaard et al., 2015; Walton et al., 2014). Stepanuk et al., (2013) examined the decision-making process and overall decision satisfaction for 143 women considering antidepressant use in pregnancy; finding that women tend to perceive the risk to the developing fetus as greater than what is supported by current research adding to the difficulty women encounter when making decisions around the use of antidepressants. found that women tend to perceive the risk to the developing fetus as greater than what is supported by current research adding to the difficulty women encounter when making decisions around the use of antidepressants.

Women value greatly the opinions of integral support persons and are influenced significantly in their decision-making process by the opinions of society and others (Battle et al., 2007; Battle et al., 2013; Bonari et al., 2005; Nygaard et al., 2005; Stepanuk et al. 2013; Walton et al., 2014). Bonari et al., (2013) recruited 100 women taking antidepressants during pregnancy, confirming that risk perception is a significant treatment barrier, mitigated through counseling

and that women valued the opinions of others and family over that of medical personnel.

Nygaard et al., (2005) conducted a qualitative study of 11 women contemplating antidepressant therapy in pregnancy, finding that risk perception contributed to discontinuation and conflict around negotiating treatment for depression in the perinatal period. Nygaard et al., (2015) also identified the importance of social acceptance and the influence of significant support persons in the decision-making process. This influence, whether positive or negative, is enough to alter decisional direction and cause significant decisional conflict. Women desire the support of their significant others and friends but hesitate to share their decision out of fear of judgment (Bonari et al., 2013 and Nygaard et al., 2005).

Social stigma and the opinions of others influenced the decision-making process contributing to increasing decisional conflict. Thus, women experiencing post-partum depression, like many others with high decisional conflict are vulnerable to the influence of others. This vulnerability, while often reported as a barrier to the decision-making process is also an opportunity to provide support in the form of shared decision making to empower value congruent, informed decision making.

Shared Decision Making

Shared decision making (SDM) is the process by which clinicians and patients engage in dialogue around available treatment options (Elwyn et al., 2012). Working together, providers seek to understand the needs of their patient and provide a safe environment to exchange information, to improve knowledge and arrive at a treatment choice that is best and right for the client (Makoul & Clayman, 2006). SDM promotes autonomy by engaging with the client to discuss the diagnosis and available care options. SDM is associated with improved patient knowledge and improved satisfaction with decisions (Elwyn et al., 2012 & Bennett et al., 2011).

When providers actively engage their patients in care planning and treatment decisions, patients experience less stress and conflict around electing new treatment choices, changing existing treatment plans and feel supported to make choices that are congruent with their values (Brehaut et al., 2003). Providers centering their care around their client's unique treatment needs, follow the assumption that individuals desire to be active participants in their care (Ballesteros et al., 2017; Glass et al., 2012; Fried, T.R., 2016; Moumjid et al., 2007). Patient and provider collaboration in decision making encourages deliberation around treatment options and promotes sharing of information, both of which support individuals to make decisions that align with their needs and values (Randall & Briscoe, 2018; Nygaard et al., 2015; Patel & Wisner, 2011; Stepanuk, 2013; Graham et al., 2018). Relationship fuels shared decision making to foster independence which improves overall understanding and the articulation of informed, confident choices (Elwyn, Frosch, Thompson et al., 2012).

Shared Decision Making in Caring for Pregnant and Postpartum Women

Integration of shared decision making in the care of pregnant and postpartum women facilitates the establishment of informed, value-congruent decisions that in turn nurture treatment engagement, patient/provider relationship, and health outcomes (Randall & Briscoe, 2018; Nygaard et al., 2015; Patel & Wisner, 2011; Stepanuk, 2013). Women desire inclusion in care deliberation and often fail to feel empowered when evaluating treatment options for postpartum depression (Randall & Briscoe, 2018; Patel & Wisner, 2011; Stepanuk, 2013). In a web-based survey of 100 women seeking treatment for depressive symptoms in pregnancy and postpartum, most women preferred a collaborative role with their provider (Patel & Wisner, 2011). This active role improved women's self-report of their overall care experience as evidenced by more effective communication and increased ease in decision making (Patel & Wisner, 2011). A

collaborative decision-making model supported women in discussing risks and benefits of treatment leading to decreased decisional conflict and feeling more satisfied with their treatment choices (Randall & Briscoe, 2018; Nygaard et al., 2015; Patel & Wisner, 2011; Stepanuk, 2013). When providers can facilitate an environment of shared decision making, women are empowered to address the ambiguity around risks and benefits and choose what they perceive as the most appropriate treatment option for them (Nygaard et al., 2015; Randall & Briscoe, 2018; Patel & Wisner, 2011; Stepanuk, 2013).

Support from significant others, as well as valued family members and friends, proved essential for many women (Walton et al., 2014). The support of friends and family mattered more to women than the opinions of providers or reviewed research (Bonari et al., 2005). Nygaard et al., (2015), noted that women often required support from their significant others during decision making and if that support was positive it aided in sifting through the varying information provided. Stepanuk et al., (2013) found that strong partner and social support enhanced stability and contributed to higher scores in terms of emancipated decision making and satisfaction with overall treatment decision. Integration of shared decision making in the care of pregnant and postpartum women with depression facilitates informed, value-congruent decisions.

Theoretical Framework

Shared Decision Making and The Ottawa Decision Support Framework

The Ottawa Decision Support Framework (ODSF) operationalizes shared decision making to move patients from a position of high decisional conflict to a quality mutually agreed upon decision. The ODSF guides a practitioner and patient through the decision-making process evaluating decision needs and utilizing shared decision making to inform quality decisions. It forms its foundation on the knowledge that women face significant decisional conflict during

health-related decision making (O'Connor et al., 2002). The ODSF was designed to evaluate decisional conflict arising from times of transition, such as the birth of a new child and subsequent development of postpartum depression (O'Connor et al., 2002). Its focus centers on decisions that have more than one appropriate treatment choice, heavily influenced by individual values and needs (O'Connor et al., 2002).

The ODSF is comprised of three specific phases: assess needs, provide decision support, and evaluate (O'Connor et al., 1998). The assessment of decision needs is important and involves the direct measurement of decisional conflict through the decisional conflict scale (O'Connor et al., 2001). Decision support is provided through patient-care provider collaboration, involving the exchange of knowledge, discussion of outcomes, and clarification of values (O'Connor et al., 2001). Finally, the framework guides practitioners and clients in evaluating their decision in terms of reduced conflict, congruency of values and choice, reduced decisional regret, and improved health related outcomes (O'Connor et al., 2001).

The ODSF has been validated in twelve studies, including studies of women in times of transition who are evaluating hormone replacement therapy, the pros and cons of undergoing a hysterectomy, and prenatal testing (Comeau, 2001; Cranney et al., 2001; Dales et al., 1999; Drake et al., 1999; Fiset et al., 2000; Grant et al., 2001; Mitchell et al., 2001; O'Connor et al., 1998; Stacey et al., 2001). No studies have been conducted with women in the postpartum period experiencing postpartum depression. Validation of the framework in previous studies involving women during times of transition, where a variety of value-sensitive treatment options are available, lends support to the application of this framework to this study.

Application

This study utilized concepts of shared decision making and O'Connor's ODSF framework to operationalize and evaluate the relationship between shared decision making and decisional conflict in women with self-reported symptoms of postpartum depression. In accordance with the theory, the study leader hypothesized that women experiencing postpartum depression experience significant decisional conflict. A provider utilizing concepts of shared decision making will examine decision needs, to provide direct interventions to resolve conflict stemming from individual decision need factors. The assumption is that decision support from a provider is not enough to change a woman's decision but is a means to resolve conflict and improve the decision quality. Figure 1 depicts the application of this theory to the current project.

Project Design

This study was a cross-sectional web-based survey designed to examine the correlation between shared decision making and decisional conflict in postpartum women experiencing depressive symptoms at an urban counseling center in Nashville, TN. This counseling center invited the project leader to look at the relationship between clients' perception of shared decision making and decisional conflict in their facility, as a means of quality improvement to evaluate the current care model to inform change or continuation. The Institutional Review Board at Belmont University approved this study in May 2019.

Clinical Setting

Since 2016, this urban counseling center has been helping individuals, couples, and family's transition through the life stages of conception, pregnancy, postpartum, infertility, or loss (E. Pardy, personal communication, September 26, 2019). Client's see maternal mental health counselors that are specially trained in marriage and family counseling and provide evidence based, unbiased therapy to support client's emotional and relational wellness (E. Pardy,

personal communication, September 26, 2019). Therapists at the center utilize cognitive behavioral therapy, interpersonal therapy, solutions focused brief therapy, and narrative therapy during birth trauma work (E. Pardy, personal communication, October 2, 2019).

The center employs nine full time therapists, an office coordinator, and a marriage and family therapy intern. The center's counselors are primarily female, with one male therapist providing couples and individual therapy. To date, the center has served over 500 clients in one-on-one counseling sessions or free support group settings (E. Pardy, personal communication, September 26, 2019). Support groups are offered weekly, open to the public, and include loss groups, loss dads' groups, and new mom wellness groups. Clients average ages are 22-42, many of which are in their thirties and typically have 0-2 children (E. Pardy, personal communication, September 26, 2019). Counseling services are provided on a self-pay basis, with availability of sliding scale based on income and financial need. The center does not accept insurance. All support groups are offered free of charge to clients and members of the community.

Additional web-based support services are provided by the counseling center. The center operates on various social media platforms providing information about maternal wellness, as well as advertising their services to the community. For individuals unable to access in person services, they can find information via the center's YouTube channel. Here, the founder interviews mental health professionals to provide information about a variety of mental health topics, adjusting to life at home with a new baby, and navigating infertility.

Project Population

Women with self-reported symptoms of postpartum depression, who are current or past clients of the center, were eligible to participate in the project and invited to complete the online survey.

Sources of Data/Data Collection Instruments

All data were gathered using a 12-question web-based survey. Information collected included qualifier questions of parity, race, age, marital status, status as a current or past client, as well as ways in which survey participants engaged in care. In addition, women who had initiated treatment for symptoms of postpartum depression identified their treatment decision (medication, therapy, combination, or no treatment at all) and length of time engaged in treatment at the counseling center.

Decisional conflict was measured using the Decisional Conflict Scale, a 16 item, Likert style scale with five possible answers to each question. The scale contains five subscales. All scores are summed, with higher scores indicative of increased decisional conflict. There are four versions of the Decisional Conflict Scale, one version is shorter and efficient for use in clinical practice whereas the other three are purposed for research (O'Connor, 1993). This study utilized the research version A, which has demonstrated high validity and reliability (O'Connor, 1993). This tool is reliable (Cronbach alpha exceeding 0.78) and valid, with demonstrated correlation to decision regret and treatment continuation among populations of women during times of transition (O'Connor, 1993). No previous studies have been conducted utilizing the DCS with women in the postpartum period experiencing depressive symptoms.

Perception of shared decision making was measured using the Shared Decision-Making Questionnaire (SDMQ-9). The SDMQ-9 is a nine item, patient rated Likert style questionnaire with six possible answers to each question (Right Care Shared Decision Making Programme, 2012). A total sum of responses is calculated with higher scores representing increased perception of shared decision making. Validation of the SDMQ-9 in women has demonstrated valid and

reliable in a wide variety of situations and conditions alongside the DCS, with internal consistency Cronbach's alpha of 0.93 (Kriston et al., 2010; Right Care Shared Decision Making Programme, 2012).

Data Collection Process/Procedures

The project leader and founder of the counseling center co-created an informational clip advising women of the project's purpose, the value of their participation, and encouragement to complete the survey. The informational clip was uploaded to the center's YouTube channel, Facebook page, and Instagram account. The survey link was distributed via email by the center's founder to current and past clients. Additionally, the survey opportunity was advertised by the project leader during postpartum and new mom support groups held weekly at the counseling center. Consent to participate was implied through initiation of the survey. The invitation to participate informed women of the purpose of the study, how the collected data would be used, and the guaranteed anonymity of survey responses. There was no collection of patient identifiers or protected health information. All data were exported from Qualtrics into Excel. Data fidelity was confirmed through a secondary reviewer, who reviewed every fourth data entry for accuracy. Data was then entered into SPSS and analyzed. A Pearson correlation was used to determine the directional relationship between decisional conflict and shared decision making.

Results

SPSS version 25 was utilized for statistical analysis. A total of 169 women responded to the web-based survey between October-December 2019. Descriptive statistics were computed for the entire sample (N=) and decisional conflict and shared decision making were computed for the subsample of women who reported engagement in care for PPD (n=48). Please refer to Figure 2 for details of the sampling frame.

Demographics of clients (Table 1). Most women in this sample were Caucasian (97%), married (91.7%), with mean age was 32 (SD 4.03, N=48). Age ranged from 21 to 41.

Clinical characteristics of clients (Table 1). 121 women surveyed reported experiencing symptoms of postpartum depression. Of the 121 women, 48 women reported engaging in care for PPD, with 73 women reporting not engaging in care for PPD. 60% of women who reported experiencing symptoms of postpartum depression never engaged in care. The mean age of this subgroup of women was 37.4 (SD 11.1, N=40). All 73 women who did not engage in care reported unrealistic expectations, unclear perceptions of other opinions, unclear values, and lack of support as barriers to care-seeking. Half of women engaged in care for PPD preferred combination treatment (medication and therapy), followed by 11% preferring support groups and 38% having not made a treatment decision.

Less than half of the 121 survey respondents (39.7%) were currently engaged in treatment for their postpartum depression, the large majority had participated in care for 6-12 months (87.1%, n+). Women reported that their obstetricians (26.3%) and therapists/counselors (42%) had the most influence in their motivation to seek care for postpartum depression. Women identified unrealistic expectations (50%), not enough skills confidence (36%), unclear perception of others opinions (27%), lack of support (27%), pressure from others (23%), and not enough information (27%) as barriers to engaging in care for postpartum depression. Few women identified unclear values (0.08%) as a barrier to engaging in care. This differed drastically from the subgroup of women who did not engage in care, as they all reported unclear values as a care-seeking barrier.

Shared Decision Making and Decisional Conflict (Table 1). 48 women who engaged in care for PPD were included in analysis to examine the relationship between shared decision

making and decisional conflict. Mean decisional conflict scores were 38.6, with a range of scores from 0-90. Mean shared decision-making scores were 25.5 with a range of scores from 1-45. Among women who self-reported symptoms of postpartum depression and were currently engaged in care for PPD, there was a significant negative correlation between shared decision making and decisional conflict, $p < .05$, Pearson's $r = -.287$. As perception of shared decision making increased, decisional conflict decreased.

Discussion

The findings from this study support the hypotheses that women with postpartum depression experience decisional conflict and that perception of shared decision making is negatively correlated with decisional conflict among women seeking care for postpartum depression.

Women with Postpartum Depression and Decisional Conflict

Women participating in this study experienced conflict when navigating complex treatment choices for postpartum depression. This holds true in comparison to previous research with women contemplating HRT therapy, tamoxifen therapy for breast cancer treatment, and amniocentesis (O'Connor et al., 1998a; Fagerlin et al., 2013; Thornton et al., 1995; O'Connor et al., 1999). A provider actively engaged in the care of a woman experiencing symptoms of postpartum depression can utilize the concepts of shared decision making and the ODSF to engage in mutual dialogue exploring decision needs to resolve conflict. This finding further contributes to the assumption that decision support is not enough to change a woman's decision or to promote one specific treatment choice but is a means to understand each woman's unique treatment needs and provide support through knowledge, options, and values clarification. When

women in this study perceived inclusion in their treatment deliberation they reported feeling empowered to make decisions aligning with their needs and values.

Barriers to Care Engagement

The finding that more than half of women who reported experiencing symptoms of PPD were not engaged in care. This finding illuminates a gap in care for this vulnerable population and highlights the need for more robust screening....Women in this study identified barriers to treatment decision making. In accordance with previous research, they noted that unrealistic expectations, unclear perception of others opinions, unclear values, and lack of support added to difficulties in navigating treatment options for PPD (Randall & Briscoe, 2018; Nygaard et al., 2015; Patel & Wisner, 2011; Stepanuk, 2013). Women identified experiencing depressive symptoms, but due to uncertainty around values, avoided engaging in treatment deliberation, expressing difficulty ascertaining what treatment options were best and right for them. This conflict delayed care seeking.

Obstetricians were identified, along with therapists, as providers with influence in seeking and navigating care for PPD. Relationship is central to shared decision making. The relationship between a woman and her provider creates a prime opportunity to provide more education around PPD and its available treatment, to engage in discussions around what is important to women in terms of treatment should they face PPD, and to utilize concepts of ODSF to promote the clarification of values (O'Connor et al., 2001).

Implications for Practice

To our knowledge, this is the first study to look at the relationship between shared decision making and its relationship with the experience of decisional conflict in women with symptoms of postpartum depression. When women perceived that they were included in the care

deliberation process, that they had a voice and a place in the decision; their expressed conflict decreased. This information empowers providers to engage actively in mutual dialogue evaluating treatment options, discussing individual needs and values, and working to arrive at a treatment decision that fits the individual needs of each woman. Inclusive, mutually driven environments allow for clients' needs and voices to be heard. When providers elect shared decision making they do not promote one option as the only option but create spaces that educate about the available treatment options, give women the opportunity to contemplate values and gain knowledge, in order to encourage and sustain treatment engagement.

More research is needed to better understand how interventions rooted in shared decision making improve outcomes for women with PPD. Utilizing SDM to decrease conflict contributes to greater care engagement, early treatment seeking, but a longitudinal study looking at the real health outcomes of women is needed. Future studies might consider development and testing of a decision aid for women experiencing PPD, like those that have been used and tested in populations of women facing complex medical decisions (O'Connor et al., 1998a; Fagerlin et al., 2013; Thornton et al., 1995; O'Connor et al., 1999). A decision aid unique to the care of women with PPD would include the assessment of decisional needs (Where are you in this decision process? What information would you need or like to know? What is important to you?), provide support through knowledge and options, and evaluate decisional quality through reduced decisional conflict and value congruent decision making. Such a tool could standardize shared decision making in the care of women with PPD, by creating environments where women feel heard and valued. One concern that providers report is the lack of time to engage in SDM. Utilization of decision aids represents an efficient and standardized practice improvement that respects the clinicians need for efficiency and the woman's need for collaborative care.

This study also highlights the importance of gaining a better understanding of what women who experience PPD, but do not engage in treatment, are facing. Further research may examine best methods for treatment engagement, rooted in shared decision making, and implemented earlier in pregnancy. A similar decision aid as the one discussed above might be presented during pre-natal care to assist women in improving understanding around available treatment for PPD to promote value formation and mitigate the unique barrier women in this study experienced.

Strengths and Limitations

This study fills a gap in the literature by examining the degree to which women with PPD experience decisional conflict. The findings of our study contribute strong evidence to support SDM as a clinical tool to abate women's experience of decisional conflict when seeking treatment for PPD. This finding opens the door for further study into the best methods for implementation of concepts of shared decision making into the care of women experiencing PPD. This study also identified that women who delay or avoid care seeking face unique barriers. These barriers contribute to increasing conflict, delayed care seeking, and place women at greater risk for consequences of untreated PPD. More research is needed to understand these unique barriers and how women navigating treatment for PPD mitigate such a barrier.

While our sample was relatively homogenous with a majority of Caucasian and married women, it is representative of women who are currently seeking and accessing care for PPD and representative of the client population. The authors acknowledge the reality that women of color and low-income experience greater barriers to access to care and consequences of PPD. As we work to redress the myriad risk factors for disease and barriers to care that originate in the social determinants of health, SDM is a low-cost intervention that may improve outcomes for women

experiencing PPD. In our research we targeted those that self-identified with PPD and had the energy to engage in the survey. We acknowledge that we may not have captured women who were unaware of signs and symptoms and not seeking treatment. Response bias was unavoidable. In the video vignette utilized to invite research participation, we attempted to be clear that we were seeking feedback from current and past clients to improve their care. We emphasized our desire to improve the quality of care being delivered, to contribute to a needed body of knowledge, and ensured anonymity of responses. Despite our small sample, survey engagement demonstrates that women desire to participate in research and to see the care they are receiving improved.

Conclusion

Women experiencing symptoms of postpartum depression are largely not engaged in care and report that they experience decisional conflict related to navigating treatment options for PPD. This high level of decisional conflict can contribute to a variety of short and long term health consequences for women and children. The results of our study offer encouragement to providers to implement shared decision making in their care of women with PPD, to reduce conflict and promote women's autonomy and positive health outcomes. Further research to better understand unique barriers women experiencing PPD, but do not engage in treatment is needed, as women in this category experience unclear values as a unique treatment barrier. Future research should focus on developing a decision aid to use when caring for women with PPD, possibly implemented early in prenatal care and throughout the postpartum period. The implementation of shared decision-making aids supports care providers in providing care to women experiencing symptoms of PPD. This model of collaborative care is patient centered, value centric, and empowers women to reach the best and right treatment decisions for them.

Leveraging the relationship between patients and their provider, SDM fosters consistent treatment engagement, supporting the health and wellness of women, as well as the health and wellness of their children.

References

- Ballesteros, J., Moral, E., Brieva, L., Ruiz-Beato, E., Prefasi, D., & Maurino, J. (2017). Psychometric properties of the SDM-Q-9 questionnaire for shared decision-making in multiple sclerosis: Item response theory modelling and confirmatory factor analysis. *Health and Quality of Life Outcomes*, *15*(1), 2–7. <https://doi.org/10.1186/s12955-017-0656->
- Battle, C. L., Salisbury, A. L., Schofield, C. A., & Ortiz-Hernandez, S. (2013). Perinatal antidepressant use: Understanding women’s preferences and concerns. *Journal of Psychiatric Practice*, *19*(6), 443–453.
<https://doi.org/10.1097/01.pra.0000438183.74359.46>
- Battle, C.L., Zlotnick, C., Pearlstein, T., IW, M., Howard, M., Salisbury, A., ... Stroud, L. (2008). Depression and breastfeeding: which postpartum patients take antidepressant medications? *Depression & Anxiety (1091-4269)*, *25*(10), 888–891.
- Becker, M., Weinberger, T., Chandy, A., & Schmukler, S. (2016). Depression during Pregnancy and Postpartum. *Current Psychiatry Reports*, *18*(3), 32. <https://doi.org/10.1007/s11920-016-0664-7>.
- Bekker, H.L., Hewison, J., Thornton, J.G. (2004). Applying decision analysis to facilitate informed decision making about prenatal diagnosis for Down syndrome: a randomized controlled trial. *Prenatal Diagnosis*, *24*, 265–275.

- Bonari, L., Koren, G., TR, E., JD, J., Taddio, A., & Einarson, A. (2005). Use of antidepressants by pregnant women: evaluation of perception of risk, efficacy of evidence-based counseling and determinants of decision making. *Archives of Women's Mental Health*, 8(4), 214–220.
- Brehaut, J. C., O'Connor, A. M., Wood, T. J., Hack, T. F., Siminoff, L., Gordon, E., & Feldman-Stewart, D. (2003). Validation of a decision regret scale. *Medical Decision Making*, 23(4), 281–292. <https://doi.org/10.1177/0272989X03256005>
- Chan, C. H. Y., Lau, H. P. B., Tam, M. Y. J., & Ng, E. H. Y. (2016). A longitudinal study investigating the role of decisional conflicts and regret and short-term psychological adjustment after IVF treatment failure. *Human Reproduction*, 31(12), 2772–2780. <https://doi.org/10.1093/humrep/dew233>
- Chang, J., Berg, C. J., Saltzman, L. E., & Herndon, J. (2005). Homicide: A Leading Cause of Injury Deaths among Pregnant and Postpartum Women in the United States, 1991–1999. *American Journal of Public Health*, 95(3), 471–477. <https://doi.org/10.2105/AJPH.2003.029868>
- Comeau, C. (2001). Evaluation of a decision aid for family members considering long-term care options for their relative with dementia. Unpublished master's thesis, University of Ottawa, Ontario, Canada.
- Connor, A. M. O., Jacobsen, M. J., & Stacey, D. (2002). An Evidence-Based Approach to Managing Women's Decisional Conflict, 31(5).

Cranney, A., Jacobsen, M. J., O'Connor, A. M., Tugwell, P., & Adachi, J. D. (2001). A decision aid presenting multiple therapeutic options for women with osteoporosis: Development and evaluation. *Medical Decision Making, Abstracts*, 21(6), 547

Dales, R. E., O'Connor, A., Hebert, P., Sullivan, K., McKim, D., & Llewellyn-Thomas, H. (1999). Intubation and mechanical ventilation for COPD: Development of an instrument to elicit patient preferences. *Chest*, 116, 792-800.

Depression among Women | Depression | Reproductive Health | CDC. (2017). Retrieved from <https://www.cdc.gov/reproductivehealth/depression/index.htm>

Durand, M. A., Boivin, J., & Elwyn, G. (2008). A review of decision support technologies for amniocentesis. *Human Reproduction Update*, 14(6), 659–668.
<https://doi.org/10.1093/humupd/dmn037>

Drake, E., Engler-Todd, L., O'Connor, A. M., Surh, L., & Hunter, A. (1999). Development and evaluation of a decision aid about prenatal testing for women of advanced maternal age. *Journal of Genetic Counseling*, 8(4), 217-233.

Elwyn G, O'Connor A, Stacey D, Volk R, Edwards A, Coulter A, Thomson R, Barratt A, Barry M, Bernstein S, Butow P, Clarke A, Entwistle V, Feldman-Stewart D, Holmes-Rovner M, Llewellyn-Thomas H, Moumjid N, Mulley A, Ruland C, Sepucha K, Sykes A, Whelan T, on behalf of the International Patient Decision Aids Standards (IPDAS) Collaboration. [Developing a quality criteria framework for patient decision aids: online international Delphi consensus process.](#) *British Medical Journal*. 2006 Aug 26;333(7565):417.

Elwyn, G., Frosch, D., Thomson, R., Joseph-Williams, N., Lloyd, A., Kinnersley, P., ... Barry, M. (2012). Shared decision making: A model for clinical practice. *Journal of General Internal Medicine*, 27(10), 1361–1367.

Fagerlin, A., Zikmund-fisher, B. J., Smith, D. M., Nair, V., Derry, A., McClure, J. B., ... Ubel, P. A. (2013). prevention: Responses to a tailored decision aid, 119(3), 613–620.
<https://doi.org/10.1007/s10549-009-0618-4>. Women

Fiset, V., O'Connor, A. M., Evans, W. K., Graham, I., DeGrasse, C., & Logan, J. (2000). The development and evaluation of a decision aid for patients with stage IV non-small cell lung cancer. *Health Expectations*, 3(2), 125-136.

Frosch, D, Kaplan R. (1999). Shared decision making in clinical medicine: past research and future directions. *American Journal of Preventative Medicine*, 17, 285–94.

Fried T.R. (2016). Shared decision making-finding the sweet spot. *New England Journal of Medicine*, 374, 104–106.

Glass K.E., Wills C.E., Holloman, C, Olson, J, Hechmer, C, Miller C.K., et al. (2012). Shared decision making and other variables as correlates of satisfaction with health care decisions in a United States national survey. *Patient Educ Counseling*, 88, 100–105.

Goel V., Sawka, C., Thiel E.C., Gort, E.H., O'Connor, A.M (2001). Randomized trial of a patient decision aid for choice of surgical treatment for breast cancer. *Medical Decision Making*; 21, 1–6.

- Goodman, J. H. (2009). Women's Attitudes, Preferences, and Perceived Barriers to Treatment for Perinatal Depression. *Birth, 36*(1), 60–69. <https://doi.org/10.1111/j.1523-536X.2008.00296.x>
- Grant, F. C., Laupacis, A., O'Connor, A. M., Rubens, F., & Robblee, J. (2001). Evaluation of a decision aid for autologous predonation for patients before open-heart surgery. *Canadian Medical Association Journal, 164*(8), 1139- 1144.
- Holmes-Rovner, M., Kroll, J., Schmitt, N., Rovner, D. R., Breer, M. L., Rothert, M. L., ... Talarczyk, G. (1996). Patient satisfaction with health care decisions: The satisfaction with decision scale. *Medical Decision Making, 16*(1), 58–64.
<https://doi.org/10.1177/0272989X9601600114>
- Howard, L. M., Molyneaux, E., Dennis, C. L., Rochat, T., Stein, A., & Milgrom, J. (2014). Non-psychotic mental disorders in the perinatal period. *The Lancet, 384*(9956), 1775–1788.
- Jarrett, P. M. (2016). Pregnant women's experience of depression care. *The Journal of Mental Health Training, Education and Practice, 11*(1), 33–47.
- Jones, I., & Cantwell, R. (2010). The classification of perinatal mood disorders---suggestions for DSMV and ICD11. *Archives of Women's Mental Health, 13*(1), 33–36.
- Keefe, R. H., Brownstein-Evans, C., & Rouland Polmanteer, R. S. (2016). Addressing access barriers to services for mothers at risk for perinatal mood disorders: A social work perspective. *Social Work in Health Care, 55*(1), 1–11.
<https://doi.org/10.1080/00981389.2015.1101045>

- Kim, J., Silver, R., Elue, R., Adams, M., La Porte, L., Cai, L., ... Gibbons, R. (2016). The experience of depression, anxiety, and mania among perinatal women. *Archives of Women's Mental Health, 19*(5), 883–890.
- Kriston, L., Scholl, I., Hölzel, L., Simon, D., Loh, A., & Härter, M. (2010). The 9-item Shared Decision-Making Questionnaire (SDM-Q-9). Development and psychometric properties in a primary care sample. *Patient Education and Counseling, 80*(1), 94–99.
<https://doi.org/10.1016/j.pec.2009.09.034>
- Measuring Shared Decision Making: A review of research evidence.* (2012). Fulbourn, Cambridge.
- Makoul, G. & Clayman, M.L. (2006). An Integrative Model of Shared Decision Making in Medical Encounters. *Patient Educ Counseling, 60*, 301–312.
- Misri, S, Eng, A.B., Abizadeb, J., Blackwell, E., Spidel, A., Oberlander, T.F. (2013). Factors impacting decisions to adhere to antidepressant medication in perinatal women with mood and anxiety disorders. *Depression & Anxiety, 30*, 1129-1136.
- Mitchell, S. L., Tetroe, J., & O'Connor, A. M. (2001) A decision aid for long-term tube feeding in cognitively impaired older persons. *Journal of the American Geriatric Society, 49*, 313-316.
- Moumjid, N., Gafni, A., Brémond, A., Carrère, M.O. (2007). Shared decision making in the medical encounter: are we all talking about the same thing? *Medical Decision Making, 27*, 539–546.

Nagle, C., Lewis, S., Meiser, B., Metcalfe, S., Carlin, J.B., Bell, R., Gunn, J., Halliday, J. (2006). Evaluation of a decision aid for prenatal testing of fetal abnormalities: a cluster randomized trial. *BMC Public Health*, 13 (96).

Nagle, C., Gunn, J., Bell, R., Lewis, S., Meiser, B., Metcalfe, E., Ukoumunne, O.C., Halliday, J. (2008). Use of a decision aid for prenatal testing of fetal abnormalities to improve women's informed decision making: a cluster randomized controlled trial. *British Journal of Obstetric Gynecology*, 115, 339–347.

Nygaard, L., Rossen, C. B., & Buus, N. (2015). Balancing Risk: A Grounded Theory Study of Pregnant Women's Decisions to (Dis)Continue Antidepressant Therapy. *Issues in Mental Health Nursing*, 36(7), 485–492. <https://doi.org/10.3109/01612840.2015.1004605>

O'Connor, A. (1995). Validation of Decisional Conflict Scale. *Medical Decision Making*, 15(1), 25–30. Retrieved from mdm.sagepub.com

Connor, A. M. O., Jacobsen, M. J., & Stacey, D. (2002). An Evidence-Based Approach to Managing Women's Decisional Conflict, 31(5). <https://doi.org/10.1177/088421702237742>

O'Connor, A. M., Rostom, A., Fiset, V., Tetroe, J., Entwistle, V., Llewellyn-Thomas, H., ... Jones, J. (1999). Decision aids for patients facing health treatment or screening decisions: systematic review. *Bmj*, 319(7212), 731–734. <https://doi.org/10.1136/bmj.319.7212.731>

O'Connor, A. M., Tugwell, P., Wells, G., Elmslie, T., Jolly, E., Hollingworth, G., et al. (1998a). Randomized trial of a portable, self-administered decision aid for post-menopausal women

considering long-term preventive hormone therapy. *Medical Decision Making*, 18(3), 295-303.

O'Connor, A. M., Tugwell, P., Wells, G. A., Elmslie, T., Jolly, E., Hollingworth, G., et al. (1998b). A decision aid for women considering hormone therapy after menopause: Decision support framework and evaluation. *Patient Education and Counseling*, 33(3), 267-279

Patel, S. R., & Wisner, K. L. (2011). Decision making for depression treatment during pregnancy and the postpartum period. *Depression and Anxiety*, 28(7), 589–595.

<https://doi.org/10.1002/da.20844>

Pleil, A. M., Coyne, K. S., Reese, P. R., Jumadilova, Z., Rovner, E. S., & Kelleher, C. J. (2005).

The validation of patient-rated global assessments of treatment benefit, satisfaction, and willingness to continue - The BSW. *Value in Health*, 8(SUPPL. 1), S25–S34.

<https://doi.org/10.1111/j.1524-4733.2005.00069.x>

Randall, L., & Briscoe, L. (2018). Are women empowered to make decisions about the use of antidepressants in pregnancy? *British Journal of Midwifery*, 26(5), 329–335.

<https://doi.org/10.12968/bjom.2018.26.5.329>

Stacey, D., O'Connor, A. M., Rovner, D., Holmes-Rovner, M., Tetroe, J., Llewellyn-Thomas, H., et al. (2001). Cochrane inventory and evaluation of patient decision aids. *Medical Decision Making, Abstracts*, 21(6), 527.

- Stepanuk, K. M., Fisher, K. M., Wittmann-Price, R., Posmontier, B., & Bhattacharya, A. (2013). Women's decision-making regarding medication use in pregnancy for anxiety and/or depression. *Journal of Advanced Nursing*, 69(11), n/a-n/a. <https://doi.org/10.1111/jan.12122>
- (2019). Tennessee Maternal Mortality: Review of 2017 Maternal Deaths, 1–59. Retrieved from https://www.tn.gov/content/dam/tn/health/documents/mch/MMR_Annual_Report_2017.pdf
- Thornton, J.G., Hewison, J., Lilford, R.J., Vail, A. (1995). A randomized trial of three methods of giving information about prenatal testing. *British Medical Journal*, 3 (11), 1127-30
- Vigod, S., Hussain-Shamsy, N., Grigoriadis, S., Howard, L. M., Metcalfe, K., Oberlander, T. F., ... Dennis, C.-L. (2016). A patient decision aid for antidepressant use in pregnancy: study protocol for a randomized controlled trial. *Trials*, 17, 1–9.
- Walton, G., Ross, L., Stewart, D., Grigoriadis, S., Dennis, C.-L., & Vigod, S. (2014). Decisional conflict among women considering antidepressant medication use in pregnancy. *Archives of Women's Mental Health*, 17(6), 493–501. <https://doi.org/10.1007/s00737-014-0448-1>
- Wills, C. E., & Holmes-Rovner, M. (2003). Preliminary validation of the Satisfaction with Decision scale with depressed primary care patients. *Health Expectations*, 6(2), 149–159. <https://doi.org/10.1046/j.1369-6513.2003.00220.x>
- Wisner K.L., Sit D.K.Y, McShea, M.C., et al. (2013). Onset Timing, Thoughts of Self-harm, and Diagnoses in Postpartum Women with Screen-Positive Depression Findings. *JAMA Psychiatry*, 70(5), 490–498. doi:10.1001/jamapsychiatry.2013.87

Zeelenberg, M., van Dijk, W. W., Manstead, A. S. R., & vanr de Pligt, J. (2000). On bad decisions and disconfirmed expectancies: The psychology of regret and disappointment. *Cognition and Emotion*, *14*(4), 521–541. <https://doi.org/10.1080/026999300402781>

Appendix

Figure 1.

Adaptation of the Ottawa Decision Support Framework.

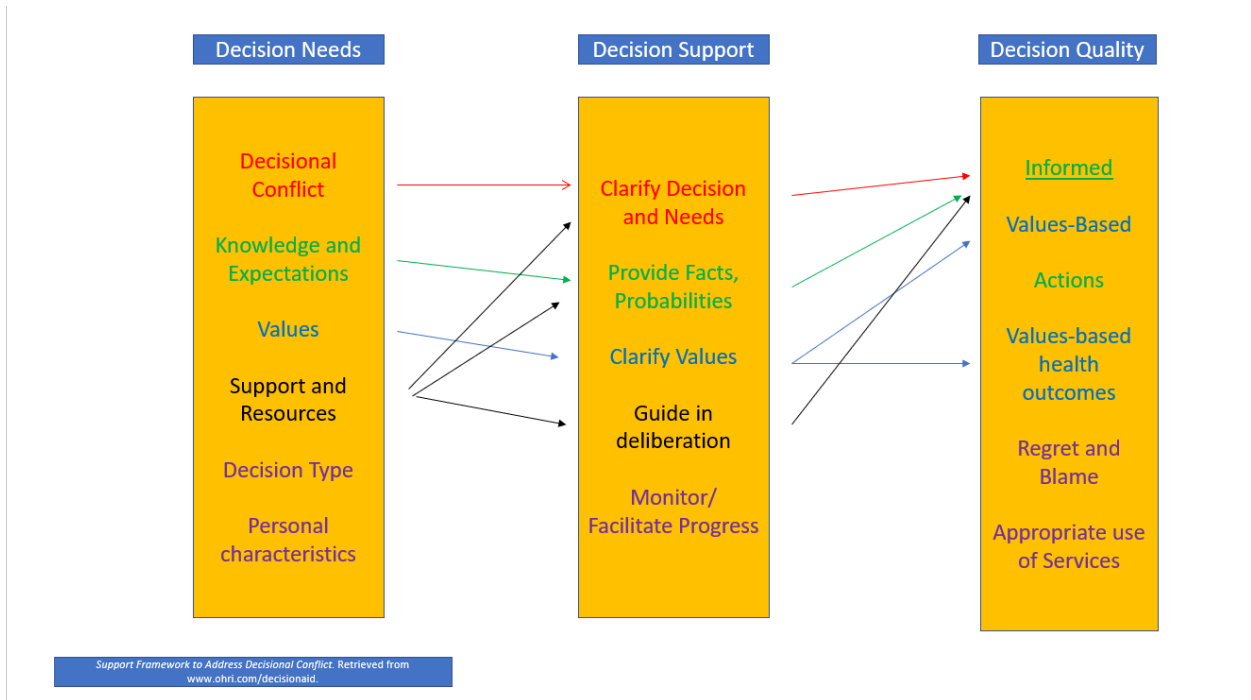


Figure 2.

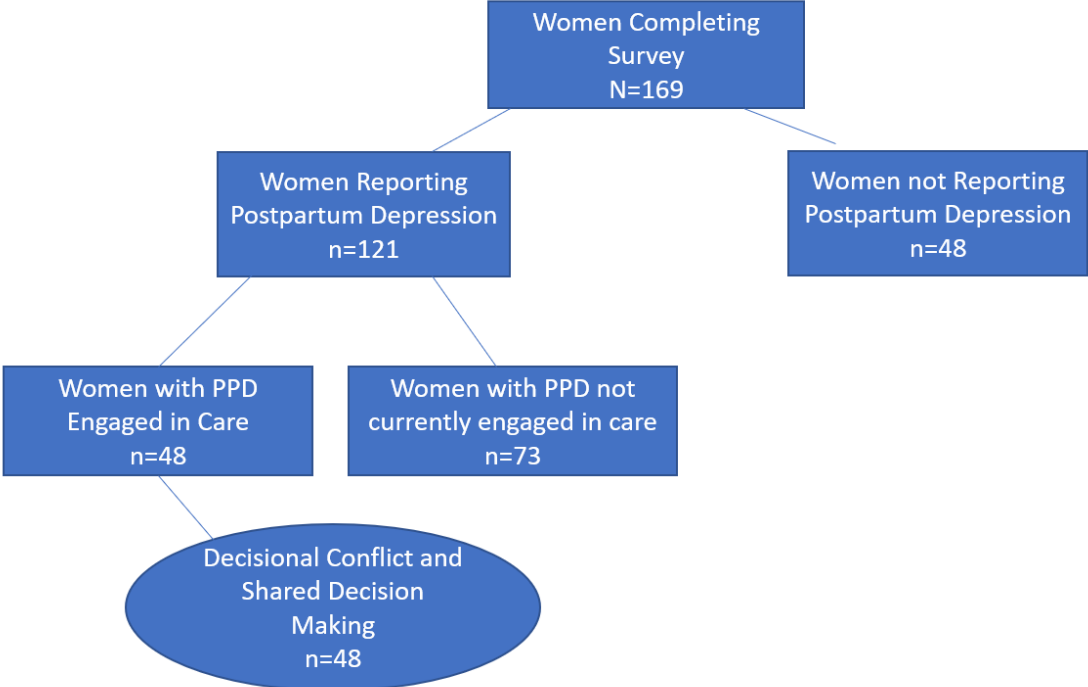


Table 1.

Demographic and Clinical Characteristics	Women self-reporting symptoms of postpartum Depression <i>n=121</i>	Women self-reporting symptoms of postpartum depression who were engaged in care. <i>n=48</i>	Women self-reporting symptoms of postpartum depression, NOT engaged in care. <i>n=73</i>
Age (Mean/Years)	35 (SD 8.006)	32 (SD 4.03)	37.4 (SD 11.1)
Ethnicity (%)			
Caucasian	94.7		
African American	1.3		
Pacific Islander/Native Hawaiian	2.6		
Other	1.3		
Marital Status (%)			
Married	94.8		91.7
Single, Never Married	5.3		8.3
Barriers to Care Seeking (%)			
Unrealistic Expectations		50	92.5
Not enough skills/confidence		36	57.5
Unclear Perception of Other's Opinions		27	87.5
Lack of Support		27	52.5
Pressure from Others		23	85
Not Enough Information		27	80
Unclear Values		0.08	100

Table 5.

<p><u>Decisional Conflict Scores</u></p>	<p>Pearson Correlation Sig. (2-tailed) N</p>	<p><u>Decisional Conflict Scores</u> 1 48</p>	<p><u>Shared Decision-Making Scores</u> -.287* 0.048 48</p>
<p><u>SDMQ-9 Scores</u></p>	<p>Pearson Correlation Sig. (2-tailed) N</p>	<p>-.287* .048 48</p>	<p>1 48</p>

***Correlation is significant at the 0.05 level (2-tailed).**