# Authoritative Knowledge in the Modern American Birth Setting

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**Abstract:**

In Brigitte Jordan's *Birth in Four Cultures*, Jordan explores birth systems and birth ecologies across different cultural settings. Within *Birth in Four Cultures*, it is notable that the United States is documented as the most medicalized setting of birth; the experience of birth in the United States is heavily influenced by western science, technology, and authoritative knowledge. Jordan's documentation of the birthing experience in the United States is sequenced by a model of authoritative knowledge in the birth setting, where Jordan identifies the different knowledge systems that influence decision making during birth. This study seeks to assess and confirm Jordan's model of authoritative knowledge by examining 17 transcribed qualitative interviews and categorizing the documented experiences using Jordan's model. The transcripts were uploaded to Software for Qualitative and Mixed Methods Research (MAXQDA) and coded line-by-line for various themes in pregnancy and birth. The findings of this study confirm Jordan's model of authoritative knowledge in United States births.

Keywords: Authoritative Knowledge; Birth; Birth Complications; Birth Intervention; Decision Making; Fetal Health; Health Communication; Health Knowledge; Maternal Health; Pregnancy; Technology

**Introduction:**

As births in the United States become more medicalized, it is evident that a combination of authoritative knowledge and advanced technology assumes the dominant role throughout the mother's pregnancy and in the labor room. The United States has faced a significant amount of changes regarding the ecology of birth. Advancements made in technology and medical science have replaced the traditional approach to birth. Also, the United States has faced a vast

redefinition of the cultural meaning of birth. Whereas birth was traditionally centered around the pregnant mother and other trusted women, a physician's knowledge combined with available technology has now assumed the central role throughout the woman's pregnancy and birth. It is often argued that birth in the United States has evolved to be very pathological, meaning that birth is seen as something that should be treated. As perspectives towards birth become more pathological, it is more commonly seen that authoritative knowledge and technology replace a pregnant mother's natural and bodily instincts.

A pregnant mother must make a multitude of decisions throughout her pregnancy. At the time that the pregnant mother finds out that she is pregnant, multiple knowledge structures and systems affect the decisions that will influence her antepartum, intrapartum, and postpartum experiences. The pregnant mother is immediately faced with a myriad of decisions including where she should give birth (hospital/birth setting), how she should give birth (birth position/methods), whom she wants at her birth (birth attendance), and what kind of interventions she would like during her birth. Preparation for pregnancy and birth is often met with overlapping systems of knowledge. The pregnant mother must take into consideration her preexisting knowledge about pregnancy and birth, any sources of health communication that she can access, and any other forms of knowledge through trusted individuals in the pregnant mother's support circle. As a pregnant mother gets closer to birth, the overlapping knowledge systems gradually become hierarchical. In the labor room, it is common that the progression of the pregnant mother's birth becomes more dependent on the available technology and the attending physician.

Labor rooms in the United States are commonly equipped with a large number of devices, including fetal monitors, ultrasonography machines, and blood pressure monitors. These devices are used to assess the progression of the pregnant mother's labor and are the driving factor behind the physician's decisions throughout the labor process. Physicians are also a significant element in the United States' modern labor ecology on the basis that their knowledge serves as the determining factor for what decisions and interventions are employed during the labor process. Because physicians have the last say in the decisions made throughout pregnancy and birth, it is conclusive that they serve as the source of authoritative knowledge. The culture and definition of birth in the United States are vastly dominated by the combination of technology and authoritative knowledge.

Brigitte Jordan's model of authoritative knowledge is heavily applicable to modern-day technology-dependent births in the United States. Jordan's model employs five elements that map out the ecology of birth: access to technology and the hierarchical distribution of birth, the medical staff as gatekeepers, the status of the woman's knowledge, the role of the physician, and participation structures in the labor room. Jordan's model of authoritative knowledge is used to maintain the argument that less authority and decision-making power is given to the woman during labor, something that is gradually taken away from a pregnant mother as she gets closer to labor in a technology-dependent setting. One of Jordan's most important arguments in her model of authoritative knowledge occurs where she reveals how authoritative knowledge is subconsciously accepted. According to Jordan, "authoritative knowledge is persuasive because it seems natural, reasonable, and consensually constructed. For the same reason, it also carries the possibility of powerful sanctions… people not only accept authoritative knowledge, but are

actively and unselfconsciously engaged in its routine production and reproduction" (Jordan 153). Because authoritative knowledge seems "natural" and "reasonable" and "carries the possibility of powerful sanctions," it is easily maintained in a technology-dependent birth setting. Thus, it is arguable that authoritative knowledge hinders a pregnant mother's ability to actively participate in her birth while giving the physician the utmost access to "powerful sanctions" and the power to influence intrapartum and postpartum decisions and experiences.

This paper will follow Jordan's model of authoritative knowledge to exemplify the role of authoritative knowledge and decision-making in a set of qualitative birth narratives. This research aims to confirm Jordan's model through the analysis of a set of qualitative birth narratives and the demonstration of nuanced experiences as a result of authoritative knowledge. Also, this research aims to encourage dialogue on the seemingly automatic and "unselfconscious" acceptance of authoritative knowledge in the decision-making process.

**Background:**

In the United States, it is very popular for births to be performed in hospitals, attended by physicians, and aided by a myriad of technologies and interventions. 1.6% of births in the United States are considered to be "out of hospital births". Out of hospital births include those in birthing centers and home births. (Macdorman, 2018) Certified Nurse-Midwives (CNM) attended 9.1% of US births with 94% of those births took place in hospital settings, 3.2% in "freestanding birth centers", and less than 3% occurring in homes. ( American College of Nurse-Midwives, 2019). Out of US reported births, 31.9% of those are by cesarean section. (CDC, 2018). 10.02% of births are born preterm, or a birth occurring at less than 37 weeks of gestation. (CDC, 2018) Vaginal birth after previous cesarean deliveries (VBAC) are reported to

be 13.3% of all births. (CDC, 2018) 2.5% of births in the US are elective and requested by the mother. (ACOG, 2013) Induction, or the method that "tries to cause labor to begin" before it starts naturally, is performed on around 23% of mothers annually. 41% of mothers state that a healthcare provider attempted an induction. (Childbirth Connection, 2016)

Technology commonly used during labor in the United States includes "ultrasonography, electronic fetal monitoring, pulse oximetry monitoring, and blood pressure screenings." The usage of these technologies has increased exponentially and poses questions about their intentions and necessity. Birthing within the United States uses a "management" system, with physicians using technology during labor that fails to be supported by evidence showing that it is "safest for mother and child". (Sousa and Dreger, 2013). The birthing parent is viewed as a "machine dependent upon technology", where the physician has ultimate authority over the process. Technological routine interventions have become applicable for all birthing parents rather than an individualized approach to each person. SMM, or severe maternal morbidity, has drastically increased in the United States, aided by the necessity of emergency interventions throughout the birth process. The frequency of obstetric interventions is rapidly increasing in comparison to the US's OECD counterparts. Assisted Vaginal Delivery, or birth occurring "with the help of forceps or a vacuum device" happens in 3% of births. Both methods prove to have serious side effects against both mother and baby with

In the last century, the United States has seen a drastic rise in the number of hospital-based and physician-attended births. 89.8% of births were attended by physicians and only .8% attended by midwives. (Stol., et. al, 2018) Beliefs shared amongst parents hold ideas that physician attendance and control over birth reduce the risk of perceived complications.

Because of these norms, the usage of doulas and midwives is uncommon in the birthing environment, unlike other OECD nations which have a midwifery usage for 50-75% of births. (Stol., et. al 2018) .

With the significant occurrence of hospital-based and physician-attended births in the United States, it is evident that authoritative knowledge has become the driving factor for decisions made throughout one's pregnancy. Jordan's model shows how authoritative knowledge has been dispersed systemically throughout healthcare practitioners with the "central participant, the woman in labor" wholly excluded. (Jordan 166). Movements and motions of birth are reserved for a physician to "authorize", eliminating the woman's natural process. (Jordan 167) An experience meant to capitalize on a woman's innate response becomes a part of the "coaching of medical staff", leading to a fully mechanized birth process. (Jordan 167)

**Methods:**

The rationale for this article was derived from a set of 17 transcribed qualitative interviews along with preexisting peer-reviewed literature detailing authoritative knowledge in different birth settings. The set of qualitative interviews asked interviewees to describe their pregnancy and birth experiences. Many of the interviewees spoke of their antepartum and intrapartum experiences, detailing their attitudes towards birth and their experiences with birth planning. Also, the qualitative interviews captured the role of attending medical staff, the impact of medication and birth interventions, and the ecology of decision-making in the labor room. The student-led research team uploaded the transcripts into Software for Qualitative and Mixed Methods Research (MAXQDA) and assigned line-by-line codewords (codes) for specific

elements in the birth process. The list of codes includes “birth attendants,” “birth preparation,” “decision-making,” “birth position,” “hospital setting,” “birth interventions,” “complications,” “health knowledge,” “health communication,” and “technology.” This article was written to confirm Brigitte Jordan’s model of authoritative knowledge using the set of transcripts and peer-reviewed literature.

**Findings:**

In Brigitte Jordan’s model, entitled “The Achievement of Authoritative Knowledge in an American Hospital birth, Jordan outlines five elements that encompass authoritative knowledge. As written, these elements are “Access to Technology and the Hierarchical Distribution of Knowledge,” “The Medical Staff as Gatekeepers,” “The Status of the Woman’s Knowledge,” “Staging the Physician’s Performance,” and “Participation Structures in the Labor Room.” each of these elements were used to analyze themes within the transcripts and existing peer-reviewed literature.

Within “Access to Technology and the Hierarchical Distribution of Knowledge,” Jordan mentions how “modern obstetric environments are full of technologies of different kinds, and women who have gone through prenatal medical care have become familiar with a great deal of it during their pregnancy” (Jordan 158). Jordan continues this thought by saying that “despite such exposure to obstetric technology, it appears that the woman (whom one might consider as the central actor) is inert concerning the technologies salient in the setting. None of them are ordered, operated, or interpreted by her" (Jordan 158). Jordan also points out that technology holds “symbolic value” and creates “particular kinds of social spaces within which certain activities are more or less possible and more or less likely.” Such symbolic value of technology

is seen throughout the transcribed interviews, where interviewees reported most significantly that their labor rooms were equipped with internal fetal monitors (electric fetal monitors). There is also a significant mention of induced labor within the transcripts. The presence of electric fetal monitors among other technologies in the labor room is pivotal because they are the driving force for decisions made during birth. Such technologies can often result in hastened births and unplanned interventions, thus undermining the pregnant mother's right to participate in her birth.

Within "The Medical Staff as Gatekeepers" and "Staging the Physician's Performance," Jordan discusses how certain processes and decisions in birth are reserved for the physician and how the birth often does not proceed without the physician. Jordan's example of this is seen in how "only the physician can do the vaginal examination on the basis of which the woman will be 'allowed' to push the baby out" despite the other attending staff's ability to do so. Jordan also outlines the physician's "unquestioned status and authority rest." Within the set of coded transcripts, interviewees mentioned the amount of trust placed in their physicians and the importance of having their physicians attend their birth and deliver their babies.

Within "The Status of the Woman's Knowledge" and "Participation Structures in the Labor Room," Jordan navigates the diminished role of the woman's knowledge during her labor. Jordan argues that in a technology-dependent birth setting, "there coexist two versions of reality, two alternative claims to relative knowledge… [the woman's] version of reality is overridden, is ignored, is denied, or, most frequently is side-tracked, deflected, and replaced with some other definition of reality." Jordan also elaborates further on the "unquestioned status" of the physician and how the physician becomes the "focal member" of the woman's birth. According to Jordan, knowledge in the labor room is "communicated downward along a hierarchical structure of

which the woman is the most distal member." When the woman is the most distal member in the hierarchical structure of labor, her knowledge holds much less weight than that of the physician. Within the set of coded transcripts, interviewees mention things like not being let out of their hospital beds to use the restroom, denied their right to walk during labor, and being told to remain in certain positions so that the labor can progress.

**Discussion:**

As outlined in Jordan's model and throughout the set of coded transcripts, the social and technological implications of pregnancy and labor are what make authoritative knowledge successful in the American hospital-based birth. The study conducted confirms that the experiences documented within the transcripts strongly align with the elements defined in Jordan's model. Difficulties in decision making, inconsistencies in health communication, and overdependence on technological intervention are widely exhibited throughout the experiences in the transcripts and Jordan's model. A larger data set would significantly improve this confirmation of Jordan's model, along with further exploration of the implications that authoritative systems of knowledge have on birthing experiences and outcomes within the United States. This study seeks to add to the pool of literature regarding authoritative knowledge in the birth setting.

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