The Contextual Factors That Contribute to the Effectiveness of Hypnobirthing

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Abstract

Hypnobirthing is a holistic approach to birth based upon the use of hypnosis consisting of guided imagery, positive language, and deep breathing exercises (Buran & Aksu, 2022). The aim of this literature review is to identify the type and extent of the published literature on hypnobirthing, the effect hypnobirthing had on pain, fear, and birth satisfaction, and factors that may increase the effectiveness in some women over others such as education level, medical interventions such as episiotomy and fundal massage, and amount of social support. This literature review will analyze current studies from the last five years using the CINAHL database. The new knowledge this project will offer to the discipline of nursing is an understanding on the factors of hypnobirthing and how they correlate to its effectiveness regarding pain and fear during labor. Providing a compilation of these factors is beneficial to help identify factors that can be modified in order to enhance the effectiveness of hypnobirthing and could allow women to have a more positive experience with the intervention and result in decreased pain or fear during labor.

Introduction

As defined by the American Psychological Association, hypnosis is defined as "a state of consciousness involving focused attention and reduced peripheral awareness characterized by an enhanced capacity for response to suggestion" (Phillips et al., 2022). The American Psychological Association also defines hypnotisability as "an individual's ability to experience suggested alterations in physiology, sensations, emotions, thoughts or behavior during hypnosis" (Phillips et al., 2022). Both of these concepts are relevant to hypnobirthing because hypnobirthing is built upon the foundation of hypnosis and the term hypnobirthing refers to the use of hypnosis during labor and delivery which was developed by Marie Mongan (Mongan, 2019).

Hypnobirthing can be defined as a holistic approach to labor and delivery that consists of a multitude of techniques focused on a mental state of relaxation to decrease fear and pain during childbirth resulting in a more positive experience (Buran & Aksu, 2022). Techniques that are utilized during hypnobirthing include deep breathing exercises, guided imagery, and positive language which all make up "hypnosis". In this literature review, hypnobirthing and hypnosis can be considered interchangeable in their meanings.

Hypnobirthing Techniques

Women who elect to utilize hypnobirthing typically take classes to learn this childbirth preparation method that ranges in time of instruction typically occurring in the second or third trimester (Buran & Aksu, 2022). The instruction usually includes the woman as well as her support person. It places an emphasis on special breathing techniques, relaxation, visualization, meditative practice, attention to nutrition, and positive body toning. For example, one of the

techniques that can be used in regards to visualization is to imagine that one is wearing a glove made of silver colored natural endorphins and that all sensation is lost in this glove wearing hand. This hand can be used to take away pain wherever it is placed on their body. Also, the emphasis on positive language is used to decrease fear and pain association with labor. The word "pain" is avoided and instead referred to as a wave to emphasize that the sensation will pass and bring calm. Participants can imagine that when a "wave" occurs, to imagine that the fetus' head is a bud of a flower and the petals are opening and blossoming more and more with each "wave". The support person can also be taught to perform an endorphin massage on their partner that is said to release endorphins into the bloodstream and create a sense of comfort

The Fear-Stress-Pain Cycle

The theory of the Fear-Stress-Pain Cycle can be considered the foundation of HypnoBirthing and the development of this theory is given credit to both Dick-Read and Mongan (Uludag & Mete, 2023). This theory states that women within society have been programmed to associate labor with extreme pain resulting in women having fear surrounding childbirth. This fear causes tension and stress within the body that prevents normal physiological functioning and relaxation. This tension within muscles then amplifies pain and prohibits relaxation resulting in an unpleasant birthing experience. Marie Mongan emphasizes the importance of trusting the birthing process and believing that one's body is made to birth. By eliminating this fear, the theory explains that it can break the cycle and eliminate pain. They eliminate this fear during hypnobirthing training where women learn the normal physiological process of birth and the emphasis on the fact that the body is made to birth (Mongan, 2019). They also provide the women with hypnobirthing techniques to cope through birth.

Aims and Objectives

The aims and objectives of this literature review included:

1. To investigate what peer-reviewed studies and literature exists on hypnobirthing published between 2018 and 2023.
2. To present data from peer-reviewed studies regarding the effect hypnobirthing had on pain, fear, and birth satisfaction.
3. To examine what contextual factors may influence the successful implementation of hypnobirthing as an intervention in some women compared to others.

These aims and objectives were utilized when conducting research so as to provide healthcare professionals with up to date information from credible sources on what women may benefit from this intervention and method of birthing.

Methods

This literature review will identify and detail the current literature that exists about hypnobirthing published in the last five years. The database utilized to search for journal articles was the Cumulative Index to Nursing and Allied Health Literature (CINAHL). This database was utilized due to availability of peer-reviewed journals. Combinations of search terms “hypnobirthing”, “hypnosis”, “hypnosis therapy”, hypnotherapy”, “birth”, and “nursing” were used. These search terms were used to provide a broad overview of articles but narrow and specific to the topic in investigation. Limits and filters that were used include setting publication date from January 2018 to now and peer-reviewed journal. Eligibility criteria included the article being published within the last five years (January 2018 to now), writing in the English

language, containing data regarding the contextual factors of participants (i.e. education level, marital status, etc), publication in a peer-reviewed journal, qualitative and quantitative study designs, quality improvement and evidence-based practice projects or guidelines, systematic reviews and meta-analyses, other review types, and relevant theoretical articles. Sources were excluded if published more than five years ago, not published in a peer-reviewed journal, and publication types such as conference proceedings, and editorials.

Journal articles were selected based upon relevance to the topic in question and fitting within inclusion and exclusion criteria. Journal articles were read and the sample of the study was analyzed for any statistically significant differences between the control and experimental group including but not limited to age, marital status, availability of social support, economic status, medical interventions, and level of education. The outcomes of the studies were evaluated to determine if hypnobirthing successfully reduced pain and/or fear of childbirth. The information gathered from journal articles was summarized narratively and organized into categories within the literature review that correlates to the different contextual factors found amongst the studies. The aim of this review was to identify factors that may increase effectiveness of hypnobirthing as an intervention that could guide clinicians in its use and help determine who would be a good candidate for this intervention.

Results

The search conducted utilizing the database of CINAHL presented the following six relevant journal articles:

1. Buran & Aksu (2022) conducted a randomized controlled trial and assessed the effect of hypnobirthing training on pain levels in pregnant women who regularly attended maternity hospital for prenatal examination.
2. Bulez et al. (2020) conducted a quasi-experimental single group pretest and posttest research study. The purpose of this study was to determine what effect hypnobirthing training had on fear, labor pain, and satisfaction regarding birth. The population of this study consisted of 992 pregnant women that applied to Eskisehir State Hospital Gynecology Polyclinic between July 1 and September 1, 2016.
3. Atis & Rathfisch (2018) conducted a single-blinded study investigating the effect of hypnobirthing on birth pain and fear. The study consisted of 60 pregnant women randomly divided into the experimental and control group. The population consisted of women who applied to Adana Maternity and Children's Hospital between 20 and 36 gestation weeks.
4. Safitri et al. (2023) conducted a quasi-experimental study investigating the effect of hypnobirthing on pain intensity in labor women. There were 25 women in each sample that attended Pratama Hadijah Clinic.
5. Uldal et al. (2023) conducted a qualitative study on women's experiences with hypnobirthing. The sample consisted of pregnant women aged 25-36 years old that attended an online hypnobirth class and opted into the research study.
6. Uludag et al. (2023) conducted a qualitative study on the feelings and experiences of Turkish women using hypnobirthing in childbirth.

Literature Review

The Effect Hypnobirthing Had on Pain

Buran & Aksu (2022) the Visual Analog Scale (VAS) was used to measure pain intensity by presenting participants with a 10 cm line with one end of the line representing zero as no pain, and the other end of the line representing ten as pain as bad as it could possibly be. Participants were asked to rate their current level of pain by placing a mark on the line. There was a statistically significant difference between the experimental group and non-experimental group on the use of analgesics during delivery (p = .000). In the experimental group, 3.2% (n = 1) used analgesics and in the control group 45.8% (n = 11) used analgesics.

Bulez et al. (2020) also used the VAS to assess pain and found that there was no statistically significant relationship between the use of hypnobirthing and pain (p = .540). Mean scores were not indicated in this article. However, this study also utilized the Birth Satisfaction Scale-Revised (BSS-R) which assesses satisfaction levels participants had regarding their birthing experience and found that 100% (n = 30) of the women stated hypnobirthing training positively affected their perception of pain and 13.3% (n = 4) said their pain was physically decreased. Although the actual level of pain experienced was not decreased, the use of hypnosis was able to alter the perceptual experience of pain.

Atis & Rathfisch (2018) found a statistically significant difference in pain scores according to the VAS scores in all phases of birth (latent phase, active phase, transition phase) between the experimental and control group (p = .000). Mean scores were not included in this article. However, this shows that hypnobirthing was an effective intervention for pain reduction in labor in this article.

Safitri et al. (2023) reported pain scores by using a pain scale between the experimental and control group and found significant differences. 72% of the experimental group (n = 18) reported middle pain, and 20% of the experimental group reported moderate pain. As for the control group, 40% reported moderate pain (n = 10) and 60% reported severe pain (n = 15). Overall, the studies reported differences in pain with the use of hypnobirthing.

The Effect Hypnobirthing Had on Fear

Buran & Aksu (2022) utilized the Wijma Delivery Expectancy/Experience Questionnaire (W-DEQ-A) to assess fear of childbirth before hypnobirthing training took place and the W-DEQ-B to assess fear of women after delivery. In the experimental group before hypnobirthing training took place, 55% of participants rated their fear level as moderate (n = 22) and 30% (n = 12) rated their fear level as severe. There was not a statistically significant difference between the experimental and control groups of fear before the intervention according to the W-DEQ-A (p = .63). However, there was a statistically significant difference between the scores of the experimental and control groups according to the W-DEQ-B (p < .001). According to the W-DEQ-B, after delivery, 90.3% of participants in the experimental group rated their fear of childbirth to be (n = 28) mild, 9.7% of participants (n = 3) rated their fear of childbirth as moderate, and 0% of participants (n = 0) rated their fear of childbirth to be severe. However, in the control group that did not receive hypnobirthing training, 58.3% of participants (n = 14) rated their fear of childbirth to be moderate and 33.4% of participants (n = 8) rated their fear of childbirth to be severe.

Atis & Ratfisch (2018) utilized the W-DEQ-A and W-DEQ-A to assess fear of childbirth in relation to hypnobirthing training. They found a statistically significant difference in pain

comparing scores before hypnobirthing training and scores after hypnobirthing training (p = .002). 96.7% of women that participated in hypnobirthing also reported that hypnobirthing helped relaxation and 76.7% reported that it gave them peace and confidence.

Uldal et al. (2023) reported qualitatively on the women's responses to hypnobirthing and how it impacted their fear. The main discussions and points made were that because they learned so many techniques to get through the process of childbirth as well as the physiological process, they had less fear. For example, one participant of the study stated, "So I think that's what actually helped me the most. Precisely that… the knowledge about how the body works and which hormones are produced, and how we help the body, in a way. So I was always a bit, sort of, trying to play along with my body and that sort of thing" (p. 3).

Uludag et al. (2023) discussed qualitatively their findings regarding the effect hypnobirthing had on fear. The participants reported in interviews that it increased their preparedness for childbirth and thus decreased their fears. One participant stated, "I have gotten rid of all my fears resulting from films I have watched and all my fears I have had since my childhood because I found out that all are based on fallacies" (p. 346). Overall, the studies reported reduced fear with the use of hypnobirthing.

The Effect Hypnobirthing Had on Birth Satisfaction

Buran & Aksu (2022) used the Birth Satisfaction Survey (BSS-R) to measure birth satisfaction and found a significant difference between the experimental and control groups in terms of the scores for the whole BSS-R ($p < .0001$). 93.5% of participants in the experimental group ($n = 29$) reported a high level of satisfaction while only 13% of participants in the control group ($n = 3$) reported a high level of satisfaction.

Bulez et al. (2020) used the BSS-S to measure birth satisfaction scores of women who utilized hypnobirthing. They reported a high rate of satisfaction according to their surveys. Overall, they found a statistically significant difference in birth satisfaction scores ($p = .010$).

Uludag et al. (2023) found a common theme throughout the participants that partook in hypnobirthing: increased satisfaction with childbirth. The participants shared their experiences and positive feelings they had surrounding their birth. One participant said, "If I'm asked to give birth for the third time to experience what I have just had, I never hesitate to say yes" (p. 347). Another participant said, "Now that I have given birth, I feel that I can overcome all difficulties I may come across. I feel as if I was someone else. Incredible power." (p. 347).

Overall, the literature points to the fact that hypnobirthing has the ability to increase birth satisfaction. Based on the data presented as well as experiences from the participants, they felt pleased with their birthing experience. They felt as though hypnobirthing gave them tools to deal with birth in a positive way.

The Effect Hypnobirthing Had on Medical Interventions during Labor

Buran & Aksu (2022) also evaluated medical interventions that occurred during labor and found that 3.2% of participants in the experimental group (n =1) received episiotomy and fundal pressure while 45.8% of participants in the control group (n =11) received episiotomy and fundal pressure. Additionally, there was a statistically significant difference between cesarean section rates between the experimental and control groups ($p = .037$).

Atis & Rathfisch (2018) reported statistically significant differences in intervention at birth using the WDEQ-B questionnaire (p = .000). The interventions the WDEQ-B assessed for

included episiotomy and fundal pressure. They reported that 73.3% (n = 22) of the experimental group received episiotomy, while only 50% (n = 15) of participants in the control group received episiotomy and fundal pressure.

Uldal et al. (2023) discusses how hypnobirthing impacted women's birth satisfaction, even when their births did not have the outcome the participants desired. For example, one participant took hypnobirthing classes with the desire to have a successful natural birth. Due to unforeseen circumstances, the participant was rushed to have an emergency cesarean section. In her interview for the study after delivery, she stated, "... but I got through the birth that I had in a way feared the most. And I was left with… Well, as I just said. The best memory of my whole life. Actually." (p. 3). Overall, the studies reported less medical interventions with the use of hypnobirthing.

Limitations

A limitation found in Bulez et al. (2020) is that their study only used a single group for the sample, and that 62.9% of women in the sample were from higher socioeconomic class. This could have affected the results and skewed them as Atis & Rathfisch (2018) also found that women with higher socioeconomic status reported lower levels of fear regarding the birthing process. This could have made them a more receptive candidate to hypnobirthing as an intervention and does not represent a wide variety of the population with different socioeconomic statuses. Other limitations included small sample sizes due to participants being excluded due to cesarean section delivery rather than vaginal delivery. Due to high cesarean section rates at the hospitals, this was common amongst the studies.

Contextual Factors

Comparing characteristics and contextual factors present in the women in the control groups versus the experimental groups, there was a difference in some contextual factors such as income status, education, and marital status. Contextual factors are important to consider as every patient is a unique individual and has different characteristics or demographics that may affect the way they receive care.

Income

Buran & Aksu. (2022) found that in the experimental group, 30% of women had income greater than expenditure, while only 15% of women had income greater than expenditure in the control group. This could potentially insinuate that women with greater disposable income would be more likely to utilize hypnobirthing in their birth plan. Atis & Rathfisch (2018). Atis & Rathfisch (2018) reported a statistically significant difference in income ($p = .004$). In the experimental group, 36.7% of participants reported their economic situation as good, while only 13.3% reported their status as good in the control group. Additionally, no participants reported their economic status as bad in the experimental group, but 26.7% did in the control group. Income is an important factor to consider because hypnobirthing training is not free and is paid for out of pocket by the participants.

Marital Status

Atis. & Rathfisch (2018) found that there was a statistically significant difference in duration of marriage between the experimental group and control group ($p = .045$). In the experimental group, 56.6% of the participants reported their marriage lasting 3 years or over, while only 30% of the participants in the experimental group reported this. Marital status is considered because hypnobirthing training is attended with the pregnant participant as well as

with their support person, usually their spouse. The support person is crucial to the success of hypnobirthing because it provides training to the support person in the best ways they can aid the birthing process and promote pain relief and relaxation in the birthing women (Mongan, 2019).

Education Level

In Atis & Rathfisch (2018) there was a statistically significant difference in education level regarding university attendance ($p = .001$). In the experimental group, 63.3% of participants had attended university, while only 16.7% had attended university in the control group. Atis & Rathfisch (2018) discuss in their study that there was an association between lower education level and increased fear. Because Atis & Rathfisch (2018) had statistically significant differences in contextual factors between the experimental and control group, it could be possible that these factors played a role in increasing the efficacy of the intervention of hypnobirthing. This study reported statistically significant differences in pain and fear as well as statistically significant differences in education level and income status. Having lower education level and income status was correlated with increased fear of birth in this study. On the other end, increased education level and income status was associated with decreased fear of birth in this study. This brings in two main discussions that will be discussed in the following section.

Impact on Efficacy

Considering the data presented, there were some differences in the contextual factors and demographic variables of the experimental groups compared to the control groups in some studies. Some of those differences included higher socioeconomic status, higher education level, and marital status. These factors and differences are important to consider when approaching hypnobirthing.

Because of this, it could be argued that if a woman has a higher education level or income status, they may be coming into the birth experience with lower fear surrounding birth, and may have a more positive outcome from the use of hypnobirthing. These factors could aid in hypnobirthing being successful due to increased support in all aspects. Because of these contextual factors, they may be more receptive to hypnobirthing. Conversely, it could also be argued that women with lower education levels may have increased fear of birth, and may benefit from hypnobirthing even more as this technique is meant to reduce fear of birth.

Lastly, it could be proposed that this intervention is not as accessible to those with lower economic status or education level, or that those that belong in those groups are less likely to utilize it. For example, women who have lower economic status are less likely to receive prenatal care to begin with (Kim et al., 2018). Because of this, they may not be aware of hypnobirthing as an intervention. Additionally, hypnobirthing training is elective training that pregnant women can choose to obtain, and they pay out of pocket for it. Someone with lower income may not have the means to pay for such training. Accessibility to hypnobirthing is an important aspect to consider and because of its possible benefits, it is important that clinicians find ways to increase its accessibility to all demographics.

This is an area of growth when it comes to future studies and research on hypnobirthing. These contextual factors should be isolated and analyzed in a way that will not have the ability to skew results. Doing this research could guide clinicians on the implementation of hypnobirthing and provide an individualized approach to its implementation.

Influence on Clinical Practice

Considering how hypnobirthing can be used in modern clinical practice, there are many ways clinicians can utilize hypnobirthing techniques to promote positive outcomes.

Hypnobirthing consists of deep breathing exercises, positive language, and guided imagery (Buran & Aksu, 2022). In the studies reviewed, hypnobirthing training was given in the antepartum period when women were still pregnant to prepare them for childbirth. In outpatient settings, obstetric doctors could use appointments to inform and educate their patients on the hypnobirthing techniques, and refer them to local classes in their area if they would like to participate. This would increase awareness and accessibility of hypnobirthing.

Additionally, techniques of hypnobirthing could be applied by both nurses and doctors in the hospital setting. Nurses and doctors could screen their patients for levels of fear when they are being admitted to labor and delivery units to give birth. This would give the clinician information surrounding the patient as well as what interventions they may benefit from. The clinician could then use hypnobirthing techniques to decrease the patient's fear if they are receptive to this. They could do so by walking the patient through deep breathing exercises, educating the patient on the normal physiology of labor and birth, as well as giving them positive affirmations. Additionally, these same techniques could be applied to help with pain management. Even if a patient is receiving pharmacological pain relief, introducing non pharmacological interventions such as the deep breathing and guided imagery, could further enhance the patients pain relief.

Conclusion

In conclusion, it was found in the literature that hypnobirthing reduced pain, reduced fear, and improved birth satisfaction. Pain scores were significantly reduced in the experimental groups compared to the control groups. Examining questionnaires of the studies, there were statistically significant differences in levels of fear between the experimental and control groups as well. Finally, the studies presented both quantitative data via questionnaires as well as

quantitative data via interviews that stated the women had pleasant experiences using hypnobirthing and had higher birth satisfaction. The purpose of this study was to identify and present what studies exist on hypnobirthing from the last five years (2018-2023) as well as the effect hypnobirthing had on pain, fear, and birth satisfaction, and what contextual factors may increase the effectiveness of hypnobirthing as an intervention.

Overall considering the literature reviewed, hypnobirthing could have many benefits if applied to the clinical setting. As one participant said in Uldal et al. (2023), "... I think it's very sad that this is… labeled as an alternative. I think it's the way we should go, all of us, really. To a bit more away from assembly line births, and back to the idea that this is what you are born to do, this is what women can do" (p. 4). Instead of hypnobirthing being considered a complete alternative way to approach birth, its techniques could be implemented into traditional clinical practice to enhance pain management, birth satisfaction, and fear reduction.

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