

## **Des contractions de Braxton-Hicks à l'accouchement prématuré : la constitution du risque pendant la grossesse**

**Karen MacKinnon et Marjorie McIntyre**

L'introduction récente de programmes de prévention des accouchements prématurés a modifié notre perception du phénomène des contractions survenant pendant la grossesse. Elle a aussi donné lieu, en matière de reconstitution des risques, à une approche qui tend à faire augmenter le nombre de femmes considérées à risque d'accouchement prématuré. Cet article présente les résultats d'une ethnographie institutionnelle menée dans le but d'analyser l'influence des discours sur le risque sur l'expérience des femmes qui accouchent prématurément. L'étude visait notamment à décrire l'effet des discours sociaux, des structures institutionnelles et des interventions infirmières sur la vie quotidienne de ces femmes. Les discours sur le risque exercent un contrôle social sur les femmes enceintes, selon les auteures. En effet, ils alimentent la crainte et la culpabilité, l'impression d'être jugée ou punie et le sentiment d'être personnellement investie de la responsabilité de prévenir un accouchement prématuré. L'étude fait aussi ressortir l'influence des constructions biomédicales du risque et de l'accouchement prématuré sur l'organisation des services de santé, dont la prestation des soins infirmiers.

Mots clés : risque, accouchement prématuré, discours social, ethnographie institutionnelle

# From Braxton Hicks to Preterm Labour: The Constitution of Risk in Pregnancy

**Karen MacKinnon and Marjorie McIntyre**

With the recent introduction of preterm birth prevention programs there has been a shift in our understanding of what the presence of contractions during pregnancy means and a reconstituting of risk in ways that position increasing numbers of women at risk for preterm birth. This paper highlights the findings of a study exploring the influences of risk discourses on women's experiences of preterm labour. The primary goals of this institutional ethnographic study were to describe the effects of societal discourses, institutional structures, and nursing work processes on the everyday lives of childbearing women experiencing preterm labour. The findings suggest that risk discourses exert social control over pregnant women and result in fear, guilt, feelings of being judged or punished, and an overwhelming sense of personal responsibility for preventing preterm birth. The study also exposes ways in which biomedical constructions of risk and preterm labour affect the organization of health services, including nursing practice.

**Keywords:** risk, preterm labour, discourse, disciplining effects, institutional ethnography

The uterus is able to stretch in this way because progesterone encourages relaxation of smooth muscle but even at 8 weeks gestation the uterus begins to generate small waves of contraction known as Braxton Hicks contractions. These are usually painless although some women do experience pain. Braxton Hicks contractions last approximately 60 seconds, continue throughout pregnancy and later change in intensity eventually becoming the contractions of labour. (Thomson [in *Myles Textbook for Midwives*, 11th ed.], 1989, p. 91)

Approximately 6 years ago an advertising campaign was launched in several Canadian cities as part of a national preterm birth prevention program. The campaign was designed to teach pregnant women about the risks of preterm labour and birth. Some professionals questioned this move, fearing it would “medicalize” yet another aspect of women's childbearing experience. Feminist scholars have also challenged the biomedical thinking behind such programs (Davis-Floyd, 1992; Jordan, 1997; Katz Rothman, 2000), expressing concern that all pregnant women will

be considered “at risk” for preterm birth. In fact there has been a significant shift in our understanding of what the presence of contractions during pregnancy means. In the past, contractions during pregnancy were referred to as Braxton Hicks contractions and were considered a normal part of the childbearing experience. But what was once thought of as a minor complaint is now seen as a condition to be managed. Women are being asked to report uterine contractions, as these are being interpreted as a symptom of preterm labour. More women are reporting symptoms of preterm labour to their care providers or presenting themselves at a hospital for assessment and treatment. However, preterm labour is an uncertain diagnosis (Stevens-Simon & Orleans, 1999) based on ambiguous symptoms (Weiss, Saks, & Harris, 2002) for which there is little effective treatment (Enkin et al., 2000). Medical treatment, such as bedrest, for preterm labour has not been shown to reduce the risk of preterm birth (Goldenberg & Rouse, 1998) and the “stubborn challenge of preterm birth” remains (Lumley, 2003).

### **Background**

When health professionals assess pregnant women they are usually looking for risk factors or risks that have been isolated as “significant” through medical science. For example, women who experience preterm labour are “at risk” for preterm birth. The list of more than 35 identified risk factors for preterm labour includes behavioural factors (such as smoking), demographics (such as age), reproductive pathologies, medical disorders, psychosocial factors (such as stress), and environmental factors (such as job-related exposures and poverty) (Maloni, 2000). Women are then classified as “low risk,” “high risk,” or “at risk,” and this classification predetermines, in some very interesting ways, how health professionals treat women. Health professionals conduct risk assessments, risk classification, risk prevention, and even risk management.

The term risk as it is used in obstetrics is understood as a technical term representing the probability of a poor obstetrical outcome. The medical use of the term is tied up with scientific understandings about measurement and progressive science. Risk can be understood as something measurable, predictable, and manageable. The related discourses of legal risk, risk management, and institutional safety are important for understanding the context of maternity care in Canada today. Elizabeth Cartwright and Jan Thomas (2001) suggest that child-birth has always been dangerous but that when it moved into the hospital setting the “danger was transformed into biomedically constructed and sanctioned notions of risk” (p. 218). This new biomedical understanding of risk requires that women be monitored by professionals and suggests

that risks can be controlled by medical interventions. Birthing women who resist the medicalization of pregnancy and childbirth are considered a risk to their unborn baby and in many situations coerced into complying with medical recommendations for the sake of their baby.

According to Cartwright and Thomas (2001), in the complex, highly technological hospital environment, fears and feelings of risk or vulnerability have frequently resulted in the creation of hospital rituals and protocol, even in the absence of sound evidence to support their use. In North America, providers of maternity care practise in a climate of risk and under the threat of malpractice litigation. Annandale (1996) describes the palpable presence of risk experienced by those who work in perinatal settings: “Risk surrounds practice, it is in the background, there in an atmosphere, it is always there” (p. 420).

### **Literature Review**

In obstetrics the concept of “preterm labour” was developed to support diagnostic reasoning. A variety of “symptoms,” such as uterine contractions, in pregnant women are diagnosed as if the woman has a disease that predates the outcome of preterm birth (defined as birth before the 37th week of pregnancy). The biomedical literature is, then, concerned with the diagnosis and treatment of preterm labour and the search for underlying biological or pathological causes. As with other diseases, the diagnosis of preterm labour is the result of a rational decision-making process that is learned by physicians during their socialization to medicine (Good, 1994; Kleinman, 1995). In the sociological and anthropological literature this process is defined as “biomedical rationality” (Good; Kleinman, Das, & Lock, 1996).

Biomedical rationality includes the mental transformation of people into patients and ultimately into cases — the objects of biomedical care. It also entails the search for biological causes of disease, the diagnosis or reframing of subjective experiences of illness into symptoms and signs that can be measured, and prescribed treatment based on objective scientific evidence. Biomedical rationality is effective for medical emergencies and single-cause acute illnesses such as infections. It is less effective for persons with chronic illness or disability, and it underestimates the self-healing capacities of individuals and the influence of their environment. In addition, biomedical rationality excludes subjective experiences of health and illness (Kleinman, 1995). The literature on biomedical rationality explicates biomedical assumptions about health and illness (disease is something whose diagnosis requires observable pathology) and questions the limits of biomedical knowledge and progressive science.

In epidemiology, preterm labour is conceptualized as the prevention of preterm birth through the identification of “risk factors.” Epidemiologic research is based on large population studies using probability statistics to identify associations between variables (Lumley, 2003). Historically, epidemiologists studied the relationships among individual (or host) factors, the agent (or disease), and the environment (Gordis, 2000). Risk factors for preterm labour and birth have been described as either “modifiable” (related to a number of social or lifestyle factors) or “non-modifiable” (related to pre-existing medical conditions or demographic characteristics) (Stewart, 1998). Medical risk factors for preterm labour and birth include having a previous preterm birth, a history of two or more second-trimester abortions, abnormalities of the uterus or cervix, and multiple pregnancy (Adams, Elam-Evans, Hoyt, & Gilbertz, 2000; Iams et al., 1998).

Using a population approach, Heaman, Sprague, and Stewart (2001) found that programs targeting high-risk women have been ineffective in preventing preterm birth. These authors recommend the development of a more comprehensive model based on the five determinants of health: social and economic environment, physical environment, personal health practices, individual capacity and coping skills, and health services.

The likelihood of a preterm birth occurring can be determined by means of a number of interacting “risk factors.” From an epidemiologic perspective, it is not possible, during the current pregnancy, to change most medical risk factors (such as previous preterm birth) or demographic risk factors (such as maternal age or socio-economic status). Although a comprehensive population health approach would also suggest the need for strategies targeting whole communities or populations, most of the research has recommended targeting “lifestyle behaviours” and “psychosocial factors” that can be changed during pregnancy (Heaman, 2001).

Most of the research underpinning current preterm birth prevention programs is shaped by individualized understandings of biomedical risk. The difficulty with individualizing risk is that it negates social and political effects of biomedical and epidemiological conceptualization on the lives of childbearing women and their families. Biomedical rationality and epidemiology are, then, intimately tied up with discourses of risk, responsibility, and blame (Douglas, 1992). Individuals are held morally responsible for lifestyle choices that result in disease. Discourses of risk can also construct women and families as responsible for the outcomes of childbearing (Cartwright & Thomas, 2001).

Pregnancy texts prepared for women tend to support similar understandings of pregnancy and its accompanying risks. Harriette Marshall and Anne Woollett (2000) examined eight popular pregnancy texts in the

United Kingdom and found them to construct the pregnant body as different and isolated from the woman's previous body knowledge and pregnancy as distinct from the woman's history and experiences. Marshall and Woollett report that the texts characterize the risks and dangers facing women as numerous but that they give little attention to the risks posed by medical screening and intervention. They conclude that the texts "often fail to engage with diversity in women's experiences in reproduction and the varied circumstances of women's lives" (p. 366) and reproduce biomedical understandings of pregnancy.

### **The Disciplining Effects of Pregnancy Risk Discourses**

As the practice of medical obstetrics has developed, so too have the discourses surrounding obstetrics. Discourses constitute new objects, such as obstetrical risk. They also produce subjects (Foucault, 1972). When pregnancy and childbearing are spoken of as "risky," women and health-care providers are constituted in certain ways. Risk opens up a world of relations in which childbearing women are patients:

There has been and continues to be confusion within obstetrics about risk and its meanings. Often obstetrics has stated with great authority that risk of serious illness and death can be defined precisely, a position that by definition should also entail pinpointing those women not at risk. But just as often and sometimes simultaneously to this first position, obstetrics states that every woman is at risk, an argument which is advanced with the rider that all women must give birth within specialist obstetric units because of the unpredictability of risk. What is more important about these incongruous and disparate lines of argument is the notion of risk itself and the extent to which this has saturated the thinking around childbirth. (Murphy-Lawless, 1998, p. 190)

Risk has also become associated with the need for hospitalization and obstetrical intervention. New and improved technologies and obstetrical interventions have come to mean reduced risks and decreased mortality and morbidity for both mother and child (Murphy-Lawless, 1998). Women, it seems, have had to be convinced that the dangers seen and measured by technology are real. Women who believe that childbirth is a normal, healthy process and challenge medical authority are labelled difficult and are sometimes forced to sign themselves out of hospital against medical advice (Cartwright & Thomas, 2001). The notion of risk is based not on the reality of dangers but rather on how these dangers are politicized (Douglas, 1992).

Anne Queniert (1992) studied the childbearing experiences of healthy women using grounded theory interviews with 48 women in Montreal, Quebec, during their first pregnancy. The women's stories were

characterized by acute insecurity. The women felt guilty and were very concerned that their baby would not be normal. They also lacked knowledge about where danger starts and stops. Queniart points out that technology and biomedical research tend to discover more and more risks and to label as risky what used to be considered normal. She also documents the increasing social control of women for the sake of the baby.

The present study was born out of a concern about a shift in our understanding of the meaning of contractions during pregnancy and about the reconstituting of risk in ways that position increasing numbers of women at risk for preterm birth. There was a need to examine the effects of societal discourses, institutional structures, and nursing work processes on the lives of childbearing women, in order to develop a more complex understanding of how women's experiences of preterm labour are organized and to provide a basis for improved health services.

The investigation was guided by three questions: 1. *How do pregnant women experience preterm labour?* 2. *How do women who experience preterm labour describe their everyday work in caring for themselves, their unborn baby, and their family?* 3. *How are the experiences of these women affected by societal discourses, institutional structures, and nursing work processes?*

## Methods

The methodology underpinning the study was institutional ethnography (Smith, 1987, 1999), a transformative approach to inquiry that reveals the "ideological and social processes that produce experiences of subordination" (DeVault & McCoy, 2002, p. 754). In conceptualizing institutional ethnography, Dorothy Smith (1987) describes a "problematic" as a place to begin investigation and as a sense that something troublesome, interesting, and worthy of study is taking place. Smith uses the concept of problematic to "direct attention to a possible set of questions that may not have been posed or a set of puzzles that do not yet exist in the form of puzzles but are 'latent' in the actualities of the experienced world" (p. 91). The title of this paper, "From Braxton Hicks to Preterm Labour," describes our sense that something troublesome and socially interesting is occurring.

Though the larger study on which this paper draws (MacKinnon, 2005) included an in-depth exploration of the everyday work of pregnant women when caring for themselves, their unborn baby, and their family, the paper focuses on the discourses that influenced women's understanding of their preterm labour experiences as well as the effects of these discourses on professional nursing practice. Smith (1987) iden-

tifies the *socially organized* character of everyday life and proposes that discourse is the organizer of experience.

In this paper, discourses (such as risk) can be understood as sociocultural concepts that are circulated through talk, texts, media images, and the like. Institutional ethnography attempts to disrupt abstract conceptualizations of discourse by focusing on how they are taken up and enacted in particular social situations. "It is a method of inquiry that works from the actualities of people's everyday lives and experience to discover the social as it extends beyond experience" (Smith, 2005, p. 10). Institutional ethnography is concerned with the social organization of experience and the effects of discourse on everyday life. "The aim is not to explain people's behaviour but to be able to explain to them/ourselves the socially organized powers in which their/our lives are embedded and to which their/our activities contribute" (Smith, 1999, p. 8).

### ***Expert Informants***

***Childbearing women.*** Within the framework of institutional ethnography, participants constitute not a sample but rather a panel of expert informants. The standpoint of childbearing women provides an entry point into the institutional relations that organize their experiences (McCoy, in press). In institutional ethnography, standpoint is understood as a shared or common mode of experience. Eight women who self-identified as having experienced preterm labour were recruited from selected health-care or community organizations in a western Canadian city. These volunteer informants ranged in age from 21 to 36 years and consented to an audiotaped interview conducted within 5 months of their experience of preterm labour. The women's experiences of preterm labour differed as follows: four of the women delivered a preterm baby within 2 weeks of experiencing preterm labour symptoms; the other four first experienced preterm labour symptoms between 24 and 34 weeks into their most recent pregnancy, lived with the "threat" of preterm labour for the rest of the pregnancy, and gave birth to a healthy full-term baby. Two of the women had other small children to care for in the home and several had limited financial and/or family resources.

***Nurses.*** Eighteen nurses working in the obstetrical triage/antepartum units of three hospitals in a western Canadian city agreed to be observed during one shift. The observations took place over 10 shifts as the volunteer nurse informants went about their work interacting with childbearing women and their families and with other health-care providers. Although the focus of the observations was nursing work, verbal consent was obtained from all the people with whom the nurses interacted.



Seven nurses working in a home-care program for women experiencing pregnancy complications were recruited to participate in a focus group. Following analysis of the preliminary interviews and informant observation, three managers and two community health nurses were identified and approached directly by the researcher for their consent to participate in an audiotaped face-to-face or telephone interview. This final recruitment included nurses working in other home-care programs for childbearing women; these nurses were selected for their ability to provide further information regarding the institutional factors that shape nursing practices.

### ***Procedure***

All interviews were conducted by one investigator, who listened carefully for traces of societal discourse and references to institutional texts and/or work processes in the women's accounts of their preterm labour experiences. The interview began with the woman being asked to describe how she first suspected she might be experiencing preterm labour. Next she was asked to describe her experiences with regard to the hospital and/or medical treatment. These accounts were usually constructed chronologically, sometimes with reference to other events that were significant in the woman's life. The women also described their interactions with health-care providers and any difficulties they encountered as a result of their medical treatment. In addition, texts developed for pregnant women and for preterm prevention programs in Canada were examined.

### ***Analysis***

The goal of analysis, in keeping with institutional ethnography, was to make visible *as social relations* the complex practices that coordinate the actions of women, nurses, and other health-care providers across space and time (Campbell & Gregor, 2002). The first author spent long periods immersed in the data in order to identify traces of social organization that might have implications for nursing practice. This approach to data analysis entails looking for patterns in the data, focusing on textually mediated discourse, and determining how discourses such as our current understandings about risk are organized to recur. Analysis of the women's transcripts included identifying and describing the complexity of the women's experiences and their work within the family, listening for traces of social organization in their talk, and determining how their experiences intersected with those of the nurses and other health-care providers they encountered. An example of social organization found in the women's transcripts was reference to a handout on preterm labour prepared for a local preterm birth prevention program. Observation in

the hospital setting helped to identify the key texts mediating the interactions between the women and health-care providers. Further analysis of these texts revealed how risk functioned in the hospital setting. Preliminary analysis of interviews and field notes served to identify a number of areas for further investigation and analysis, such as what home-support services were being provided.

### **Findings**

This paper focuses on the intersection between the discourses of “risk” and the women’s accounts of their preterm labour experiences. In the analysis the researchers traced the ways in which the women were drawn into the risk discourse, the influence of this discourse on the women’s experience/understandings of preterm labour, and ultimately the effects of the risk discourse on the professional practice of hospital and home-care nurses.

#### ***Drawing Women into the Risk Discourse***

Many women learn about the risk of preterm labour through books written for pregnant women and materials prepared for preterm birth prevention programs. Many texts developed for such programs in Canada ask women to monitor their bodies for “symptoms” of preterm labour without reference to the context of their lives. Careful examination of a text prepared for one program revealed that it assigned the woman responsibility for avoiding pregnancy risks (including some beyond her control), for engaging in self-surveillance to identify early signs of preterm labour, and for presenting herself to medical authorities for early diagnosis and treatment (MacKinnon & McCoy, in press). The text provided some very general pregnancy advice not directly related to preterm labour and omitted information that may have been helpful, such as that on occupational stressors. Employers were not drawn into or held accountable in the risk discourse, which was highly individualized and focused on the responsibilities and self-surveillance work of pregnant women.

#### ***Taking Up the Risk Discourse***

Traces of the risk discourse were apparent in the profound sense of personal responsibility for preventing preterm birth that was expressed by each of the women. Even more troubling, the women who had given birth early felt that they had failed in the work of “keeping the baby in” and that they were being judged:

*There’s definitely a stigma [to having a preterm baby], and I began to see it when I started running into my coworkers, and that was the most*

*difficult part... I was just thinking, so here we go, this is a black mark against me...you know, that I didn't have a normal pregnancy. [Khanya]*

Khanya went on to say that preterm birth is seen as “the mom’s fault.”

The four informants who had given birth early, even those who had diligently avoided all the listed risk factors, spoke about the “shame” of preterm birth. Eve, for example, could not understand why she had a preterm baby when she “did everything right” and “never took an aspirin.” She described the “other women” who had delivered prematurely as the “kind of people they expect to be here.” These “other women” included a prostitute who took drugs during her pregnancy and a young woman who did not eat “properly” because she was “under-privileged.”

The women gave numerous examples of messages linking preterm labour to poor lifestyle or behaviour. Educational materials provided to them stressed that all pregnant women are at risk for preterm birth and should monitor and report symptoms promptly. They highlighted “lifestyle choices” such as avoiding smoking, drinking, and taking drugs, thereby emphasizing the woman’s responsibility for reducing the risk of preterm birth. The result of these individualizing risk discourses is the creation of categories of “good” mothers and “other” mothers (those who do a poor job of caring for their unborn babies).

Vicki, who had experienced preterm labour and birth in two previous pregnancies, expressed fear and guilt for “cheating” with regard to prescribed bedrest. Vicki was the primary breadwinner in her family and was caring for her two preschool children. Vicki’s talk about her experiences shows how discourses of risk were taken up and used by her family members:

*My mother-in-law...believes strongly...and I try not to put too much guilt on myself, but she believes that I was much too busy and much too active... And so I felt like...I was being blamed, and of course it's her son who's in school and it's affecting his life...so it turned out to be a bit of an issue.*

The discourse on risk for preterm labour suggests that Vicki was at high risk for recurrence of preterm birth and would direct Vicki to limit her activities. However, the context of Vicki’s life and her work within the family is invisible (and irrelevant) in biomedical constructions of risk for preterm labour. Individual risk discourses intersected with economic and social discourses in ways that forced the women to carry the burden of responsibility for preterm birth prevention and for the work of managing their household along with the health work for preterm labour (MacKinnon, 2005).

### ***Risk and Nursing Practice***

Obstetrical triage consisted largely of the repetitive assessment of “risk factors” and the completion of institutional forms and procedures. Perhaps the most striking feature of the interactions observed in triage was the posing of the same questions again and again by a variety of health-care workers. Women were repeatedly asked about risks before their pregnancy (such as medical conditions), about risks in their past obstetrical history (such as pregnancy complications), about risks during their current pregnancy (such as hospitalizations), and about risks seen as relevant to their presenting concern (such as leaking fluid). Both the nurses and the childbearing women observed in triage expressed frustration with having to ask and answer the same questions over and over. This repeated assessment of risk factors served to underscore (for both the woman and the health-care provider) the seriousness of the woman’s situation, increasing her likelihood of complying with the treatment plan. It also served to keep the focus on risk and the pregnancy, rendering invisible the woman’s life, work, and social circumstances.

### ***Teaching and Disciplining Women***

The identification of risk factors creates an opening for physicians and nurses to give medical advice to pregnant women. Nurses working in the hospital setting were actively involved in teaching women to be diligent with self-surveillance and were observed to chastise women whose behaviours did not reflect the nurses’ understanding of pregnancy risks. One woman (26 weeks pregnant) who presented at triage for assessment told the nurse that she had slipped on the stairs the day before, after which she had leaked “a lot” of clear fluid. Although the nurse was considerate in her interactions with the woman, she gave her a very clear message that she should have come in for assessment the previous day. She later explained to the researcher that since this was the woman’s third baby “she ought to know better,” inferring that Canadian women are expected to know about the “risks” of leaking clear fluid. The woman later told the researcher that she had a 3-year-old and a 14-month-old at home and had not had a chance to “look up leaking in the book” until the evening when the children were in bed. She explained that she had to arrange for her elderly parents to care for her children so that she could come to triage “to be checked, just in case.” None of this family contextual information was entered in the triage record. The triage record was then carefully examined for its work of determining what is or is not considered institutionally actionable (MacKinnon, 2005). The everyday experiences of the woman were rendered invisible by the

predominant risk discourses; they did not enter into her interactions with the nurse and were not recorded in her chart.

### ***The Risk to the Baby***

Because of fetal health surveillance technology (ultrasound and fetal heart rate monitoring, for example), the fetus has an active presence on hospital units. The nurses frequently used the technology to remind women of the risks to the baby. Their reminders took the form of disciplining, shaping the behaviour of the women in order to make them “good mothers.” Some nurses were clearly disapproving of behaviours that posed a “risk” to the baby, such as taking analgesics for pain or requesting a pass to leave the hospital in order to deal with family concerns. One nurse said, “We don’t take any chances where babies are concerned.” Clearly, the nurses believed that, with pregnancy, there is no acceptable level of risk. Their understanding of risk did not reflect the women’s concerns about the risks that hospitalization and medical treatment posed to their family members, particularly their other children. The fear and uncertainty of the preterm labour experience (Berardelli, 1994; Maloni, 2000) also helped to establish the women’s subordinate position in their interactions with nurses and physicians.

### ***The Risk of Going Home***

The childbearing women reported that they were fearful upon returning home from the hospital and that they felt alone with the burden of responsibility for preventing preterm birth. Although individual nurses working in the community-based prenatal home-care program did engage in some creative acts of resistance, their work was shaped by the discourse of risk, which accentuated their surveillance and disciplinary role. The lack of sufficient community resources and biomedical constructions of preterm labour contributed to the development of strict admission and discharge criteria. Eligibility criteria for community programs functioned as “institutional gatekeepers,” displacing the local knowledge of physicians, nurses, and the women themselves.

## **Discussion**

One of the goals of this study was to trace the organization of women’s experiences and of nursing practices across space and time through discourses and textually mediated work processes. The findings are necessarily limited to the particular historical and social context explored in one western Canadian city following the introduction of one preterm birth prevention program (MacKinnon, 2005). The social relations identified may be of interest to other researchers concerned with how under-

standings of biomedical risk come to be transmitted across space and time.

In our larger study (MacKinnon, 2005) we also examined the restructuring of maternity services and the ways in which nursing work processes are influenced by business management discourses and an exclusive focus on health-care outcomes. Although at first glance many of these discourses and practices appear neutral, our analysis shows how they function to maintain existing power relations. These objectifying discourses and practices displace local knowledge about the needs of women and families.

Biomedical constructions of risk mask the disjuncture between women's everyday experiences and the need to comply with medical regimens that frequently include the prescription of bedrest. Since women are usually responsible for family care work, it is not surprising that some of the women in the study could not easily drop all of their usual activities and responsibilities for the sake of their unborn baby. Risk discourses served to exert social control over the women, resulting in fear, guilt, a feeling of being judged or punished, and an overwhelming sense of personal responsibility for preventing preterm birth.

Biomedical constructions of risk and preterm labour also affect the organization of health services. The overriding concern with biomedical risk and institutional safety limits nurses' opportunities for sharing the burden of responsibility with childbearing women. Risk discourses intersect with economic and social discourses that locate responsibility for care in the private sphere. The assumption that the family is responsible for care in the home results in a lack of assessment of resources for managing the medical plan on discharge and the lack of resources available to families.

Discourses of legal risk management and institutional safety also affect the work processes of nurses and other health-care providers. They direct the focus and the work of nurses away from caring for women and their families and towards nursing the chart, the unit, and the institution. Biomedical understandings of population health science construct measurable health outcomes as the only valid means of evaluating health services. Preterm birth prevention discourses and an exclusive institutional focus on health outcomes contribute to the public perception of preterm birth as a tragedy. Such societal discourses also affect the work of women who become mothers of preterm babies. What would happen if we shifted our gaze from the outcomes of pregnancy to the celebration of childbearing as a "workful" process? Would we come to value the work performed by these women as they become mothers to the smallest citizens?

### **Nursing Work Processes**

In the hospital setting in particular, nursing work has become increasingly structured by institutional processes of admitting, charting, and discharging patients, with little opportunity for getting to know patients or assessing their needs. Much important nursing work is driven underground, remaining unrecognized and undervalued by health-care institutions. We need to ask what nursing work is left undone when nurses take on more and more institutional work, such as nursing the chart. By shifting our gaze, as nurses, from assessing needs to determining eligibility for services, we are in effect accepting institutional priorities (Gustafson, 2000) and complying with the relations of ruling. Nurses are also affected by management discourses of scarcity, cost-effectiveness, and the importance of measurable outcomes and by practices grounded in decentralized cost accounting (Rankin, 2001). We need to maintain the practice of putting the needs of women and families first and to recognize the embodied work performed by women in preventing preterm birth.

This sustained critique of discourses and practices aimed at preterm birth prevention is not intended to imply that preventing preterm birth is not an important goal. Our analysis has shown that current approaches place the burden on the woman and her family instead of treating it as a joint responsibility of governments, communities, employers, institutions, and health professionals. Awareness of how risk discourses are reproduced in institutional texts and through institutional work processes creates an opening for changes that might more fully acknowledge the everyday realities of women and their families.

### **References**

- Adams, M., Elam-Evans, L., Hoyt, G., & Gilbertz, D. (2000). Rates of and factors associated with recurrence of preterm delivery. *Journal of the American Medical Association*, 283(12), 1591–1596.
- Annandale, E. (1996). Working on the front-line: Risk culture and nursing in the new NHS. *Sociological Review*, 33, 416–451.
- Berardelli, C. M. (1994). *The meaning of being in preterm labor: A hermeneutic inquiry*. Unpublished doctoral dissertation, Adelphi University.
- Campbell, M., & Gregor, F. (2002). *Mapping social relations: A primer in doing institutional ethnography*. Aurora, ON: Garamond.
- Cartwright, E., & Thomas, J. (2001). Constructing risk: Maternity care, law, and malpractice. In R. De Vries, C. Benoit, E. van Teijlingen, & S. Wrede (Eds.), *Birth by design* (pp. 218–228). New York: Routledge.
- Davis-Floyd, R. (1992). *Birth as an American rite of passage*. Berkeley: University of California Press.
- DeVault, M. L., & McCoy, L. (2002). Institutional ethnography: Using interviews to investigate ruling relations. In J. F. Gubrium & J. A. Holstein (Eds.),

- Handbook of interview research: Context and method* (pp. 751–776). Thousand Oaks, CA: Sage.
- Douglas, M. (1992). *Risk and blame: Essays in cultural theory*. New York: Routledge.
- Enkin, M., Keirse, M., Neilson, J., Crowther, C., Duley, L., Hodnett, E., & Hofmeyr, J. (2000). *A guide to effective care in pregnancy and childbirth* (3rd ed.). Toronto: Oxford University Press.
- Foucault, M. (1972). *The archaeology of knowledge* (A. M. Sheridan Smith, Trans.). London: Routledge. (Original work published 1969)
- Goldenberg, R. L., & Rouse, D. J. (1998). Prevention of premature birth. *New England Journal of Medicine*, *339*(5), 313–320.
- Good, B. J. (1994). *Medicine, rationality, and experience: An anthropological perspective*. Cambridge: Cambridge University Press.
- Gordis, L. (2000). *Epidemiology* (2nd ed.). Toronto: W. B. Saunders.
- Gustafson, D. (2000). Introduction: Health care reform and its impact on Canadian women. In D. Gustafson (Ed.), *Care and consequences: The impact of health care reform* (pp. 15–24). Halifax: Fernwood.
- Heaman, M. I. (2001). *Risk factors for spontaneous preterm birth among aboriginal and non-aboriginal women in Manitoba*. Unpublished doctoral dissertation, University of Manitoba.
- Heaman, M., Sprague, A., & Stewart, P. (2001). Reducing the preterm birth rate: A population health strategy. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, *30*(1), 20–29.
- Iams, J. D., Goldenberg, R. L., Mercer, B. M., Moawad, A., Thom, E., Meis, P. J., McNellis, D., Caritis, S. N., Miodovnik, M., Menard, M. K., Thurnau, G. R., Bottoms, S. E., & Roberts, J. M. (1998). The Preterm Prediction Study: Recurrence risk of spontaneous preterm birth. *American Journal of Obstetrics and Gynecology*, *178*(5), 1035–1040.
- Jordan, B. (1997). Authoritative knowledge and its construction. In R. Davis-Floyd & C. Sargent (Eds.), *Childbirth and authoritative knowledge* (pp. 55–79). Berkeley: University of California Press.
- Katz Rothman, B. (2000). *Recreating motherhood: Ideology and technology in a patriarchal society* (2nd ed.). New Brunswick, NJ: Rutgers University Press.
- Kleinman, A. (1995). *Writing at the margin: Discourse between anthropology and medicine*. Berkeley: University of California Press.
- Kleinman, A., Das, V., & Lock, M. (1996). Introduction. *Daedalus*, *125*(1), 1–5.
- Lumley, J. (2003). Defining the problem: The epidemiology of preterm birth. *BJOG: An International Journal of Obstetrics and Gynaecology*, *110*(Suppl 20), 3–7.
- MacKinnon, K. (2005). *The social organization of women's preterm labour experiences*. Unpublished doctoral dissertation, University of Calgary.
- MacKinnon, K., & McCoy, L. (in press). The very LOUD discourses of risk in pregnancy! In P. Godin (Ed.), *Risk and nursing practice*. Basingstoke, UK: Palgrave.
- Maloni, J. A. (2000). Preventing preterm birth: Evidence-based interventions shift toward prevention. *AWHONN Lifelines*, *4*(4), 26–33.
- Marshall, H., & Woollett, A. (2000). Fit to reproduce? The regulative role of pregnancy texts. *Feminism and Psychology*, *10*(3), 351–366.



- McCoy, L. (in press). Keeping the institution in view: Working with interview accounts of everyday experience. In D. E. Smith (Ed.), *Institutional ethnography as practice*. Lanham, MD: AltaMira.
- Murphy-Lawless, J. (1998). *Reading birth and death: A history of obstetrical thinking*. Bloomington: Indiana University Press.
- Queniart, A. (1992). Risky business: Medical definitions of pregnancy. In D. H. Currie & V. Raoul (Eds.), *Anatomy of gender: Women's struggle for the body* (pp. 161–174). Ottawa: Carleton University Press.
- Rankin, J. (2001). Texts in action: How nurses are doing the fiscal work of health care reform. *Studies in Cultures, Organizations and Societies*, 7(2), 251–267.
- Smith, D. E. (1987). *The everyday world as problematic: A feminist sociology*. Boston: Northeastern University Press.
- Smith, D. E. (1999). *Writing the social: Critique, theory, investigations*. Toronto: University of Toronto Press.
- Smith, D. E. (2005). *Institutional ethnography: A sociology for people*. Lanham, MD: AltaMira.
- Stevens-Simon, C., & Orleans, M. (1999). Low-birthweight prevention programs: The enigma of failure. *Birth*, 26(3), 184–191.
- Stewart, P.J. (1998, April 14). *Primary prevention of preterm birth*. Paper presented at the Canadian Preterm Birth Prevention Consensus Conference, Ottawa, Ontario.
- Thomson, V. (1989). Psychological and physiological changes of pregnancy. In V. R. Bennett & L. K. Brown (Eds.), *Myles textbook for midwives* (11th ed.). Edinburgh: Churchill Livingstone.
- Weiss, M., Saks, N., & Harris, S. (2002). Resolving the uncertainty of preterm symptoms: Women's experiences with the onset of preterm labor. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 31(1), 66–76.

### Authors' Note

This paper is based on research conducted by Karen MacKinnon as part of her doctoral program in the Faculty of Nursing, University of Calgary. She would like to acknowledge the support and guidance of her co-supervisors in this research project, Professor Carol Rogers and Dr. Marjorie McIntyre.

The research was supported by a Graduate Research Fellowship from the University of Calgary and the Province of Alberta.

Comments or queries may be directed to Karen MacKinnon, Rural Maternity Research, 530–1501 West Broadway, Vancouver, British Columbia V6J 4Z6 Canada. Telephone: 604-742-1794. E-mail: karenm@ruralmatresearch.net

---

*Karen MacKinnon, RN, PhD, is Postdoctoral Fellow, Rural Maternity Research, Vancouver, British Columbia, Canada. Marjorie McIntyre, RN, PhD, is Associate Professor, School of Nursing, University of Victoria, British Columbia.*