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#### THE EPISIOTOMY CRUSADE

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Department of Sociology

McGill University, Montreal

c Ian D. Graham

November 1994



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#### ABSTRACT

This thesis traces and analyses the evolution of obstetrical and midwifery doctrine and use of episiotomy in the United States and United Kingdom. In the U.S., the routinization of episiotomy resulted from strenuous lobbying efforts of a small group of obstetrician/gynecologists between 1915 and 1935. These physicians claimed episiotomy prevented perineal lacerations, infant mortality and morbidity, and future gynecological problems. In the U.K., the liberal use of episiotomy came about during the 1970s from pressure from obstetricians although no overt campaigning for the practice occurred. In both countries adoption of routine episiotomy was encouraged by social forces which involved changes occurring in the dominant belief system in obstetrics, maternity care practices, and the obstetric and midwifery professions. Questioning of the practice by childbirth activists and others eventually led to declines in episiotomy. This was facilitated, particularly in Britain, by midwifery interest in resisting obstetrical control. Neither the adoption nor rejection of routine episiotomy was informed by scientific evidence. This study contributes to understanding the process of innovation in maternity care.

#### <u>SYNOPSIS</u>

Cette thèse retrace et analyse l'évolution de la doctrine de l'obstetrétrique et des sages femmes et l'utilization de l'épisiotomie aux États-Unis et au Rayaume-Uni. Aux États Unis, le recours routinier à l'épisiotomie est le résultat de pressions soutenues d'un petit groups d'obstétriciens/gynécologues entre 1915 et 1935. Ces médecins soutenaient que l'épisiotmie prévenait les déchirures périnéales, la mortalité et al morbidité infantile et d'éventuels problèmes gynécologiques. Au Royaume-Uni la banalisation de l'épisiotomie a fait son apparition au cours des années 20 à la suite de pressions exercées par des gynécoloques, mais il n'y a eu aucune campagne systématique en faveur de cette practique. Dans les deux pays, l'adoption routinière de l'épisiotomie a été encouragée par des forces sociale telles des changements de l'opinion dominate en obstétrique, des practiques de soins en maternité et des professions d'obstétrique et de sage femme. Remise en question par les militants de l'accouchement natural et par d'autres individus, la pactique de l'épisiotomie a éventuellemnt ralenti. Ce déclin a été favorisé par la résistance des sages femmes au contrôle de l'obstétrique, particuliérement dans le Royaume-Uni. L'adoption ou le rejet de l'épisiotomie de routine n'est fondé sur aucune évidence scientifique. Cette étude contribue à la compréhension du processus d'innovation en soins maternels.

To DAWN

"Till the End of Time"

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....

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#### INTRODUCTION

"The wise man does no wrong in changing his habits with the times." Dionysius Cato Disthica de Moribis Bk 1. No.7

This thesis is about the process of innovation and change in maternity care. It is a cross-cultural case study of one particular maternity practice: episiotomy. Episiotomy is the surgical enlargement of the birth canal made at the time of birth, presumably to facilitate the birth. The operation is performed with a pair of scissors or a scalpel (Figure 1).

To place this research in context, it is important to understand why I elected to study episiotomy. Around 1987, physicians at McGill University and the University of Montreal collaborated on a randomized controlled trial of episiotomy. I became awarc of this trial when one of my professors who later became my thesis supervisor, gave me the study grant proposal to read. As I read through the proposal I was struck that what was being proposed was a study to evaluate an obstetrical procedure which had been a routine and standard obstetrical practice for decades in North America. This made me wonder how and why this surgical intervention had become routine practice in the first place, why it had persisted so long despite there being apparently little evidence it is beneficial, and why it was only now being questioned. It also led me to ponder how a widely accepted practice comes to be questioned. Studying episiotomy appealed to me because it offered the potential for providing insights into the process by which health care practices are both adopted and abandoned. Another reason I selected episiotomy was that it is a common knowledge-based procedure of the type which makes up a large portion of health care practices. Episiotomy is literally performed on millions of women annually. Over 1,717,000 episiotomies were performed in the U.S. in 1990 and for the last year for which data are available, another 142,000 were performed in England in 1985 (National Center for Health Statistics, 1990; Department of Health, 1988).



Source: Kitzinger and Simkin, 1986.

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Before describing how the use of episiotomy has changed over time, I should define "innovation." To innovate is to effect a change or make changes (Webster's Ninth New Collegiate Dictionary, 1991). Innovation in medicine typically refers to the adoption or abandonment of medical technology, with medical technology usilly being defined "as the set of techniques, drugs, equipment, and procedures used by health-care professionals in delivering medical care to individuals and the system within which such care is delivered" (United States Congress, 1976:4). I use the term innovation to refer to the generic process of change in health care technology. As health care is also provided by professionals other than physicians, throughout this thesis I use the term health care innovation to include innovation in medicine and midwifery. In the first chapter, the term medical innovation predominates as the theories and models of innovation to date have narrowly focused on medical technology. The terms "change" and "innovation" are used interchangeably throughout this thesis.

In the thesis, I trace and analyse the evolution of obstetric and midwifery doctrine and use of episiotomy in the United States and the United Kingdom<sup>1</sup>. Episiotomy was first proposed in 1742 by Sir Fielding Ould, Master of the Rotunda Lying-in Hospital, Dublin (Morton, 1954:538). During the 1800s and early 1900s, American and British physicians seldom performed the operation. Based on reports in the literature, episiotomy was increasingly adopted in the United States during the 1930s and 40s as a routine procedure. In Britain, the restrictive use of episiotomy persisted into the mid 1960s at which point its use began escalating. Table 1 and Figure 2 present the national episiotomy rate for the U.S. and England and Wales for the years 1967-1990. As presented, the English episiotomy rate more than doubled in 11 years, climbing from 25% of all hospital deliveries in 1967 to 53.4% in 1978. Over the next 7 years (1978-1985) the rate declined from 53.4% to 36.6%, an absolute reduction of 17% or a relative reduction of 31%. In the U.S., the episiotomy rate in 1979 was 65.1%. Over the next decade (1979-1990), the episiotomy rate edged down from 65.1% to 56.8%,

# TABLE 1

## THE PREVALENCE OF EPISIOTOMY IN ENGLAND, WALES AND THE USA 1967 - 1990

<u>Year</u>	England & Wales	<u>USA</u>
1967	25.0	*
68	*	*
69	*	*
1970	*	*
71	*	*
72	*	*
73	44.0	*
74	47.4	*
75	48.6	*
76	50.6	*
77	52.0	*
78	53.4	*
79	*	65.1
1980	*	64.0
81	51.2	64.0
82	*	63.1
83	*	61.2
84	*	61.1
85	36.6 <sup>1</sup>	61.1
86	*	60.8
87	*	61.9
88	*	59.0
89	*	56.8
1990	*	55.8

## Number of Episiotomies Per 100 Vaginal Deliveries

\*Not available

<sup>1</sup>Data for England only

Sources: Macfarlane & Mugford (1984); DHSS, 1986; DH, 1988; Kozak (1989); National Center for Health Statistics (1990)



an absolute and relative decline of 8.3% and 12.7% respectively. As these are the only available data on the use of episiotomy for these countries, this thesis examines actual changes in episiotomy which occurred only up to 1985 in England and 1990 in the U.S.

#### Outline of the Thesis

The first two chapters of the thesis describe the theoretical framework and methods for the research. In Chapter 1, I present the models and theories which have been proposed as ways of understanding medical innovation. I also describe how the theoretical framework I have adopted integrates several of these approaches. In Chapter 2, I describe the sources of data for the thesis and the methods used to collect them.

The substantive chapters of the thesis roughly correspond to the phases through which episiotomy has passed in each country. In Chapter 3, I describe the origins of episiotomy and trace the evolution of obstetric doctrine about the operation from the mid 18th century through the turn of the 20th century. The chapter shows that by the 1900s, a consensus had developed that episiotomy was a legitimate obstetrical emergency procedure. I describe how a small number of "episiotomy enthusiasts" rediscovered the operation during the latter part of the 1800s and unsuccessfully campaigned for the more widespread use of the operation. I also consider some of the reasons this initial episiotomy advocacy failed to have the desired effect.

In Chapter 4, I examine how the prophylactic use of episiotomy eventually replaced emergency use of episiotomy in the U.S. during the early decades of this century. I trace the adoption of routine episiotomy back to the claims-making activities of a number of obstetrician/gynecologists who lobbied for the greater use of the operation between 1915 and 1935. I describe their lobbying efforts and examine the factors which facilitated the widespread adoption of episiotomy by American physicians.

In Chapter 5, I focus on England and investigate the reasons for the persistence of the restrictive use of episiotomy through the 1960s and then adoption of a more liberal use of the operation in the 1970s. I explore the factors which effectively discouraged the medical and midwifery use of episiotomy prior to the mid-1960s. I also examine the stimuli which prompted the sudden increased use of the operation during the late 1960s and 1970s.

In Chapter 6, I examine challenges to the liberal use of episiotomy which developed in the U.K. during the 1970s and 80s. I trace the emergence and burgeoning of medical and midwifery controversy over the routine use of episiotomy which coincided with the declining popularity of the operation. I then place the professional questioning of episiotomy within its broader social context and describe how the many pressures from outside the professions significantly influenced both the development of the debate about episiotomy and subsequent decline in use of the procedure.

In Chapter 7, I focus on the American efforts and activities to reduce the use of episiotomy and the factors which resulted in these efforts being less successful than apparently similar efforts in Britain. I consider the nurse-midwifery and medical questioning of episiotomy during the late 1970s and 1980s and examine the role played by lay efforts to undermine the medical rationales for the operation.

In Chapter 8, the conclusion, I summarize the thesis, offer some generalizations about the process by which health care practices evolve, and comment on the strategy I adopted to study innovation.

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#### Footnotes

1. In this thesis, I use documentary material from England, Scotland and Ireland to trace obstetrical thought regarding the use of episiotomy in the "United Kingdom." Data on episiotomy statistics are however, restricted to data from England and Wales or England alone.

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#### <u>CHAPTER 1</u>

#### THEORIES OF INNOVATION IN HEALTH CARE

In this chapter, I review the various theories and models which have been offered to explain the process of innovation in health care, more precisely medicine. I first present and critique the positivist model of medical innovation which assumes all change is the result of scientific discoveries or thinking and is therefore largely impervious to social forces. Next I discuss the sociological theories of medical innovation which are characterized by an assumption that innovation is better understood as a social activity or, more precisely, a product of human activity. I end the chapter by presenting the theoretical framework which guided this thesis and describe the influences which molded my approach to studying the changing use of episiotomy.

#### Ways of Understanding Innovation and Change in Medicine

Innovation in medicine has been studied and interpreted in two fundamentally different ways. One approach assumes science (i.e. scientific thinking, discoveries and research) is responsible for medical innovation. This version tends to be championed by groups with authority. It presents medicine as a scientifically neutral enterprise that is objective, rational and value free (Bell, 1989). Medical technology is assumed to be the product of science and scientific thinking is assumed to determine its adoption and use. The other perspective rejects the presupposition that medical innovation is solely the product of science and suggests social forces are equally, and in some cases more important in influencing change.

#### The Rational-Scientific Sequential Model of Medical Innovation

In the positivist tradition, a number of what might be called rational-scientific sequential models have been proposed or used to explain the development of medical technology (President's Panel on Biomedical Research, 1976; DHEW, Forward Plan

cited in President's Panel on Biomedical Research, 1976; United States Congress, 1976; Whitted, 1981). Each of these models explicitly or implicitly defines medical technology as a thing or procedure and assumes that the development of medical technology is a relatively linear process occurring in a sequence of discrete and identifiable stages. Typically these models are used to trace the steps a medical technology passes through as it progresses from a novel idea to eventual adoption by care givers. Although all the rational-scientific sequential models share the same basic assumptions about the process of change in medicine, they differ in terms of the number and sequence of stages offered.

The President's Biomedical Research Panel (1976) lists the six steps making up the "continuum from the development of new knowledge to the application of such knowledge" as:

1. discovery, through research, of new knowledge and the relating of new knowledge to the existing base;

translation of new knowledge, through applied research, into new technology and strategy for movement of discovery into health care;
 validation of new technology through clinical trials;

4. determination of the safety and efficacy of new technology for widespread dissemination through demonstration projects;

5. education of the professional community in proper use of the new technology and of the lay community on the nature of these developments; and

6. skillful and balanced application of the new developments to the population (President's Biomedical Research Panel, 1976:7).

The National Institutes of Health model portrays the process of medical innovation as a sequence of activities, basic research, applied research and development, clinical investigation, clinical trials, followed by demonstration programs (DHEW, Forward Plan cited in President's Biomedical Research Panel, 1976b:77). The Office of Technology Assessment (OTA) of the United States Congress offers a four stage model of the development process. According to this model, four general categories can be distinguished in the spectrum of activities that precedes the widespread acceptance of many medical innovations. These are basic research, applied research and development, clinical testing, and diffusion (United States Congress, 1976:68). A fifth stage, the widespread use of new technologies, was subsequently added (Banta and Thacker, 1979:931). Gary Whitted (1981) presents a model of technology development consisting of four basic developmental stages, genesis (bioscience and biotechnical research efforts accomplished and funded primarily by government sources), gestation (new technologies or technological enhancements derived from the basic research of stage 1 which have sufficient clinical and financial potential to be developed and refined for commercial production; the gestation phase is undertaken primarily within the private sector), utilization (the period that is of most interest to researchers and policy analysts; the diffusion of new technology), and, evaluation (the technology is finally evaluated).

The rational-scientific sequential model receiving by far the widest exposure is the one offered by the Office of Technology Assessment (OTA). The OTA model of the development of medical technology was first proposed in 1976. This model, or slight variations of it, have subsequently appeared in the medical (Banta and Thacker, 1979) and sociological literature (Banta, 1983;1984) as well as elsewhere (Banta, Behney, and Sisk Willems, 1981; Ruby, Banta, Kesselman Burns, 1984). Furthermore, the OTA, a research agency of the U.S. government, has used this model to explain the emergence of such medical technologies as DES (diethylstilbestrol) (Bell, 1986), as have other researchers (Scheirer, 1990). The OTA model of medical technology development has also become popular in bureaucratic circles. For example, the U.S. federal government has developed a series of formal programs relating to medical technology depending on its stage of development so as to try to improve the process at each stage (Banta and Thacker, 1979:931).

#### The OTA Model

Integral to the OTA and other rational-scientific sequential models is the conceptualization of medical technology as a thing. The OTA is quite explicit about this,

defining medical technology "as the set of techniques, drugs, equipment, and procedures used by health-care professionals in delivering medical care to individuals and the system within which such care is delivered" (United States Congress, 1976:4). The stages of the model are basic research, applied research and development, clinical testing, diffusion and widespread use.

In the following passage describing the development of medical technology, many of the major assumptions implicit in the OTA model are evident. For example, the model regards the development process as linear and unidirectional. Scientific research initiates and propels the process. As the process is based on scientific knowledge, by implication it is impervious to social forces. Furthermore, the process is considered orderly and occurs in discrete stages with the work at each stage carried out by distinct communities.

Adoption of a new technology by the consumer can be viewed as the final step in a long sequence of activities. First, a background or conceptual basis is laid by theoretical research and the sum of previous research. Then, basic empirical research provides a framework of knowledge about the mechanisms involved, discovers points in a natural process that are susceptible to technological intervention, and suggests strategies for technology development. Applied or mission-oriented research is then directed at applying this basic knowledge to a practical purpose and demonstrating the feasibility of the proposed technology. Once feasibility is demonstrated, engineers, entrepreneurs, and developers, usually in the private sector, can develop goal-oriented programs. Prototypes are built and problems of translating the technology from the lab to the marketplace are faced. Once the manufactured item is ready, its effectiveness and efficiency can be assessed in a realistic way in industrial testing laboratories, in field tests, or in consultation with potential users. Finally, the technology is marketed and, if all goes well, it is adopted by the proper class of consumers, be they manufacturers or industries, public groups or institutions, or private individuals (United States Congress, 1976:67-68).

Unfortunately, the rational-scientific sequential model of medical technology development suffers from several major weaknesses. Some of the problems relate to the "rational-scientific" assumptions of the model. As identified by Bell, its greatest shortcoming in this respect is that it is "based on a 'hierarchical' model of the relationship between science and technology: Scientific knowledge precedes technology development, both temporally and causally" (1989:189). For example, the OTA's very use of the expression "applied research and development" to describe the second stage of the development process, underscores the model's assumption of a direct and unique path from research to development, with research initiating the development process. Clearly, in light of the work of Maxwell (1986), Bell (1986;1989), Valenstein (1986), and others, this assumption is untenable. To quote James Maxwell (1986) who studied the role of the iron lung in the evolution of respiratory care,

Technological change in medicine is not a single linear process, but one in which science and technology interact in complex and largely unpredictable ways (p.24).

Another major problem with the rational-scientific sequential model of medical technology development is the assumed "sequential" nature of the development process. As admitted by the OTA, their model is highly idealized. Basic research, applied research and development and even diffusion often progress simultaneously, not sequentially. Boundaries between categories are fluid, creating problems in attempting to understand the development process. As Bell (1986) has reiterated, such a model

can only identify when things and procedures move from one stage to the next. Yet the development process is ongoing, and stages can be distinguished only artificially. Viewing the process as discontinuous masks the continuous streams of activities carried out by interacting communities in the development of medical technology (p.5).

#### Sociological Theories of Medical Innovation

In sharp contrast to the rational-scientific sequential models of medical technology development, sociologists and occasionally physicians have offered very different ways of understanding the process of change in medicine. Common to these social theories or models is the belief that medical innovation is a social activity; a product of human activity. For example, Bell (1986:2) who has proposed an interactive model of technology change, explicitly defines medical technology as the embodiment of human activity. Another defining characteristic of the social approach to medical innovation is the rejection of the assumption that science alone produces innovation. Instead, these models attempt to identify the extra-medical factors such as social, political and economic forces which give rise to medical innovation. These models simply do not assume that scientific evidence or research play a defining role in medical innovation. The sociological models of innovation include the natural history model, the political economy approach, the interactive model and the belief system approach. The Natural History Model of Medical Innovation

Natural history is "an account of an evolutionary process- a process by which not the individual, but the type evolves" (Park, 1955:36). As Bucher describes, "It implies an unfolding course that can be analyzed in terms of phases, discernible landmarks, or characteristics" (1988:132). This is an inductive approach that involves comparison of cases to discover common traits. Existing models of innovation which can be classified under the natural history approach present change in medicine as an irrational process with innovations being adopted before thorough testing. With its focus on the evolution of medical innovation, this approach tries to explain not only the adoption of innovations but how they fall into disuse.

Over the years, a number of what might be considered natural histories of medical innovation have been proposed. Thinking of medical innovation as an evolving process dates back to the late 19th century. James Chadwick, a prominent Boston obstetrician of the 1880s presents one of the earliest natural histories of medical innovation. After reviewing the obstetric and gynecological literature of 1876-1881, he describes the "life history" of a "new therapeutic remedy" or "new operation" as occurring in the following sequence of stages. First an innovation is presented to the medical profession in the literature. Next, for reasons relating to physician self-interest, early

adopters accept the innovation without evidence of its effectiveness. This is followed by more widespread acceptance until evidence mounts showing the limitations of the innovation. Then, based on the reports, positive and negative, the innovation is either adopted or rejected. Chadwick explains the process this way,

an article is written, recounting the success obtained by its author in the treatment of a certain condition by a new operative method. Immediately it is tried by many practitioners, who hasten to publish their results, particularly if favorable, when they may expect to derive renown or practice from being early identified with the innovation. Articles multiply rapidly, the operation has been forced upon the attention of the whole profession; soon its charm of novelty wears off, and the number of papers would rapidly diminish, were it not that the negative or unfavorable results obtained begin to be published; the true merits of the operation are gradually reached, and finally it is either adopted or is renounced and forgotten (p.254).

Nearly a century later, two physicians from New Orleans offered another sequen-

tial model of the process of innovation to explain the phenomenon of "bandwagons of

medicine". Cohen and Rothschild (1979) define bandwagons of medicine as the over-

whelming acceptance of unproved but popular ideas, theories, practices and proce-

dures. They describe a process which is dynamic, complex, and more driven by

interest-group politics than rational scientific thought. They describe bandwagons in

medicine this way,

A single advocate or groups of advocates may be able to generate the necessary interest to launch the idea. Once other investigators become enthusiastic, preconceived notions blur the distinction between quality and quantity of evidence. Clinicians, laymen, the media, and various interest groups all have a role in sustaining unproved ideas. Physicians often accept a new idea because it offers a simple solution to a complex problem. Pressured by their profession to keep abreast of current trends, physicians must absorb an abundance of new material. Therefore, they may read uncritically or concentrate their reading on nontechnical journals and abstracts. The public, in search of a panacea, exerts further pressure on the clinician. The mass media give the idea momentum by publishing opinions, conclusions, and extrapolations as data. Research foundations, government agencies, and private industries may each have vested interest in the idea, endowing it with official sanction and monetary support. Once the hypothesis is generally accepted, further investigation is considered perfidious and is curbed by the reluctance to fund dissidents. Though the idea may become orthodoxy, doubts persist among an unconvinced minority, because the evidence is not conclusive. Eventually these doubts lead to a critical reevaluation of the hypothesis. The gap left by the decline in popularity of an idea is filled either by a more viable idea or by a newly emerging bandwagon (Cohen and Rothschild, 1979:531-532).

Within the natural history approach, McKinlay's (1981) 7 stage career of a medical innovation is the most celebrated. Using the concept of a typical career as a heuristic device, McKinlay breaks down fairly complex social behaviour and political processes into a manageable form and identifies possible points of intervention (McKinlay, 1981:375). In keeping with the other natural histories of medical innovation, adoption of an innovation precedes its being evaluated for effectiveness. Once evaluated, it is often abandoned as ineffective. McKinlay's model portrays the first four stages of the career of an innovation as a political process in which a scientific-rational basis for legitimating the adoption of the innovation is lacking (Ost and Antweiler, 1986:33). According to McKinlay, the typical career of a medical innovation is initiated with the release of a promising report. The innovation then passes through a stage of professional and organizational adoption, followed by a stage of public acceptance and state endorsement before attaining the status of a standard procedure. Only after it has become a standard practice, is it submitted to randomized controlled trials (RCTs) to evaluate its effectiveness. The two remaining stages in the career of a medical innovation are professional denunciation after RCTs reveal the innovation is not beneficial. and finally, its erosion and discreditation.

More recently, Dixon (1990), has used a four stage model to describe the evolution of clinical policies. Clinical policies are guidelines or "medical rules of thumb" which are developed to spell out the circumstances under which certain technologies, practices or procedures should be used. In keeping with the previous natural histories of medical innovation, Dixon (1990:201) reveals that at each stage social rather than scientific forces play a central role. He also notes that at each step errors in both reasoning and research may occur. The four stages in the evolution of clinical policies are development, diffusion, domination, and disillusionment.

Bell (1986) views McKinlay's career of a medical innovation as simply another sequential model along the lines of the positivist OTA model. By doing so, however, she ignores the social activity explicit within this model. The stage model is fundamentally different from the rational-scientific sequential model in that the natural history concept identifies and directs attention to the extra-medical forces involved in the process of innovation and orients analysis to the emerging and unfolding lines of social activity. A more apt criticism of the 7 stage model and natural history models in general, might be that they have been presented prematurely and accepted uncritically as true descriptions of the innovation process. Perhaps, there is no sequence of stages common to all changes or innovations in medicine. Alternatively, there may be common stages with only certain types of innovations. For example, innovation involving pharmaceutical or biomedical equipment may be very different from innovation involving the use of only knowledge based skills. If the complete power of the concept of natural history is to be realized, considerably more case studies must be conducted on different types of innovation to establish what, if any, common stages exist. In the mean time, using the concept of natural history or career as an analytic tool to study innovation is, as McKinlay claims, one way to break down fairly complex social behaviour and political processes. In doing this however, one must not impose McKinlay's stages a priori but allow stages, if there are any, to emerge from the data.

#### The Political Economy Approach

A somewhat different way of understanding the process of innovation in medicine is the political economy approach. This approach offers a Marxian analysis of medical technology change and places medical innovation within the broader structural arrangements of society. Political and economic structures are assumed to determine medical innovation. Waitzkin's (1979; 1980) analysis of coronary care technology falls within this perspective. He argues that capitalist profit considerations are behind the development and growth of coronary care technology. He identifies industrial corporations, academic medical centres, private philanthropies, the health care labor force and the state as communities involved in encouraging innovation. This approach is limited however, by its deterministic nature and complete lack of consideration of the role of science in medical innovation (Bell, 1986). Furthermore, Waitzkin's view oversimplifies the development process as not all medical innovations involve the production of consumable products such as equipment, pharmaceuticals, supplies, etc. Some innovations simply involve a change in the way a procedure or practice is performed; an innovation in knowledge. With these types of innovations, there may be little or no involvement of industrial corporations, private philanthropies or the state in bringing about change.

#### The Interactive Model

Building on the work of Waitzkin and others, Bell offers a complex interactive model of medical technology development. The model suggests that medical technology embodies ideas and practices. Understanding medical innovation, it follows, involves identifying which ideas and practices are embodied in medical technology and how they give rise to it (Bell, 1986). This is done by identifying communities that produce medical technology as well as their interests and ideas; locating these communities within a broad political and economic context; revealing how the communities are structurally related to each other and showing how they resolve conflicts. As Bell explains,

If medical technology is defined as embodied concepts and practices and if the innovation process is defined as one in which streams of activity are carried out over time by communities whose work is informed by intellectual concerns and by political, economic and social arrangements, then a number of implicit processes can be revealed and explained (p.26).

Bell used diethylstilbestrol (DES) as a case study to demonstrate the usefulness of the interactive model in explaining medical technology development. Her analysis revealed that four communities produced DES, science, medicine, the pharmaceutical industry, and the state. Within these communities she identified a number of specific groups, sex endocrinologists, elite physicians, 12 leading pharmaceutical manufacturers and the Food and Drug Administration which communicated with each other in an ongoing way during the development of DES. She explained the interactions and communications between these groups by the politics of the New Deal period, professional networking, and attempts to make a product that was effective and safe. Bell's analysis revealed that the development of DES was facilitated by the medicalization of menopause during the 1930s. It was at this time that physicians redefined this normal female condition as a disease.

#### The Belief System Approach

Another social approach to studying medical innovation directs attention to the ways in which medical practice and the content of that practice are influenced by professionals' biomedical paradigm or understanding of the world. This approach can stand alone as a model for the study of medical innovation (Richards, 1975); however, it is also an important component of the Bell's interactive model. The belief system approach assumes that innovations are shaped by the belief systems or paradigms of their producers and users. Richards (1975) for example, has used this approach to explain the rapid increase in the non-medical or elective use of induction of labour in Britain during the 1970s. His analysis revealed that the apparently irrational practice of induction could be traced, in large part, to the dominant belief system of modern obstetrics in Britain. According to Richards, the increase in induction was directly related to obstetrics being a hospital based surgical specialty which tries to solve problems by active intervention. These features of the profession, he argued, encouraged a belief system which emphasizes control over patients.

It is this feature of obstetrics that may be the key to the process of innovation. To put the matter rather crudely, obstetrics treats the body like a complex machine and uses a series of interventionist techniques to repair faults that may develop in the machine. But given that all births (both malfunctioning and smoothly running machines) are treated obstetrically there is a constant tendency to use the repair techniques when all is going well (Richards, 1975:598).

Other researchers have examined the relationships between the belief system within medicine and obstetrics and intervention in childbirth: Ehrenreich and English (1979), Graham and Oakley (1981), Katz Rothman (1984), Rosengren and Sartell (1986), and Martin (1989).

#### **Theoretical Framework**

For this research, I adopted a theoretical framework which blends aspects of several of the sociological models of health care innovation. I began by adopting Bell's assumption that medical innovation is the product of human activity and therefore a social as opposed to strictly scientific activity. From the natural history approach, I adopted the conceptualization of innovation as an unfolding and evolutionary process and directed my efforts toward seeking the processual character of the innovation under investigation; episiotomy. This involved documenting the phases or changes in obstetrical and midwifery thinking and use of episiotomy over time. It also directed my attention to identifying the antecedents to these changes. From Bell's interactive model I adopted the position that innovation is complex involving the activities of many communities occurring simultaneously. This model alerted me to the need to identify all the specific individuals and communities responsible for bringing about change as well as their interests and ideas. Being a surgical technique or knowledge based skill, the primary communities involved were physicians, midwives, and women. I did not expect industry or government to have any role in the adoption or rejection of episiotomy. Finally, the belief system approach sensitized me to be mindful that innovation is

influenced and molded by the belief system of those considering any sort of change. The theoretical framework I adopted did not include the political economy approach as I did not consider it would be very informative or useful in studying a purely knowledge based technology. Episiotomy is a skill with no commercial value unlike the case with pharmaceuticals or biomedical equipment.

My approach to studying the process of innovation in health care was also molded by Spector and Kitsuse's (1977) social construction of reality approach to social problems. This approach conceptualizes social problems not as a condition but as a kind of social activity. They refer to this social activity as "claims-making." It involves the "protesting and complaining activities that generate awareness, policy, and response to morally offensive and objectionable conditions" (Spector, 1976:168). As Spector and Kitsuse explain about their theory,

The emergence of a social problem is contingent upon the organization of activities asserting the need for eradicating, ameliorating, or otherwise changing some condition. The central problem for a theory of social problems is to account for the emergence, nature, and maintenance of claims-making and responding activities (p.76).

Drawing on Spector and Kitsuse's work, I adopted the notion of innovation in health professions as a claims-making activity with innovation resulting from the claims-making, advocating, campaigning and questioning activities of individuals and communities intent on producing change. This notion of claims-making activity is quite compatible with Bell's interactive model. Taking the liberty of adapting Spector and Kitsuse's (1977:78) words, claims-making is always a form of interaction: a demand made by one party to another that some change be made in the way health care is practiced. Also, similar to Bell's model, this approach requires identifying the individuals and groups engaged in claims-making activity, as well as the response it receives. One other similarity between my research and the social constructionist approach is that the focus of attention is on the claims-making activity not on evaluating the veracity of the
claims being made. Whether the claims are based on anecdotal evidence or scientific findings, they are considered putative.

## Summary and Discussion

In this chapter I have reviewed the major theoretical models of medical innovation. I described two fundamentally different ways of understanding this process. One approach offers a rational-scientific sequential model of medical innovation. This model defines medical technology as a thing or procedure and assumes that all medical innovation is produced by science and scientific thinking. The other general approach, which is sociological in orientation, views medical technology development and innovation as a social activity, a product of human activity. Within this broad tradition, I identified several models of medical innovation: the natural history model, the political economy approach, the interactive model, and the belief system approach.

Lastly, I described how the theoretical framework I developed to study innovation in the use of episiotomy was influenced by the social models of medical innovation as well as by Spector and Kitsuse's social construction of reality approach to social problems. This framework, which is sociological, views innovation as an evolutionary process driven by the claims-making activities of individuals, groups and organizations. Another defining feature of this framework is that it tries to respect the true nature of innovation by allowing the processual character of change to emerge, rather than imposing structure on this process apriori.

### CHAPTER 2

### **RESEARCH METHODS**

In this chapter I describe the methods used in conducting this research. I begin by presenting the numerous sources of data I examined. Next, I explain how I went about collecting these data. I also discuss steps taken to minimize gender issues. As a male studying a women's health issue, I was aware that my gender might influence data gathered from key informants. The chapter ends with a brief description of the technique used to analyse the data.

## The Data

The data for this research consist primarily of documentary materials and interviews with key informants. The documentary materials are derived from diverse sources including the professional and popular literature. They are limited to the English language literature of North America and the United Kingdom and Ireland. These materials span the period from the mid-1800s to 1990. Interviews with key informants supplement the documentary materials by providing data on the events and activities of the most recent years (roughly the period from 1970 on).

## The Professional Literature

The predominant sources of data, particularly for the period prior to about 1970, are medical (primarily obstetric) and midwifery (including nurse-midwifery) textbooks, journals and conference proceedings. As Harold Speert (1980), an official historian of the American Gynecology Association, notes

The principal medium of communication in medicine has always been its "literature". Medical books and journals have served the three-fold purpose of instructing students and practitioners, recording scientific observations, and providing a forum for the expression of opinion by authors and editors (p.124). For these very reasons, the professional literature, as a repository of medical knowledge, may reveal why a practice was begun and continues to be performed or has been abandoned (Banta and Thacker, 1982:25). Journals offer a particularly rich source of data on claimsmaking activities. The publication of papers, editorials, commentaries, and letters to the editor provide a forum for these activities. Another source of data which can provide considerable insight into the process of claims-making is scholarly discussions which take place at annual meetings of professional bodies. These data are often available in the official proceedings of conferences and meetings.

Textbooks are extremely useful for revealing current practices and thinking within a profession. Because they are intended for the instruction of novices, the practices, techniques and theories presented in textbooks tend to be ones over which there is considerable agreement. In other words, textbooks are simultaneously repositories of knowledge and orthodoxy. The comparison of consecutive editions of the same text is a fairly easy way of identifying and dating shifts in professional consensus.

Materials such as membership directories of professional associations (e.g. the <u>American</u> <u>Medical Directory</u>, the <u>Medical Directory</u>, the <u>Medical Registry</u>), obituaries and organizational documents (for example, the <u>Album of the Fellows of the American Gynecology Society</u> (Chadwick, Dickinson and Edgar, 1901; Broun, 1918; Keene, 1930), are valuable sources of information on the individuals involved in bringing about change. These types of materials provide background data on an individual's training and professional credentials (e.g. specialty training, board certification, specialty association membership, academic affiliations), as well as offices held and honours received. This type of information is useful in providing an indication of an individual's general stature or prominence within their profession and by implication, their potential influence on peers.

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## The Popular Literature

Prior to the 1970s, the use of episiotomy was almost exclusively a medical issue. Since that time, however, women have increasingly questioned the practice. From about 1970 onward, the consumer literature challenging the medical claims made about the use of episiotomy is an important source of data. These data consist mainly of childbirth education books and manuals directed at expectant parents, and newspaper and women's magazine articles dealing with pregnancy, chi \_\_inth or birthing practices. I also examined the newsletters, \_\_ publications, and conference proceedings of childbirth organizations such as the National Association of Parents and Professionals for Safe Alternatives in Childbirth (NAPSAC), the International Childbirth Education Association (ICEA), the National Childbirth Trust (NCT) and the Association for Improvement in the Maternity Services (AIMS).

## Historical and Sociological Analyses

To place the episiotomy claims-making activity within its socio-historical context, I relied on what might be appropriately considered the "childbirth literature." This material includes histories of childbirth and the caregivers in childbirth, sociological analyses of the development and evolution of obstetrics and midwifery, and historical, sociological and anthropological analyses of the evolution of childbirth practices. This body of literature contains several perspectives on the history of childbirth: histories of the obstetric profession (Cianfrani, 1960; Speert, 1980); feminist revisions of this history (Korbin, 1966; Ehrenreich and English, 1973; 1976; Oakley, 1976; 1986; Donegan, 1978; Wertz, 1983), and a revision of this revisionist history (Shorter, 1982). I also consulted less controversial histories such as those by Wertz and Wertz (1979; 1989), Donnison (1977), Scholten (1977; 1985), and Leavitt (1986).

# **Interviews**

For the more contemporary component of my research, I supplement the documentary research with personal interviews with 26 prominent individuals involved in varying aspects of childbirth research, and activism. These individuals are public figures and most were selected because of their questioning of the routine use of episiotomy during the 1970s and 1980s. The key informants include physicians (obstetricians and family or general practitioners), midwives, childbirth activists, and a women's health activist. I also had discussions with academics and an official with the National Department of Health and Welfare (Canada) responsible for childbirth issues. For the most part, I used these interviews to verify the findings of my analysis and interpretation of the documentary data. In a number of cases, the interviews were also useful for revealing the respondent's personal interest in episiotomy, their motivation for questioning the practice, and the strategies they used to challenge the use of the practice. They also provided information on the 'behind the scenes' activities which are seldom reported in the published literature. The individuals who served as key informants are listed in Appendix B. While not used specifically as a source of data, presentations of "research in progress" before medical, sociological and feminist audiences provided feedback on my analysis and sometimes quite useful insights about my interpretation of the data.

## **Data Collection Methods**

# The Documentary Material

I used several strategies to locate the professional or caregiver literature on episiotomy. Initially, I conducted computerized searches of the U.S. National Library of Medicine's data base (MEDLINE). MEDLINE corresponds to the print indexes: <u>Index Medicus</u>, the <u>Interna-</u> <u>tional Nursing Index</u> and the <u>Index to Dental Literature</u>. Information indexed on MEDLINE includes research papers, reviews of the literature, articles, editorials and letters to the editor dating from 1966. As of 1990, MEDLINE indexed articles from 3,363 journals published in over 70 countries. For the professional periodical literature predating 1966, I manually searched the <u>Cumulative Index Medicus</u>. I used the search term "episiotomy" in searching both the MEDLINE and <u>Cumulative Index Medicus</u>. The Index and Abstracts of the Current Literature produced by the journal <u>Birth: Issues in Perinatal Care and Education</u> was also useful in locating episiotomy literature. This journal has indexed the periodical literature on pregnancy and childbirth since 1973.

I also systematically examined the leading American and British journals in the fields of obstetrics and midwifery for references to episiotomy. These journals included:

- the <u>American Journal of Obstetrics and Gynecology</u> (1920+) formerly the <u>American Journal of Obstetrics and Diseases of Women and Children</u> (1868-1919); this journal known in obstetrical circles as the "Gray Journal." It is the world's foremost journal in obstetrics and gynecology (Speert, 1980:125). It has served as the official organ of the American Gynecology Society, the American Association of Obstetricians and Gynecologists as well as the obstetrical societies of Boston, New York, Philadelphia and many other local and regional obstetrical and gynecological organizations.
- 2) the <u>Transactions of the American Gynecological Society</u> (1868-).
- 3) <u>Obstetrics and Gynecology</u> (1953+); the speciality's most widely read periodical in the United States (Speert, 1980:126). It is referred to by obstetricians as the "Green Journal," and is the official organ of the American College of Obstetrics and Gynecology.
- 4) <u>Surgery. Gynecology and Obstetrics</u> (1905+); the official organ of the American College of Surgeons.
- 5). <u>Obstetrics and Gynecology Survey</u> (1946+); a journal distinctive for the editorial comments of the editors appended to selected abstracts of the world's literature (Speert, 1980:126).
- 6) the <u>British Journal of Obstetrics and Gynaecology</u> (1975+) formerly the <u>Journal of Obstetrics and Gynaecology of the Commonwealth</u> (1961-1975) and the <u>Journal of Obstetrics and Gynaecology of the British Empire</u> (1902-1961); the official journal of the Royal College of Obstetricians and Gynaecologists.
- 7) the <u>Journal of Nurse Midwifery</u>; the official journal of the American College of Nurse Midwives.
- 8) Midwives Chronicle and Nursing Notes; the official journal of the Royal

College of Midwives.

9) <u>Midwives. Health Visitor and Community Nurse</u>; a popular British midwifery journal.

10) <u>Birth: Issues in Prinatal Care and Education</u> (1982+) formerly <u>Birth</u> <u>and the Family Journal</u> (1973-1981); a progressive journal devoted to family maternity care.

I also spent considerable time browsing the open and closed stacks of McGill University's medical, nursing and history of medicine libraries, Harvard University's Countway medical library and the library of the Royal Society of Medicine (London) to locate obstetric and midwifery texts and monographs.

To locate the popular or consumer or lay material on episiotomy, I manually searched <u>The Reader's Guide to the Periodical Literature</u>, <u>The Magazine Index</u>, <u>The Social Science</u> <u>Citation Index</u>, <u>Dissertation Abstracts</u>, <u>Women Studies Abstracts</u>, <u>The British Newspaper</u> <u>Index</u> and <u>The Times of London Index</u>. For these indexes, I used the search terms "episiotomy", "birth", "childbirth", "obstetrics," and "midwifery."

Throughout the course of my research, whether searching for documentary material in the professional or popular/consumer literature, I also relied on the time-honoured data collection method of following the reference trail. I continuously traced the references cited in the materials I retrieved.

While I was able to locate most of the material in the local medical, history of medicine, nursing, graduate and teaching hospital libraries, I also made good use of interlibrary loan (ILL). This service was especially helpful in locating dissertations, obscure or highly specialized journals and childbirth education books, and consecutive editions of medical and midwifery textbooks. Books on childbirth preparation/education tend to be found in public as opposed to academic libraries making the use of ILL essential when these types of documents were to be retrieved.

## The Interviews

The majority of individuals selected to serve as key informants were chosen because of their prominence in the contemporary questioning of episiotomy and childbirth practices as indicated by their research and writings. Making use of journals and letters to the editor to identify the "movers and shakers" on a particular issue is a strategy well known to researchers studying the professions (Habenstein, 1970). Having identified the central figures involved in challenging the routine use of episiotomy, I wrote to the individuals I wanted to use as key informants requesting an interview. In three cases, key informants suggested other individuals they felt I should also "talk to" and made the necessary introductions for me. With the exception of five individuals with whom I was only able to correspond by mail because of distance or other logistical problems, the remaining interviews were in person. The interviews were semi-structured, audio-taped and transcribed verbatim for analysis.

# Gender Issues Related to Studying a Women's Health Issue

Studying a uniquely women's issue--episiotomy, I was initially concerned that being male might subtly or not so subtly influence the amount and type of data women key informants would provide. Due to the unobtrusive nature of documentary research, gender seldom plays a role in the data gathering process. Anyone can study just about anything when it involves retrieving documentary material from public sources. However, as Warren (1988) and others have shown, gender issues can become very salient when undertaking field research. Initially, the two most important questions I asked myself were: Would gender influence the respondents willingness to agree to be interviewed? If they agreed to the interview, would the gender issue cause respondents discomfort and interfere with the development of rapport and trust, thereby affecting the nature and amount of information they would disclose? It appears, these concerns were unfounded, not one of the key informants I contacted (male or female) showed any reluctance or hesitation to cooperate with me. None refused to be interviewed. In fact, I was rather surprised that they appeared so interested in speaking with me. Despite being quite important and well-known individuals with extremely busy schedules, all made time to meet with me. This would seem to fit with Spector's (1980) experience of having little difficulty obtaining interviews with prominent figures involved in psychiatric controversies.

As for the concern about studying a women's issue, this too appeared unfounded. If the length of the interview is any indication of the respondent's level of comfort with the interview and interviewer, then gender seems not to have been a concern for respondents. Interviews ranged from 45 minutes to 4 hours (averaging 2 hours), the few which lasted less than an hour tended to be with physicians who scheduled the interview during office hours or while on-call.

I attribute the respondents' willingness to spend so much time with me to number of factors: their passion about the topic, the offer of confidentiality I extended to them, and the interviewing style I adopted.

## Respondent Enthusiasm

Without exception, all of the respondents who are engaged in challenging the routine use of episiotomy hold very strong views about the operation. They share a profound desire to reduce the use of the operation. Some, like Sheila Kitzinger, have even mounted what might accurately be called personal crusades against the procedure. Being prominent figures in the episiotomy controversy they are also used to having others seek out their opinions. Wanting to talk about an issue close to their personal and professional hearts probably did not hurt my chances of the respondents granting an interview. Another factor possibly predisposing some of the key informants to speak with me might have been that they were somewhat flattered to have their activities considered worthy of attention. At the same time, however, many are also keenly aware that their questioning of professional orthodoxy has made enemies of some of their peers and therefore had concerns about the possibility of being misquoted.

## The Offer of Confidentiality

I also think respondents were as open as they were in part because of the arrangement they agreed to at the beginning of the interview. Respondents agreed to allow me to use the information provided confidentially, unless prior to publication I sought and received their consent to do otherwise. Two respondents waived their right to authorize the attribution of a quotation to themselves. One said I could freely quote anything she said as she tried never to say anything she would not like repeated. The other stated she specifically wanted everyone to know exactly what she had to say. Regardless of whether or how I would use the information provided, all respondents agreed to have themselves listed as a key informant in an appendix (Appendix A). This arrangement was well received, especially by those who stated they had in the past been put in very embarrassing situations when things they had said had been misrepresented. With respondents who are well-known (or who have reputations for publicly questioning professional orthodoxy), I believe that by offering to show how they will be quoted helps develop a bond of trust by giving them some sense of control over the information they provide.

## The Interviewing Style

The way I approached the interview and the dynamics of the interview itself must have also played a part in the willingness of respondents to be as forthcoming and generous with their time as they were. In addition to some of the respondents spending as much as half a day with me, three opened their episiotomy files and fugitive literature (unpublished reports from government and private organizations) to me. In interviewing key respondents, I adopted the stance of an "informed researcher." Interviews were only conducted after a large part of the documentary research was complete. By this time, I had identified the actors involved in the questioning of episiotomy and put the sequence of events around the episiotomy controversy into chronological order. In preparation for an interview, I created a separate file on the respondent. This file contained the documentary materials I had previously collected, such things as the scholarly articles they had written on episiotomy, letters about episiotomy they had sent to the editor of journals, and articles about their opinions or work which had appeared in the newspaper. I went into each interview with a clear idea of what I wanted to find out. I used this opportunity to raise specific questions, to test hypotheses about how and why things had transpired the way they had, to seek interpretations and clarifications unlikely to appear in published accounts and to fill in the blank spots in the facts. The interviews themselves were unstructured and usually started off by my summarizing the results of the documentary research and asking the respondent to pass judgement on my interpretation of what had happened and to fill in the missing pieces. This usually led to a discussion of their account of the events and the other individuals involved.

Spector (1980) believes researchers who adopt this strategy of being informed, are much more likely to be taken seriously by respondents who are well-known. Public figures he suggests, tend to expect the researcher to have done his homework before the interview and may be impatient with questions which could have been answered by reviewing the public record. I would further suggest, this might be especially true when a man interviews women about a women's issue. The practice of starting the interview by reviewing the results of my documentary research gave respondents an opportunity to assess my knowledge of the topic. It also gave them a sense of where I was coming from, and where I wanted to go. This seemed important to several of the women respondents who, during the course of the interview stated they had wondered coming into the interview why a male would show so much interest in episiotomy. Something else which seemed to facilitate the building of rapport during the interview was my willingness to truthfully answer the respondents' questions about my own views (self-disclosure). Had I chosen to try to present myself as being "objective" and evade the questions, thereby concealing my own opinions, these respondents may have thought I had a hidden agenda and may have been considerably more careful with what they said.

### The Data Analysis

I performed a content analysis on the documentary materials using a grounded theory approach (Glaser and Strauss, 1980; Strauss and Corbin, 1990; Strauss, 1989). This is an inductive method which involves moving from the data to a level of abstraction (developing hypotheses about a phenomenon) and then going back to the data to verify the hypotheses.

The strategy I adopted for analysing the documentary data is quite straightforward. As I. located the literature on episiotomy, I read each document carefully and then created a computer file on it. These files consisted of a brief summary of what the document or article was about, a transcription of passages relating to the claims made by the author, any information which may have placed the document in its socio-historical context, bibliographic information about the document, and any information about the author which may have been reported. When I had completed half a dozen or more files, I went back and coded the files. Coding is "the process of breaking down, examining, comparing and conceptualizing, and categorizing data" (Strauss and Corbin, 1990:61). As categories or themes began emerging in the data, I went back to the documentary material, reviewed it once more and then further refined the coding. As the description of my method of analysis indicates, data collection and data analysis occurred concurrently. The process of analysis was greatly facilitated by Note Bene, an academic word processing software. Note Bene indexes entire files or sections of files marked by keywords. The program's search and retrieval capacity make it ideally suited for category development as well as for the coding and retrieval of coded data.

## Summary and Discussion

In this chapter, I have presented the various sources of data upon which I have based this thesis and described the diverse methods I employed to collect these data. I have also discussed how issues related to gender could have negatively affected the collecting of data from women key informants and suggested why this appears not to have occurred. I end the chapter by describing the method I used to analyse the data.

#### <u>CHAPTER 3</u>

## THE EMERGENCY USE OF EPISIOTOMY AND A FAILED ATTEMPT TO PROMOTE INNOVATION IN MEDICINE

The obstetrical use of episiotomy has a long history. Recorded use of the procedure in the English speaking world goes back more than two and half centuries. In this chapter, I describe the origins of episiotomy and trace the evolution of medical doctrine regarding the operation from the mid 18th century through the turn of the 20th century. The chapter is divided into three sections. In the first section, I show that by the 20th century, a consensus had developed about episiotomy being a legitimate obstetrical emergency procedure. I describe how a small number of "episiotomy enthusiasts" rediscovered the operation during the latter part of the 1800s and unsuccessfully campaigned for the more widespread use of the operation. I present in some detail the campaigning efforts and claims-making activities in which these physicians engaged to promote the increased use of episiotomy. In the last section, I identify and discuss the factors which effectively neutralized the episiotomy protagonists' claims-making activities and restricted the greater use of episiotomy from the late 19th century through the early 20th century.

## Historical Background. The First One Hundred Years

Although it is not known exactly when the practice of incising the perineum during childbirth began, the operation was first proposed in the literature by Sir Fielding Ould in 1742. In <u>Treatise of Midwifery</u>, the first English language textbook of obstetrics of any importance (Morton, 1954:538), Ould offered up incision of the perineum as a means of saving the life of the child. Ould was the second Master of the Rotunda Lying-in Hospital in Dublin and described the operation and the indication for it this way: It sometimes happens, though the Labour has succeeded so well, that the Head of the Child has made its way through the Bones of the Pelvis, that it cannot however come forward, by reason of the Extraordinary Constriction of the Vagina; so that the Head, after it has passed the Bones, thrusts the Flesh and Integuments before it, as if it were contained in a Purse; in which Condition if it continues long, the Labour will become dangerous, by the Orifice of the Womb contracting about the Child's Neck; wherefore it must be dilated if possible by the Fingers, and forced over the Child's Head; if this cannot be accomplished, there must be an Incision made toward the Anus with a Pair of crooked Probe Sizars; introducing one Blade between the Head and Vagina, as far as shall be thought necessary for the present Purpose, and the Business is done at one Pinch, by which the whole Body will easily come forth. (Parvin citing Ould, 1882:151-2).

Over the next hundred years or so, the operation remained relatively obscure in the English speaking world although numerous European physicians experimented with it. During the first half of the 19th century, these physicians proposed several modifications or variations to Ould's method. They also tended to look on episiotomy as more a means of preventing a spontaneous perineal laceration or rupture than a technique for simply widening the birth canal in order to facilitate an extremely difficult birth. During this time, Michaelis of Germany is credited by some with being the first to perform the operation in 1799 (Wilcox, 1885:176). In 1836, Von Ritgen, also of Germany, suggested making 7 small nicks on each side of the vaginal orifice as an effective method of protecting the perineum from rupture (Broomall, 1878:517). In France, Professor Dubois is credited with being the first to suggest making an oblique incision in the perineum in 1847 (Nugent, 1935:251). This practice is known today as mediolateral episiotomy. In 1850 and 1852, Eichelberg and Scanzoni recommended lateral and bilateral episiotomy (the making of lateral incisions perpendicular to the vaginal orifice) (Stahl, 1895:675).

Despite the numerous methods advanced for incising the perineum during the first half of the nineteenth century, there is little indication the operation ever gained wide acceptance among physicians. As one late 19th century physician remarked about Michaelis' 1810 suggestion that median incision prevented rupture of the perineum, "the recommendation did not meet with favour" (Broomall, 1878:517). Indeed, there was so little general interest in the operation it went unnamed until 1857 when Carl Braun of Vienna suggested the term "episiotomy" which literally means cutting of the vulva or pubic area. Braun himself had little use for the operation and condemned it as "inadvisable and unnecessary" (Nugent, 1935:249).

In North America, the situation was much the same. Incision of the perineum was seldom, if ever performed. The first reported North American use of the operation was by a Virginian surgeon who performed it on December 2, 1851 (Schmidt, 1959). Writing about the case the following year in <u>The Stethoscope and Virginia Gazette</u>, the surgeon remarked,

When this was done by me I was not aware of its having been done before, and was really afraid that my professional brethren would condemn me... (Taliaferro cited by Longo, 1976:115).

## Episiotomy as a "Dernier Resort"

Between the 1870s and the second decade of the 20th century, the operation of episiotomy became increasingly accepted as an operation of last resort in cases where the perineum was thought to be at extreme risk of rupturing. During these years, a growing number of distinguished obstetricians in America and Britain, Scotland, and Ireland cautiously began condoning the use of the operation. In their textbooks and published monographs on management of the perineum during childbirth, these leading obstetrical authorities put forth episiotomy as a means of saving the perineum from an imminent and extensive perineal laceration which might be so severe as to reach the anal sphincter or rectum. Today, these types of lacerations are classified as third- and fourth-degree perineal tears respectively. Nineteenth century obstetricians emphasized that the operation was to be reserved for those relatively few abnormal or extremely difficult cases where the then currently accepted non-surgical methods of preventing a perineal laceration seemed unlikely to be effective. Episiotomy, according to these physicians was to be considered an operation of desperation, something that was rarely if ever necessary. It was an operation which was only to be used when all other measures had been exhausted and a severe perineal laceration still seemed imminent.

These physicians' approbation of the emergency use of episiotomy rested primarily on their belief the operation offered a means of controlling the extent and location of an impending laceration. They reasoned that if a laceration seemed inevitable, by performing an episiotomy, the physician could choose the location and depth of the wound, something not thought possible with a spontaneous laceration. The obstetric authorities advised their colleagues that by performing an episiotomy they could thereby save the anal sphincter by diverting an impending laceration away from it. Some also suggested an incised perineum healed as well as, or better than a spontaneous laceration. Others, however, disputed this view believing instead that spontaneous lacerations healed just as well as incised trauma and without complication.

The following sample of quotations from Sir James Young Simpson, Thomas More Madden, and William Lusk is illustrative of what some of the most influential English speaking obstetrical authorities of the late nineteenth and early twentieth century were saying about the use of episiotomy. Simpson, one of the best-known obstetricians of his day, is noted for his discovery and use of obstetrical anesthesia (chloroform) for which he received a baronetcy from Queen Victoria in 1866 (Graham, 1960:256). He is also claimed by some biographers as the chief individual responsible for laying the foundation of Gynecology as a separate branch of medicine (Thoms, 1935:29-30). Simpson's advice on the use of episiotomy appears in the <u>Selected</u> <u>Obstetrical and Gynaecological Works of Sir James Y. Simpson</u>. Under the heading "Lacerations in the Perinaeum and Vulva," subheading "Prevention. Central Perineal Laceration," Simpson writes,

1- The common methodic manual support of the perineum.

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2- Delivery of head, and its proper guidance through the vulva by forceps.

3- Lateral incisions, if absolutely necessary, of the interior edge of the perineum, for in this, it is, I believe, better practice to make one or two slight cuts on either side of the fourchette, so as to regulate the site and direction of the lacerations that must occur, rather than leave their form and their character to mere chance alone. It is always an indefinitely more important matter to save the sphincter of the anus than the sphincter of the vagina (1871:594-5).

Madden, a member of the Royal College of Surgeons, Examiner in Midwifery

and Diseases of Women and Children, Queen's University, Ireland, and Ex-Assistant

Physician at the Rotunda Lying-in Hospital, Dublin (Madden, 1872), endorsed the use

of episiotomy in an article published in the first specialty journal in the field of

obstetrics and gynecology, the American Journal of Obstetrics and Diseases of Women

and Children<sup>1</sup>. In the article entitled, "On Laceration of the Perinaeum, Sphincter Ani,

and Recto-Vaginal Septum--Their Prevention and Surgical Treatment," Madden

advises,

When this accident (perineal laceration) appears otherwise inevitable, it may sometimes be obviated by incising the perineum in such a manner as to afford a sufficient passage for the child, and at the same time, protect the mother from the possibility of a recto-vaginal laceration...It has recently been proposed, in cases of impending laceration of the perineum during labor, that an incision should be made through the thin, expanded structures so as to relieve the existing tension. I have put this suggestion into practice in several cases with great advantage, as the perineum was thereby generally saved from laceration, which had previously appeared inevitable. Moreover, the wound thus made was limited to the extent of the incision, and generally healed within a few days without, any special treatment. I do not recommend this measure, however, excepting in those comparatively very rare cases in which well-directed manual support would fail to protect the perineum (1872:57-58).

The last example comes from the American textbook The Science and Art of Mid-

wifery by William Lusk. Lusk was Professor of Obstetrics and Diseases of Women and Children and of Clinical Midwifery at Bellevue Hospital Medical College, New York; and a founder (1876). Vice-President (1889) and President (1894) of the American Gynecology Association (Lusk, 1884; Chadwick, Dickinson, and Edgar, 1901). His textbook is considered one of the two major American obstetrical texts of the latter part of the nineteenth century

(Speert, 1980:128). Under the heading "Preservation of the Perineum," Lusk counsels,

When, in the judgment of the physician, rupture of the perinaeum seems inevitable, he is justified in making lateral incisions through the vulva to relieve the strain upon the recto-vaginal septum. To this operation the term episiotomy is applied. By it not only is the danger of deep laceration through the sphincter ani prevented, but, owing to their eligible position, the wounds themselves are capable of closing spontaneously; whereas, when laceration follows the raphé, the retraction of the transversi perinaei muscles causes a gaping place which interferes with immediate union. As, however, every wound surface is a source of danger in childbed, episiotomy should never be performed so long as hope exists of otherwise preserving the perinaeum. It is essentially the operation of young practitioners, the occasion for its employment diminishing in frequency with increasing experience (1884:210).

The above discussion of episiotomy remained unchanged in the subsequent 1885 and 1895 editions of Lusk's textbook.

The use of episiotomy as a measure of last resort was also advocated by such other well-known American and British, Scottish, and Irish physicians as Fordyce Barker (1874), Montrose Pallen (1876), Henry Garrigues (1880), Theophilus Parvin (1882; 1890; 1895), Thad Reamy (1885), Barton Cooke Hirst (1902), J. Chalmers Cameron (1903), James Clifton Edgar (1903; 1904; 1913), J. Clarence Webster (1903), Henry Jellett (1905); Alfred Galabin and George Blacker (1910), Thomas Watts Eden (1911), Robert Johnstone (1913), and J. W. Ballentyne (1919). Biographical information on these physicians appears in Appendix B.

# The Rediscovery of Episiotomy and Late 19th Century Pleas for the Liberal Use of Episiotomy

While the distinguished obstetric authorities of the latter part of the 19th century were endorsing the use of episiotomy as strictly an emergency operation, a small number of mostly American physicians attempted to broaden the indications for episiotomy by issuing pleas that the operation be performed considerably more frequently. These physicians, who are best described as episiotomy protagonists or enthusiasts, published the first-time ever papers devoted entirely to the issue of episiotomy. The pleas for episiotomy appeared in the <u>American Journal of Obstetrics and Diseases of Women and Children</u> (Broomall, 1878; Manton, 1885), <u>Archiv fur Gynäkologie<sup>2</sup></u> (Credé and Colpe, 1884), the <u>New York Medical Journal</u> (Wilcox, 1885), the <u>Brooklyn Medical Journal</u> (Jewett, 1890), and the <u>Annals of Gynaecology and Paediatry</u> (Stahl, 1895).

Believing that perineal incision did not seem to be receiving "at the hand of English and American writers on the subject of obstetrics, the attention its merits entitle it," (Wilcox, 1885:176) the episiotomy enthusiasts set out to popularize the operation. While none explicitly stated how often they believed the operation should be done, three reported performing an episiotomy in 20-50% of primiparous deliveries. For example, one reported performing 56 episiotomies in a series of 212 patients (an overall episiotomy rate of 27.7%- 51/101 primiparous patients; 6/111 multiparous patients) (Broomall, 1878:524), another reported 300 episiotomies in 2,000 patients (an overall episiotomy rate of 15%- 288/1,000 primiparous patients and 12/1,000 multiparous patients) (Manton citing Credé, 1885:234), and a third reported using the operation in excess of 20% of "so called normal deliveries" (Stahl, 1895:676).

The episiotomy protagonists set about encouraging the greater use of the operation by making several claims about what the benefits of the operation. Some repeated the already familiar belief that episiotomy offered physicians some control over the extent and location of a perineal rupture. For example, Anna Broomall (1878), and Reynold Wilcox (1885) emphasized that the operation provided a method of managing extremely unpredictable perineal lacerations. The following quotations illustrate how important the issue of control over perineal lacerations was to these episiotomy protagonists.

I consider the operation a safe and justifiable procedure, when the perineum is threatened, and where the danger of deep laceration is imminent, I look upon it as the proper and indispensable means to be used with the hope of meeting that danger, and diverting the risks of labor from what may possibly be a horrid permanent mutilation to a harmless temporary lesion (Broomall, 1878:525).

Granting that a laceration is inevitable, the operation removes it from the median line and locates it in the exact position chosen by the accoucheur. This avoids the danger of a laceration through the sphincter ani, and also relieves the strain upon the recto-vaginal septum, preventing a central rupture...Also...episiotomy limits the extent of the lesion...When one compares the spontaneous lacerations, irregular in depth and outline, with the subcutaneous incisions or the clean-cut operations, he can not but mark the difference and marvel that so simple a procedure has attracted so little attention in America (Wilcox, 1885:177-8).

In some cases, episiotomy enthusiasts went even further and proposed that the

operation actually prevented perineal lacerations altogether, or held them to an absolute

minimum (Credé and Colpe, 1884; Wilcox, 1885; Manton, 1885; Jewett, 1890). In the

words of Manton and of Wilcox,

episiotomy diminishes the frequency of these ruptures to a minimum (Manton, 1885:235).

as the operation of episiotomy becomes frequent, in just the same ratio do perineal ruptures become infrequent (Wilcox, 1885:179).

Another claim issued by Credé and Colpe (1884) and then Manton (1885) was

that the operation shortened labour, thereby diminishing the suffering of the mother

during a prolonged and painful labor. Jewett (1890) and Stahl (1895) advocated the

greater use of episiotomy for yet another reason. They believed that an episiotomy fol-

lowed by repair restored the perineum to its original integrity, something not thought to

happen with spontaneous lacerations.

I have been frequently struck with the depth and solidity of the perineal body after a typical episiotomy which has been sutured and healed. The tonicity of the pelvic floor is in marked contrast with that which usually follows the immediate suture of a deeply lacerated perineum (Jewett, 1890:708).

Lastly, Stahl (1895) repeated Ould's assertion that episiotomy saved the lives of

infants.

episiotomy is an instrument, par excellence, aiding as no other instrument in the preservation of life and body both in the foetal and maternal, and as I grow in obstetrics...I am glad to know that there is so effectual and yet simple an instrument as central episiotomy at my command. In private practice it has often assisted me in saving the life of the foetus and always in preserving the perineal body and other parts of the soft outlet (Stahl, 1895:676).

## Episiotomy Protagonists' Claims-Making Activities and the Use of Evidence

As endorsement of the emergency use of episiotomy rested entirely on obstetrical authorities' own positive clinical experiences with the operation, much of the evidence offered in support of the usefulness of episiotomy also took the form of personal testimonials. Stahl's quotation above of how episiotomy had "often assisted" him "in saving the life of the foetus and always in preserving the perineal body and other parts of the soft outlet" is an example of this strategy. The following passage from Jewett's (1890:708) is another example of a personal testimonial for episiotomy.

From these considerations I have been led to make more frequent use of episiotomy for the prevention of perineal tears, and the results in my experience have borne out my expectations. I have not always succeeded in wholly preventing lacerations nor have I succeeded in restoring the perineum in all cases to its primitive integrity, yet in no case have I reason to regret the incision and in none have I failed of a better repair than could have been reasonably expected without incision (Jewett, 1890:708).

Some episiotomy protagonists, however, argued for their position in a manner that had no precedent. They provided what should have been considered at the time fairly sophisticated statistical evidence in support of their claims. Broomall (1878:526-7), for example, reported on a series of 212 patients, of which 56 had received an episiotomy. In support of her observations, she provided a table listing the 56 episiotomy cases along with the woman's age, nativity, number of pregnancies, condition of the perineum during labor, duration of the second stage, number of vulva incisions, condition of perineum after labor, maximum temperature and maximum pulse of puerperium, date of discharge, and condition on discharge. Data were also included on the infant such as the presentation and position of the fetus, birthweight, occipitofrontal diameter, bi-partial diameter, and width of shoulders. Using these data she concluded that in nearly all of these cases episiotomy saved the perineum (Broomall, 1878:524). Broomall also concluded, that the operation was painless ("patients complain of no suffering" (Broomall, 1878:524)), was not attended by hemorrhage, healed readily and did not complicate the lying-in. Credé and Colpe (1884) presented an analyses of 1,000 consecutive primiparous cases from their clinic in Leipsic to support their contention that episiotomy prevented perineal lacerations. Comparing the percentage of episiotomies and ruptures of five successive birth assistants, Credé and Colpe reported the occurrence of lacerations diminished in direct proportion to the frequency with which perineal incisions were performed. Credé and Colpe provided a modern looking table to support their conclusion (Table 3-1).

In addition to apparently offering "proof" that episiotomy prevented tears, Wilcox and Manton attempted to overcome possible physician resistance to their pleas by using Credé and Colpe's data to refute three of the risks commonly attributed to the operation. At the time, it was believed by some obstetrical authorities that incising the perineum did not always prevent a perineal laceration. Further, it was felt by most that the episiotomy incision often became infected and an episiotomy lengthened the lyingin period. Addressing the concern that perineal lacerations, or ruptures occurred in spite of performing an episiotomy, Manton showed statistically this was not a common occurrence. He noted that of Credé's 1,000 cases, there were 259 episiotomies (25.9%), 104 spontaneous ruptures (10.4%) and only 29 ruptures in spite of incision (2.9%). Wilcox approached this issue differently by showing that most of the ruptures could be explained away by factors other than the episiotomy.

To explain the cases of rupture in spite of episiotomy, twenty-nine in number, it is necessary to state the condition present. Fifteen of these patients gave birth to children of over thirty-five hundred grammes (seven and seven tenths pounds), four suffered from vaginitis granulosa, three underwent forceps operations, and in one case the blades were badly placed. Of the remaining fourteen cases, three were vaginitis granulosa, three syphilis, one was an antero-frontal presentation, one

# TABLE 3-1

# THE PREVALENCE OF EPISIOTOMY AND PERINEAL LACERATION OF 5 BIRTH ASSISTANTS AT CREDÉ'S LEIPSIC CLINIC (1,000 Consecutive Primiparous Cases)

	% <u>Incisions</u>	% <u>Ruptures</u>
First Assistant	10.3	20.7
Second Assistant	20.4	11.8
Third Assistant	26.3	11.0
Fourth Assistant	28.5	7.4
Fifth Assistant	32.0	7.2

Source: Wilcox (1885:179)

case of hydrocephalus, two tears were caused by the shoulder, thus leaving four cases in which rupture took place after incision, which only shows that in these four cases the incision was not long enough, and in no cases to be considered an argument against the operation (Wilcox, 1885:179).

In a scientific fashion, Wilcox and Manton also addressed concerns that episiotomy might increase chances of infection and lengthen the lying-in period. They countered these concerns by conducting essentially an uncontrolled comparison. Both Wilcox and Manton statistically compared women who received an episiotomy with those who remained intact or suffered a perineal laceration. The following lengthy passage provides one example of how Wilcox (1885:179) skillfully used data to reject commonly held criticisms of the operation.

One of the strongest objections to this operation has been that it offers a point for general infection. That infection more frequently results from coincident tears in the vagina or cervix is stated above; the observations in the Leipsic clinic confirms this view, there being a difference of only three tenths of one per cent. in cases of puerperal fever in patients suffering from injured perinaeum over those occurring when the perinaeum was intact. Indeed among fatal cases of puerperal fever, two hundredths of one per cent. (sic) represents the difference of death rate in favor of injured perinaea, conclusively showing that the condition of the perinaeum had nothing to do with either mild or severe cases of puerperal fever. Nor are figures wanting to show that this operation shortens the time of convalescence, for the cases of episiotomy that remained over fourteen days were twenty-one and two tenths per cent.; (sic) cases of ruptured perineum remaining over the above time, twenty-six and nine-tenths per cent.; (sic) cases of rupture in spite of episiotomy remaining over the same time were thirty-one per cent. of the whole number (italics in original) (Wilcox, 1885:179).

Manton dealt with this issue by observing the following.

In 2,000 cases examined by Credé, there were records of 33 deaths. Autopsy showed 19 of these to be due to septic infection; the other 14 cases were caused by eclampsia, uterine rupture, and intercurrent diseases. Of the 19 septic cases, 15 were found in 1,572 cases where the perineum was intact- a percentage of 0.954; while only 4 died who had perineal laceration- a percentage of 0.934, a scarcely appreciable difference. This would seem to indicate that the chances for infection are about equal, whether episiotomy is done or not (Manton, 1885:233)

Despite their pleas for the greater use of episiotomy, and in some cases the

apparent statistical evidence supporting their claims and refuting common objections to

the operation, episiotomy enthusiasts' appeals appear to have had little effect on the medical establishment. In Jewett's (1890:708) opinion, episiotomy was "almost wholly neglected by practitioners." The majority of physicians he believed, probably never performed the operation at all. By the second decade of the 20th century, there is strong evidence that the weight of professional opinion had not been swayed by arguments of the episiotomy enthusiasts.

Episiotomy continued to be considered a last resort for preventing a severe perineal laceration. A unique mail survey of 10 'prominent' American obstetricians conducted in 1915 reveals that all but two (Williams, Cragin) performed episiotomy and six (Hirst, Skeel, Webster, DcLee, Zinke, and Edgar) admitted the operation was a useful "safety measure" for avoiding perineal laceration (Rothschild, 1915). Furthermore, all but one (DeLee) reported "rarely," if ever, performing the operation or using it in less than 5% of their deliveries.

Consensus about the emergency use of episiotomy remained intact as confirmed by the influential Scottish physician, J.W. Ballentyne. In a 1919 paper on methods of protecting the perineum during childbirth, Ballentyne, the so-called "founding father" of British antenatal care (Oakley, 1986:20), reviewed nine of the leading early 20th century American, English, Scottish and Irish obstetrical and midwifery texts. He spoke for physicians on both sides of the Atlantic when he concluded that now "...most admit its value in exceptional cases." Personally endorsing the operation, Ballentyne writes,

The writer of this critical summary is...very favourably impressed with the value of episiotomy, especially in primipara, and he has used it with increasing frequency in late years. He believes he has often saved the median line by its employment (p.409).

In keeping with the majority of obstetric authorities he had consulted, Ballentyne also noted he was only, "ready to admit the propriety of such a surgical procedure in desperate cases" (p.411).

Additional confirmation exists that the episiotomy protagonists were unsuccessful in overcoming the obstetrical authorities limited endorsements of episiotomy. With the exception of Garrigues (1880), who made passing reference to Broomall's paper, none of other obstetrical authorities I have identified acknowledged the pleas of the episiotomy protagonists in print.

## Barriers to Innovation: Factors Preventing the Widespread Use of Episiotomy

To completely understand the process of medical innovation, it is important to consider not only factors responsible for change but also the forces serving to prevent it. The failure of the episiotomy protagonists resulted from a number of factors including the prevalent notion of birth as a physiological process not requiring surgical intervention, anticipated patient resistance, the unpredictable nature of perineal lacerations, risks commonly attributed to the operation, and the lack of prominence of most of the episiotomy enthusiasts (or conversely the influence of authorities opposing the widespread use of episiotomy).

## The Natural Law of the Perineum

Probably the most important factor which impeded the more liberal use of episiotomy as proposed by the episiotomy protagonists in the later part of the 19th century was the dominant belief system in obstetrics at the time. During the late 1800s, childbirth was conceptualized, as an essentially normal or physiological process. This view also applied to the functioning of the perineum during birth. Most physicians of the day accepted what was known as the "natural law:...normally every perineum will properly distend to allow the exit of the child, leaving all the tissues intact" (Dewees, 1889:841). The following passages from three leading obstetrical authorities explain the "natural law" as it pertained to the perineum. The first is from 1871 offered by William Goodell, who at the time was Clinical Lecturer on Diseases of Women and Children at the University of Pennsylvania and Physician-in-Charge of the Preston Retreat. Three years later he was appointed Clinical Professor of the Diseases of Women and Children, University of Pennsylvania, one of the first chairs in gynecology in America (Speert, 1980:79-80). Goodell would later become a founder and President of the Philadelphia Medical Society (1872, 1873) and a founder and Vice-President of the American Gynecological Society (1878). The second passage from 1884 is by Henry Garrigues, Professor of Obstetrics in the Postgraduate Medical School and Hospital in New York, Obstetric Surgeon to the New York Maternity Hospital and Fellow of the American Gynecological Society. The final passage from 1904 is by Ely Van de Warker, Surgeon to the Central New York Hospital for Women, founder and Ex-President of the American Gynecological Society (1901).

Is it not marvelous, that in the management of the only stage of labour which appeals to more than one of the five senses of the physician--those of sight and touch--there is a greater diversity of opinion than in that of any other stage? Is not this fact a strong argument that the perineum was made to take care of itself, and not to be supported? "We cannot"--writes Senca--"complain of the malignity of nature." "Am I to believe"--asks Leishman--"that nature, after making such admirable provision for the earlier stages of labour, bungles matters to such an extent at the end, as to render the aid of the obstetrician in every case necessary to remedy a mechanical deficiency!"

When one sees, for the first time, the maternal soft parts stretched out to a diaphanous thinness by the presenting part of the child, to all appearances just upon the point of cracking open, the impulse to place the hand upon the bulging flesh becomes almost an instinct. We must not, however, forget that these tissues are not only elastic, but living and sentient; and--what is still greater weight--that the process of labour is a strictly physiological act. Nature in all her operations intends to adapt means to ends, and the perineum was certainly not created to be torn, unless shored up by the hand of the physician (Goodell, 1871:71).

...the physician is the servant, not the master of Nature. Nature always leads the greatest diameter of the child through the greatest diameter of the maternal parts, and attains this end by those wonderful turnings and adaptations, the particulars of which are not even fully understood (Garrigues, 1884:248-9).

The normal elasticity of the perineum should not be interfered with. The perineum has the capacity to stretch, to elongate, instead of tear. It seems to be the natural endowment of the perineum if it is not carried beyond the breaking point (Van de Warker, 1904:227).

As long as the obstetrical belief system supported the view that Nature ensured the proper distention of the perineum during childbirth, physicians were philosophically discouraged from surgically intervening in the second stage of labour. That is, unless confronted by an extremely abnormal or emergency situation; the very conditions under which obstetrical authorities were sanctioning the use of episiotomy. Under normal conditions, which were thought to apply to the vast majority of births, there was simply no theoretical justification for performing an episiotomy regardless of what the episiotomy protagonists were claiming. Given this generalized belief in the "natural law," the episiotomy protagonists' pleas for the more liberal use of perineal incision, went, not surprisingly, unheeded.

### Anticipated Patient Resistance

Physicians may have also been reluctant to adopt the liberal use of episiotomy for a reason more directly related to self interest. At this time, women also believed childbirth was a physiologic process which did not require physician intervention in most cases. Midwives, who did not perform episiotomy, attended the vast majority of American births prior to the turn of the twentieth century. Physicians may have been unwilling to offend the minority of women who secured their services during childbirth by performing an unwanted and unappreciated episiotomy. The following statement made by a rural physician reflects this fear.

New ideas and methods are being brought to our notice almost every day, but it is well for the man and woman in private practice to exercise considerable caution in the use of new and untried methods. We have not only the welfare of the mother and child to consider, but we must give a little attention to our professional reputations in the community...We who are in private practice must work under the more or less close scrutiny of the patient's relatives, who all too often have been brought up in the belief that nature should be allowed to take her course unaided and that interference of any sort is flying in the face of Providence. Most patients will forgive a doctor for almost any degree of laceration if he explains the conditions that caused it and makes an honest attempt at repair but very few of them fail to be critical of an episiotomy that fails to heal readily. No matter how urgently it was indicated (Neal, 1923:292). Leavitt (1986:152) cites a comment made in 1903 by another physician (Mary Whery) which indicates that physicians may have been reluctant to perform the operation because patients objected to the procedure.

Episiotomy has often been recommended, but it is only a substitution of certainty of laceration for an uncertain laceration. The patient, if she were conscious, would object to the laceration.

## The Unpredictability of Perineal Lacerations

On a more practical level, the very nature of perineal lacerations also discouraged the more frequent use of perineal incision. During the 19th century episiotomy enthusiasts promoted episiotomy as a means of managing and even preventing perineal lacerations. On the other hand, the fact that lacerations were not predictable also meant one could never be sure when an episiotomy was absolutely necessary. On predicting the occurrence of perineal laceration during childbirth, Parvin in his textbook wrote,

The late Dr. McClintock stated that he had so often seen the perineum escape laceration where this accident seemed inevitable, he was led to doubt the possibility of recognizing the cases where incision is an absolute necessity. In view of this statement one might require conditions for episiotomy similar to those which Coleridge did for the Caesarean operation: "I think there are only two things wanting to justify a surgeon in performing the Caesarean operation: first, that he should possess infallible knowledge of his art; and, secondly, that he should be infallibly certain that he is infallible" (Parvin, 1882:152-3).

As late as 1910, Galabin and Blacker in the 7th edition of their text, The Practice

of Midwifery were still pointing out that lacerations were unpredictable making the

decision to perform an episiotomy difficult.

The plan recommended by some, namely, to perform *episeiotomy* (sic)...in order to avoid a central laceration, is not generally desirable. For it is never possible to be certain when, and to what extent, a laceration is inevitable... (italics in original) (Galabin and Blacker, 1910:648).

Being uncertain as to when an episiotomy was necessary also meant that performing the operation required the physician to abandon any hope of delivering the woman intact, the only outcome for both the woman and the doctor that was in accordance with the "natural law". When this dilemma is considered within the context in which physicians were attending women in childbirth, the decision to remain restrictive in the use of episiotomy is quite understandable. Prior to 1900, over 95% of births took place at home (Wertz and Wertz, 1979:133). During homebirths, physicians worked under varying conditions. They often complained of there being insufficient light and little assistance other than a relative or neighbor. Under these circumstances, performing an unnecessary episiotomy and inflicting a wound which might not have otherwise occurred, was a prospect not welcomed by physicians.

# Risks Attributed to the Operation and the Lack of the Necessary Supporting Technology to Carry Out the Procedure

Aside from the issue of not knowing when an episiotomy was necessary, apprehension about episiotomy side effects also discouraged the liberal use of the operation. The most frequently mentioned concerns about the risks of the operation were that it would be painful, the incision might not heal well or become the site of infection. These fears reflected limitations in the existing technology necessary to safely carry out perineal incision. For example, the use of episiotomy during this period was probably impeded as a result of limitations in the technique of episiotomy repair (the method of suturing, type of suture material, etc.). Episiotomy protagonists advised incising the perineum, yet neglected to seriously discuss how the wound should be closed. It was around this same time that a typical treatment for a spontaneous perineal laceration was to bind the women's legs together for several weeks until the wound healed. Furthermore, the use of local anesthesia to render episiotomy repair painless had yet to be proposed. In fact, the suggestion that episiotomy incisions should even be sutured first appeared in the published literature in 1876 (Broomall, 1978:523). Along the same lines, prior to the age of Listerism in the 1880s, fears that the incision could become the site of infection (puerperal fever) was a justifiable concern as well. Had

surgical technology been refined to a level where the alleged benefits of performing an episiotomy outweighed the perceived risks, protagonists' pleas might have been more successful in convincing physicians to make use of the procedure in non-emergency situations.

# The Importance of Professional Stature

Lastly, most of the episiotomy protagonists were not sufficiently prominent to counteract the weight of obstetrical opinion favouring the emergency use of episiotomy and the natural law. As the eminent Samuel Gross, Emeritus Professor of Surgery, Jefferson Medical College and founder and first president of the American Surgical Association noted, "We are too apt, as a profession, to be influenced by prejudice, especially when it is backed by great authority" (1884:342). With two exceptions, the physicians campaigning for the liberal use of episiotomy, were early in their careers and quite unknown. For example, one was a woman physician who held the position of Resident Physician at the Woman's Hospital in Philadelphia (Anna Broomall). As an indication of Broomall's status within obstetrics, her paper promoting a more liberal approach to episiotomy was delivered before the Obstetrical Society of Philadelphia not by her but by Dr. Albert Smith. Women physicians were excluded from addressing this elite society or becoming a member of it. Another proponent, Walter Manton had recently returned from spending three years abroad studying medicine in Europe and England indicating he was earlier in his medical career. I was unable to locate biographical information on Reynold Wilcox and Frank Stahl during the period in which their episiotomy pleas were published. This suggests they probably had limited influence on their peers. Only two of the episiotomy protagonists can be counted with the obstetric authorities of the day, Chas Jewett and Carl Credé. Jewett was Professor of Obstetrics and Diseases of Women at Long Island College Hospital, New York and

a Fellow of the American Gynecological Society. He was honoured with the presidency of the Medical Society of the County of Kings (1878-80), and subsequently the Brooklyn Gynecological Society (1893), and New York Obstetrical Society (1894). In 1901, he was elected Vice-President of the AGS. Of all the episiotomy protagonists of the late 19th century, Credé would have been most widely known. Credé, a German physician, is famous for introducing the prophylactic use of silver nitrate drops for infantile blindness and a method of manual extraction of the placenta, both of which he proposed around the same time as routine use of episiotomy.

In contrast, the physicians endorsing the use of episiotomy as a last resort were all leading obstetrical authorities. They were members of the prestigious American Gynecological Society (AGS) or the Royal Colleges of Physicians and Surgeons. The AGS is the oldest national gynecological society in the world (founded in 1867). Membership in it has been referred to as "an accolade of the highest order" (Beacham, 1953:117). Initially, membership in the Society was restricted to 60 Fellows. Candidates had to be nominated by the Council and required a two-thirds affirmative vote of all the Fellows to be accepted. Since that time, membership in the AGS has continued to be coveted. In 1968 the AGS passed a resolution increasing membership to a maximum of 120 Fellows, although the actual number of Fellows did not reach 100 until 1972 (Speert, 1980).

At the time of their endorsement of the emergency use of episiotomy, 8 Americans obstetricians were Fellows of the American Gynecology Association (AGS): three founding members (Barker, Lusk, Parvin); another 4 elected Fellows (Garrigues, 1877; Reamy, 1877; Hirst, 1889; Edgar, 1893) and one Honorary Fellow (Webster, 1898). Parvin and Reamy had been elected to the Council of the AGS (1876-77 and 1883 respectively) and Reamy had served as Vice-President in 1881. In the ensuing years, five of these men were eventually elected President of the AGS (Barker, 1876; 1877; Reamy, 1886; Parvin, 1893; Lusk, 1894; Hirst, 1924;), five served as Vice-President (Parvin, 1883; 1886; Garrigues, 1897; Lusk, 1889; Edgar, 1907; Hirst, 1922), two served on Council (Garrigues, 1882, Barker, 1883) and two were elected Honorary Fellows (Garrigues, 1901; Cameron, 1910).

Physicians from the U.K. and Ireland who favoured last resort use of episiotomy were also prominent. Prior to the formation of the College of Obstetricians and Gynecologists in 1929 (later becoming the Royal College), membership in the Royal Colleges of Physicians and Surgeons indicated prominence within the profession. Of all the English, Scottish, and Irish physicians, almost all were either Fellows of the Royal College of Physicians of London (Blacker, Eden, Galabin), the Royal College of Physicians of Edinburgh (Ballentyne), the Royal College of Surgeons of Edinburgh (Blacker, Eden, Johnstone), the Royal College of Physicians of Ireland (Jellett), or a Member of the Royal College of Surgeons of Ireland (Madden). Two physicians practicing in North America also belonged to the Royal College of Physicians. Cameron was a Member of the Royal College of Physicians of London and Webster was a Fellow of the Royal College of Physicians of Edinburgh.

#### <u>Summary</u>

This chapter has examined an unsuccessful attempt to promote the liberal use of episiotomy. I first described the origins of the obstetrical use of episiotomy and traced its acceptance as a legitimate emergency procedure to prevent or minimize the damage of a severe perineal laceration. I then described the rediscovery of the operation by a handful of late 19th century obstetricians as well as their claims-making activities intended to overturn the well established practice of restricting episiotomy to desperate cases.

Claims-making activities involved issuing pronouncements about the benefits of the operation. In their pleas for the operation, the episiotomy protagonists claimed that episiotomy rendered perineal lacerations manageable by giving physicians some control over the extent and location of a perineal tear. They also claimed that episiotomy prevented perineal lacerations altogether; shortened labour and maternal suffering; returned the perineum to its original integrity; and lastly and most dramatically, saved babies' lives. These late 19th century episiotomy claims-making activities are striking in that some the episiotomy protagonists attemtped to support their claims with statistical evidence. These episiotomy enthusiasts were essentially making evidence-based recommendations for obstetrical practice well before Abraham Flexner made the notion of scientific medicine fashionable in 1910. As the following comment reveals, at least one episiotomy enthusiast was well aware of the need to counteract the prominant opponents of the liberal use of episiotomy with evidence of the operation was beneficial.

But when so distinguished an accoucheur as Dr. Playfair says of episiotomy that he "questions if it is likely to be of use" we beleive that the operation has not been done sufficiently in the lying-in wards of King's College Hospital to prove its efficacy. One hesitates to criticise the opinions of men who are known to the world as Nestors in the individual specialties, and yet investigation often tends to overthrow such opinions, and place in their stead facts, which in their turn must also pass through the fire (Manton, 1885:226)

In the remainder of the chapter I examined factors acting against medical innovation (the overturning of the restrictive use of episiotomy). Despite the apparent evidence supporting some of the claims made by episiotomy protagonists, pleas for episiotomy had little impact on other physicians. The more liberal use of episiotomy was not supported by the then current obstetrical belief system which held that Nature ensured the proper distention of the perineum during childbirth making the use of perineal incision unnecessary in the vast majority of normal births. This belief was referred to as the natural law of the perineum. When birth, or more precisely the functioning of the perineum was conceptualized as a normal process not requiring intervention, physicians were philosophically discouraged from surgically intervening unless it was an emergency. Furthermore, this view was espoused and promulgated by the leading obstetrical authorities of the day. Episiotomy protagonists for the most part, lacked the prominence or stature to counteract the influence these weighty men had on the profession. Women, too, held the view that birth was a normal or physiologic process not requiring surgical intervention and may have objected to the performance of episiotomies. Having not yet obtained a monopoly on childbirth, physicians may have been particularly sensitive to client demand and therefore were disinclined to adopt the liberal use of episiotomy.

The effect of the episiotomy protagonists' claims-making activities was negated by another practical concern physicians had about the operation. Physicians' use of episiotomy as anything other than as a last resort was discouraged by limitations in the existing surgical technology. At the time, episiotomy repair techniques were quite rudimentary; local anesthesia was unknown, and aseptic techniques just beginning to be advanced. In other words, because the technology necessary to carry out the frequent use of episiotomy was lacking, physicians perceived that the risks of performing the operation outweighed its alleged benefits and therefore would have naturally resisted employing the operation.

I have shown that research and claims-making activities alone may be insufficient to produce innovation in medicine. Efforts to generate medical innovation are also moderated by social and technological factors such as the dominant belief system, the prominence of those advocating or opposing change, client demand, and the existing technology. In the next chapter, I examine the successful efforts to promote the widespread use of episiotomy in the United States and identify the key factors responsible for the popularity of the operation.
#### Footnotes

1. The <u>American Journal of Obstetrics and Diseases of Women and Children</u> first published in 1868 was the third speciality journal to enter the American medical literature. The first two were the <u>American Journal of Insanity</u> (1844) and the <u>American Annals</u> of the Deaf (1847).

2. Although Credé and Colpe's article was written in German, the German medical literature was widely read by American physicians. At that time, Germany was a centre of scientific development and "lured American students by the hundreds, reaching a peak in the 1870s and 1880s" (Stevens, 1971:39). Between 1870 and 1915, 15,000 American physicians studied medicine in German-speaking universities. It has been estimated that at least a third and perhaps half of the best-known men and women in American medicine in that period (1870s-1880s) received part of their training in Germany, including the entire faculties of the medical schools at Harvard, Johns Hopkins, and Michigan (Stevens, 1971:39). Furthermore the article received considerable exposure in America as it was subsequently discussed at length by Manton (1885) in the <u>American Journal of Obstetrics and Diseases of Women and Children</u> and Wilcox (1885) in the <u>New York Medical Journal</u>.

#### CHAPTER 4

## OVERTURNING THE EMERGENCY USE OF EPISIOTOMY: THE AMERICAN CAMPAIGN FOR PROPHYLACTIC EPISIOTOMY

By the late 1930s in the U.S., the strictly emergency use of episiotomy was giving way to prophylactic episiotomy. In this chapter I examine how episiotomy went from being an emergency operation which was seldom thought necessary to a routinely used prophylactic procedure. First I trace the adoption of routine episiotomy back to the claims-making activities of a number of prominent and then less prominent obstetrician/gynecologists who lobbied for the greater use of the operation between 1915 and 1935. I describe their lobbying efforts. I then consider the factors which facilitated the widespread adoption of episiotomy by American physicians. I show how scientific evidence had little role in the routinization of episiotomy in American obstetrics and describe how the recasting of childbirth in pathological terms was of paramount importance in encouraging the acceptance of routine episiotomy. I also consider other practical and professional factors which facilitated the adoption of routine episiotomy. These factors were a shift in the obstetrical belief system, the hospitalization of childbirth, physician convenience and the professionalization of obstetrics.

#### The Changing Use of Episiotomy

During the 1930s, discussions in the literature about episiotomy suggest the operation was no longer being considered strictly an emergency procedure and was beginning to be performed quite frequently. In 1937, papers written by two fairly prominent physicians from different parts of the U.S. appeared back-to-back in the <u>American Journal of Surgery</u> revealing the growing acceptance of the operation. In the first paper, Howard Taylor (1937), an Associate Professor of Obstetrics and Gynecology at the New York University College of Medicine, Fellow of both the American

Gynecological Society and the American College of Surgeons, and Diplomat of the

newly created American Board of Obstetrics and Gynecology<sup>1</sup> reports,

After discussions dating back a century or more and continuing till within a few years ago, little argument now exists as to the justifiable inclusion of episiotomy among the valuable surgical procedures in obstetrics (1937:403).

In the second paper, Willard Cooke (1937), Professor of Obstetrics at the University of Texas, Diplomat of the American Board of Obstetrics and Gynecology and Fellow of both the American Gynecological Society and American Association of Obstetricians and Gynecologists and Abdominal Surgeons declared,

episiotomy as a routine measure in all cases...is done by a great many of the best obstetricians. The procedure is unnecessary in approximately 10 per cent of primipara and in a much higher percentage of multipara... (1937:416).

Similar statements about the use of episiotomy were also being echoed at obstetrical meetings around the country. For example, during a discussion of a paper presented before the Obstetrical and Gynecological Section of the California Medical Association in May of 1937, one discussant stated "episiotomy as a routine procedure is the rule rather than the exception in the practice of modern obstetrics" (McCausland, 1938:178). The following year, Martin Diethelm (1938), a Diplomat of the American Board of Obstetrics and Fellow of the American College of Surgeons, proclaimed before the Section on Obstetrics and Gynecology of the Ohio State Medical Association, "episiotomy is today of all obstetric surgery the most frequently performed" (p.1107).

By 1950, the routine use of episiotomy was so well entrenched as standard obstetrical practice in America that the 10th edition of <u>Williams Obstetrics</u>, reported "Except for cutting and tying the umbilical cord, episiotomy is the most common operation in obstetrics" (Eastman, 1950:410).

Table 4-1 lists episiotomy rates reported by a number of individual North American institutions and physicians between the 1930s and 1970s. The rates are

Date	Institution/Physician	Overall Episiotomy	Primip Rate (%) (when stated)	Number of Deliveries
		Rate (%)		
1930	Johns Hopigns Baltimore	07		954
	Chicago Lying-In Hospital	43 1	est. 90-9576	6 031
	SIN AVENUE HOSPITAL NY	27.3	est. 90-9576	737
	(Tritsch 1930)	22.3	est 90-95%	337
1930	Royal Victoria Hospital Montreal (Duncan 1930)	-	vast majority	4,000
1935	Evanston Hospital, Evanston, III. (Galloway 1935)	•	96	500
July 1, 1932- June 30, 1934	Chicago Lying-In Center (Homebiths) (Buibaum,1936)	33		•
July 1, 1933- June 30, 1935	Chicago-Lying-In Hospital (Kretzschmar and Huber, 1938)	52.9	in nearly every instance	5,624
1073.1076	Or Martin Durthelm	61.0		4 607
	Dr Martin Diethelm (Diethiem 1938)	50.2		664
1936-1939	Province of Alberta (Conn et al. 1941)	47 3	77	2.000
1940	Boston Lying-In Hospital (Nelson and Abramson, 1941)	58.5		2.000
1935-1946 1938-1948	University Hospital, Baltimore Baltimore City Hospital (Kaltreider and Doon, 1948)	37.0		43.503
June 1948- February 1949	Mercy Hospital, San Diego (Smith, 1951)	54.0		2,771
May 1, 1948- April 30, 1951	Drs. D'Errico & McKeogh ( D'Errico & McKeogh, 1951)	89.0	89	153
1951	Miwakee Hospital (Hofmeister 1952)	86.4		3.017
1949-1953	Emanual Logartal Rodland Ora			
1949	(Eulsher and Eest 1655)	81.0		4 222
1950		84.0		4,233
1951		83.0		4 493
1952		83 D		4 837
1953		75.0		5.393
		. =. =		
1949-1954	Private and Clincial OB Services			
1949	Dept of OBS	59.4		3,144
1950	Washington University School of	53.6		3.506
1951	Medicine, Saint Louis	47.6		3 751
1952	(Ballew and Sullivan, 1958)	38.5		4 014
1053	(	44.7		4,019
1954		45.3		4,110
				-,200
1040/3-1330/3	George vvasnington University Hi	ospital		<b>•</b> <i>c</i> =-
1040+1949	(caner et al. 1960)	60.1		2.420
1004+1000		19.1		3,694
1200-1200		80.6		3.722
1930-193/		78 6		3,747
120/+1200		79.4		3,889
1920-1928		79 1		3.690
1954-1955		79.7		3,694
1955-1956		80.6		3,722
1956-1957		78.6		3,747
1957-1958		79.4		3.889
1958-1959		79.1		

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Table 4-1. Selected Episiotomy Rates Reported in the American Medical Literature, 1930-1979.

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# Table 4-1. Cont'd

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	Institution/Physician	Overall Episiotomy	Primip Rate (%)	Number of Deliveries
Date			(when stated)	
	•	Rate (%)	•	-
1954-1958	Frances Hospital Waterico, Iowa			
1954	(Miller, 1960)	49 8		900
1955		49.4		933
1956		55 2		997
1957		54 6		1.028
1958		57 4		905
1960	Milwaukee Matemity Pavillion (Wendt and Kroon, 1961)	84 5		500
1953-1960	Drs. Sleber and Kroon,			
1953	Mount Carmel Mercy Hospital.	85.6		263
1954	Detroit	87.2		299
1955	(Sieber and Kroon, 1952)	90.0		256
1956		95.4		277
1957		96.6		274
1958		99.6		259
1959		99.9		219
1960		100 0		198
1960	U of Maryland, School of Medicine	67.9		•
May 1, 1961- April 30, 1962	Washington Hospital Center, Washington, D.C. (Dodek 1963)	94 0		4.022
No date given "past decade"	Drs. O'Leary and O'Leary, 1965 (O'Leary and O'Leary, 1965)	95.1		4,537
Jan 31, 1975- Feb 12, 1976	Evanston Hospital, Evanston, III	95 0	500 pts using	Lamaze method
	(Hughey et al. 1978)	98 O		500 controls
1976	U of Washington Hospital (Shy and Escheubach, 1979)	69.0		•

Not reported.

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obviously selective and may not be representative of the national picture. However, they do confirm that for the most part, the operation was frequently performed during these years. During the 1930s and 1940s, with a few exceptions (Johns Hopkins University in 1930 and the Chicago Lying-In Center in 1932-1934)<sup>2</sup>, the reported incidence of episiotomy typically ranged between 40 and 50% for all vaginal deliveries and closer to 80-100% for mothers giving birth for the first time. In the following decades, the use of episiotomy was often reported to be even higher, in many cases exceeding 80% of all vaginal deliveries.

In the following three sections, I describe how the prophylactic use of episiotomy was brought about in the United States. I focus on the activities and individuals responsible for this change during two specific periods; 1915-1925 and 1925-1935.

## Pleas for the Prophylactic Use of Episiotomy

In North America, the replacement of emergency episiotomy with routine episiotomy resulted largely from a campaign to encourage the elective use of episiotomy which took place roughly between 1915 and 1935. During this time, episiotomy advocates called for the operation to be performed not as a last resort but prophylactically. As one of these episiotomy protagonists wrote,

Episiotomy should be performed for prophylactic purposes and not as an emergency requirement. It should be a method of choice and not one of necessity (Deutschman, 1924:CLI).

A closer examination of the drive for prophylactic episiotomy reveals that it occurred in two quite distinct phases. Initially, during the second two decades of the 20th century (approximately between 1915 and 1925), a small number of leading obstetrician/gynecologists made the case for the prophylactic or elective use of episiotomy. During the second phase of the episiotomy campaign (from the mid twenties through the thirties), a larger number of somewhat less distinguished obstetrician/gynecologists went further by championing the routine use of the operation.

### Prophylactic Episiotomy (~1915-1925)

At a time when most American and British physicians agreed that episiotomy was a rarely needed emergency procedure, a handful of quite prominent obstetrician/gynecologists began urging the profession to broaden the indications for episiotomy and to employ it in non-emergency situations. They championed episiotomy as a prophylactic for maternal and infant morbidity and infant mortality. Their rationale for prophylactic episiotomy consisted primarily of four claims: 1) episiotomy prevented perineal lacerations and the resulting maternal morbidity associated with this condition; 2) following an episiotomy, when properly repaired, the perineum returned to its prepregnancy state; 3) episiotomy shortened labor thereby preventing infant morbidity and mortality, and 4) episiotomy prevented gynecological problems which might appear many years after the birth (such conditions as cystocele, rectocele, and relaxation of the pelvic floor (uterine prolapse)). While allegations that episiotomy prevented perineal lacerations, preserved the tonicity of the perineum, and saved fetal lives had been made much earlier by the 19th century episiotomy enthusiasts, the assertion that the operation prevented future gynecological problems was unique and central to the argument for the prophylactic use of episiotomy. While there was considerable agreement on the benefits of the prophylactic use of episiotomy, these authorities often disagreed over which type of episiotomy incision to perform. Some favoured making a mediolateral incision while others preferred the median or midline incision.

The launching of the campaign for prophylactic episiotomy can be traced to the 1915 Annual Meeting of the American Gynecological Society when Brooke Anspach (1915a; 1915b), an Associate in Gynecology at the University of Pennsylvania declared "episiotomy would reduce the physical incapacity following labor" and "by facilitating delivery would reduce infant mortality and maternal morbidity" (p.714). Three years later before the same society, Ralph Pomeroy (1918a; 1918b), Associate Professor of Obstetrics and Gynecology at New York's Long Island College Hospital joined the campaign when he proposed episiotomy for all first-time mothers<sup>3</sup>. More attention was focused on episiotomy in 1919 when James Harrar (1919), Attending Surgeon at the Lying-in Hospital of New York lobbied obstetricians attending the Annual Meeting of the American Association of Obstetricians and Gynecologists to perform elective episiotomy. That same year, Charles Child Jr. (1919), Professor of Gynecology at the New York Polyclinic Medical School presented the proposition of prophylactic episiotomy before the New York City Charity Hospital Alumni Society. Joseph B. DeLee (1920a; 1920b), Professor of Obstetrics at Northwestern University Medical School, issued the best known plea for prophylactic episiotomy at the 45th Annual Meeting of the American Gynecological Society in 1920. In 1922, Dan Collier Elkin an instructor in Obstetrics and Gynecology at Emory university School of Medicine, outlined the prophylactic benefits of episiotomy in an article published in a state medical journal. During this period, the last major appeal for the more widespread use of episiotomy was issued in 1924 by David Deutschman (1924), a New York obstetrician and gynecologist. With the exceptions of Elkin and Deutschman, the prophylactic episiotomy advocates were quite prominent obstetrician/gynecologists. Anspach, Pomeroy, Child and DeLee were Fellows of the American Gynecological Society and Harrar a Fellow of the American Association of Obstetricians and Gynecologists<sup>4</sup>. Anspach, Pomeroy, Harrar, and DeLee were also Fellows of the American College of Surgeons.

These pleas received substantial attention. Four of them were issued at meetings of the American Gynecological Society and the American Association of Obstetricians and Gynecologists in the presence of many of the most eminent and influential

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obstetricians in the country. All were widely reported in the medical press. The papers presented before the AGS and AAOG were included in the published transactions of the meetings (Transactions of the American Gynecological Society (Anspach, 1915b; Pomeroy, 1918b; DeLee, 1920b), Transactions of the American Association of <u>Obstetricians and Gynecologists</u> (Harrar, 1919), and also published in the <u>American</u> <u>Journal of Obstetrics and Diseases of Women</u> (subsequently the American Journal of Obstetrics and Gynecology), the official organ of both societies. The AGS and AAOG presentations were also abstracted in the <u>Journal of the American Medical Association</u>. Two other papers appeared in the <u>Medical Record</u> (Child, 1919). and the <u>Medical</u> <u>Journal and Record</u> (Deutschman, 1924), both national publications. Elkin's paper, the only one not published in a national journal, appeared in the <u>Journal of the Medical</u> <u>Association of Georgia</u>.

Of the physicians campaigning for prophylactic episiotomy. the pleas by Ralph Pomeroy and Joseph B. DeLee are most frequently cited by physicians as having influenced obstetrical practice (e.g. Kelly, 1930; Pieri, 1938; Dallas, 1953; Pilkington et al., 1963, Everett and Taylor, 1976; Speert, 1980:187). Pomeroy's presentation before the American Gynecological Society provocatively entitled, "Shall We Cut and Reconstruct the Perineum for Every Primipara?" elicited considerable interest in episiotomy. Pomeroy, best known for devising one of the most popular methods of tubal sterilization (Speert, 1980:228), championed prophylactic episiotomy as a means of preventing future gynecological problems by saving the mother's pelvic muscles from over-stretching, restoring the mother's genitals to their original prepregnant state by proper episiotomy repair, and diminishing the danger of death to the first born (Pomeroy, 1918a:213).

DeLee, a prominent Chicago obstetrician/gynecologist was somewhat more celebrated in stature than Pomeroy or the other advocates of prophylactic episiotomy.

At the time and for decades later, DeLee exerted substantial influence over the teaching of obstetrics through his widely used textbook, <u>Principles and Practice of Obstetrics</u> and his editorship of the <u>Yearbook of Obstetrics</u>. In all, DeLee's obstetrical textbook went through 13 editions (1913-1965). He was sole author of the first 7 editions and senior author of next two prior to his death in 1943. DeLee served as editor of the <u>Yearbook of Obstetrics</u> for nearly four decades (1903-1942).

At the 1920 annual meeting of the AGS, DeLee delivered his now famous paper, "The Prophylactic Forceps Operation." In this paper he set out a method for managing normal labor with the purpose of "relieving pain, supplementing and anticipating the efforts of Nature, reducing the hemorrhage, and preventing and repairing damage" (DeLee, 1920a:34). Prophylactic episiotomy was but one element, albeit a significant one, of the package of obstetric care promoted by DeLee. Essentially, the prophylactic forceps operation consisted of giving morphine and scopolamine (an amnesiac) during the first stage of labor, putting the mother to sleep with ether after the fetal head passed the cervix, performing a mediolateral episiotomy, extracting the infant with forceps. injecting ergot and pituitrin to contract the uterus and prevent postpartum hemorrhage, manually extracting the placenta, repairing the episiotomy incision, and administering more morphine and scopolamine to abolish, as much as possible, the memory of labor. Many authorities regard DeLee's espousal of the prophylactic forceps and episiotomy, as the most enduring of his contributions to obstetrics (Everett and Taylor, 1976; Speert, 1980:187). Furthermore, this paper and what it advocates is regarded by obstetricians and social scientists alike as the cornerstone of modern obstetric practice (Wertz, and Wertz, 1979:141; Shorter, 1990:173).

Of all the prophylactic episiotomy protagonists, DeLee offered what was the most comprehensive rationale for performing prophylactic episiotomy and forceps. He listed the reasons for doing the operation as:

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1- It saves the woman the debilitating effects of suffering in the first stage and the physical labor or a prolonged second stage.

2- It undoubtedly preserves the integrity of the pelvic floor and introitus vulvae and forestalls uterine prolapse, rupture of the vesicovaginal septum and the long train of sequelae previously referred to. Virginal conditions are often restored.

3- It saves the babies' brains from injuries and from immediate and remote effects of prolonged compression. Incision of the soft parts not alone allows us to shorten the second stage, it also relieves the pressure on the brain and will reduce the amount of idiocy, epilepsy, etc. (DeLee, 1920a:43).

While strenuously promulgating the alleged advantages of prophylactic episiotomy, the episiotomy protagonists, with the exception of Pomeroy who believed episiotomy should be performed in every primiparous labour (a practice he later denied doing himself<sup>5</sup>), did not advocate the wholesale use of the operation. Harrar for example, suggested that "by careful observation episiotomy will be found to be of avail in about one-third of all primiparae" (191:708). Child (1919:144) reported performing the operation in about half of a series of 112 primipara labours. DeLee's response to Rothschild's 1915 mail survey, indicates he performed episiotomy in a third of all his cases. Concerning his use of episiotomy with forceps, statistics provided by DeLee from his private practice for the two years previous to his talk revealed that he frequently applied forceps. Of 200 cases DeLee performed, he used forceps in 85 and prophylactic forceps in another 39. Since DeLee's practice was to perform an episiotomy prior to applying forceps, the episiotomy rate in his private practice would have been in the order of 62% (85+39/200). Furthermore, in response to one of the discussants of DeLee's paper who criticized him for recommending the procedure in all cases (Byford, 1920:78), DeLee retorted, "I do not do the operation in every case. Most cases of multiparae with large pelves do not need prophylactic forceps" (1920:80). From these statistics it is evident the episiotomy protagonists on the whole were advocating the selective, albeit frequent, use of prophylactic episiotomy. Promotion of

episiotomy as routine practice really only occurred during the second phase of episiotomy activism which developed after 1925.

#### Pleas for Routine Episiotomy (~1925-1935)

Around 1930, a second phase of prophylactic episiotomy activism developed as more rank-and-file obstetrician/gynecologists began actively lobbying for the universal or indiscriminate use of episiotomy, especially for first time mothers. It is this universal use of episiotomy which is today, in the minds of most people, synonymous with "routine" episiotomy. For the most part, the protagonists of routine episiotomy made all of the same claims about the operation as did the prophylactic episiotomy enthusiasts a decade earlier. However, they, as opposed to their earlier colleagues, proposed that all, or nearly all, first time mothers would benefit from perineal incision. In contrast to the earlier celebrated champions of prophylactic episiotomy, these physicians lacked the stature of a Dr. DeLee or Pomeroy. In fact, of the dozen or so advocates of the universal use of episiotomy in the early thirties, none were Fellows of the AGS, although Gillis (1930) and Hannah (1930) were Fellows of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons. While most of the routine episiotomy enthusiasts can not be counted among the elite of American obstetricians, they were nonetheless specialists in obstetrics and gynecology. Three were Diplomats of the newly created American Board of Obstetrics and Gynecology (Gillis, Hannah, and Galloway) and half were Fellows of the American College of Surgeons (Gillis, Kelly, Hannah, Tritsch, Galloway).

Differing from the earlier advocates of prophylactic episiotomy who had tended to take advantage of national obstetrical meetings to advance their views, only one advocate of routine episiotomy lobbied such an audience. Before making its way into print, R.A.D. Gillis' plea for routine episiotomy was initially presented as a Thesis to the American Association of Obstetricians and Gynecologists in 1929. Many of the appeals for routine episiotomy were, however, made before local professional bodies (Kelly, 1928; 1930; Blevins, 1929; Sellers and Sanders, 1930; Gusman, 1932; Galloway, 1935). Generally speaking about half the pleas for routine episiotomy appeared in state medical journals such as <u>Virginia Medical Monthly</u> (Kelly, 1928; 1930), the <u>New Orleans Medical and Surgical Society</u> (Sellers and Sanders, 1930), the <u>Ohio</u> <u>Medical Journal</u> (Gusman, 1932), and the <u>Illinois Medicai Journal</u> (Galloway, 1935). The remainder were published in more widely distributed national publications such as <u>American Journal of Obstetrics and Gynecology</u> (Blevins, 1929; Hannah, 1930), the <u>American Journal of Surgery</u> (Gillis, 1930), <u>Medical Journal and Record</u> (Berlind, 1932) and the <u>Journal of the American Institute of Homeopathy</u> (Tritsch, 1930).

In the next section, I explore the content of the prophylactic episiotomy protagonists' claims-making activities. In particular, I focus on the apparent lack of a relationship between the benefits and harms of episiotomy claimed by the advocates of the operation and the evidence for these claims.

# The Role of Scientific Evidence in the Prophylactic Episiotomy Claims-Making Activities

While physicians have tended to assume that the success of the pleas for prophylactic episiotomy probably rested on the scientific evidence which showed the operation was safe and beneficial, this was not the case. Although by 1920 there had been significant scientific advances in obstetrics and gynecology, it is striking that research on episiotomy did not figure prominently in the arguments for its use.

Pomeroy for example, freely admitted at the time of his talk that there was no evidence for his proposition.

As sufficient time for labor test will not accrue for another year or two, I can only offer this proposition as a tentative one, lacking entirely present evidence of favorable follow up results (Pomeroy, 1918a:219).

As the following passage from Elkin's paper indicates, personal experience with the operation rather than scientific evidence of benefit were the basis of his pleas for prophylactic episiotomy.

By this procedure, as simple and easy to repair as a first degree laceration, we have restored the vaginal canal to an almost virginal condition, and in no case has vaginal relaxation followed. However, the time elapsing from delivery to follow up examination has been too short in most cases to make an absolute statement in this regard (1923:229).

Even the claims made for episiotomy by the eminent Dr. DeLee were based entirely upon his personal clinical experience.

Many efforts are being made to ease the travail of the woman and to better the lot of the infant. What follows is another such effort. Experience alone can decide whether it accomplishes its purpose (DeLee, 1920a:34).

As Klein (1988) has also pointed out, DeLee's "Prophylactic Forceps Operation" is

particularly notable for the complete absence of references.

At the annual meeting of the AGS in 1921, the year following DeLee's dramatic

presentation of the prophylactic forceps operation, a discussion erupted over the lack of

evidence for the many new obstetrical interventions including prophylactic use of

episiotomy. At this meeting, Rudolph Holmes a Chicago obstetrician, generated con-

siderable debate when he accused DeLee, Pomeroy and others of meddlesome mid-

wifery. Holmes pointed out these physicians

produced no evidence to show that their systems are more worthy, less risky, and promise a higher conservation of life than carefully watched spontaneous labour (Holmes, 1921:236).

Responding to Holmes' accusations, DeLee admitted there was still little hard evidence supporting his claims about the prophylactic forceps operation made the previous year. Referring to the prophylactic forceps operation, DeLee admitted to Holmes, "We must...prove that this interference in labor brings good results, and that in course of time we will *probably* be able to do (italics added)" (DeLee, 1921:299). During this same discussion, DeLee also commented, "Statistics in general are very insecure building stones on which to base judgment" (1921:298). This statement would seem to suggest that DeLee was not at all convinced of the need to scientifically demonstrate that obstetrical interventions were beneficial before introducing them into practice. Two years later, DeLee had still not provided any data showing that prophylactic forceps and episiotomy were beneficial. As Brooke Anspach remarked in 1923,

When we consider the proposition of DeLee we are impressed, from the beginning, with the fact that here there is actually debatable ground and that we must not, even for a moment, compare the prophylactic use of forceps after episiotomy with either Reed's or Potter's proposals (Reed routinely induced labor at term by means of a tube or bag and Potter routinely shortened the second stage of labor by performing podalic version- delivering the fetus feet first). Indeed, there is some justification in the advocacy of forceps used prophylactically, and yet, after weighing the matter carefully, even here one must decide that interference in a normal case as a routine measure is unwise and that both the mother and the child will do better if Nature is permitted to take its course. DeLee, at present, furnishes no statistics, so far as we know. His last report gave a gross fetal mortality of 3.6 per cent in 9258 cases, but assuredly these cases were not all treated prophylactically with forceps (p.98).

In the years which immediately followed, not only did evidence of the benefit of episiotomy fail to emerge, in at least one case, one of the episiotomy enthusiasts actually reported the operation appeared to be associated with an increased risk of infection. Buried in a paper on functional dystocia presented at the 1922 meeting of the American Association of Obstetrician, Gynecologists and Abdominal Surgeons, James Harrar who had advocated prophylactic episiotomy in 1919, reported

It is a matter of comment in the wards that there is more fever after repair of episiotomy wounds than those of spontaneous laceration (Harrar, 1923:230).

One of the comments made during the discussion of Harrar's paper is suggestive of the extent to which physicians of the time were not interested in evidence-based medicine, at least as it related to the issue of episiotomy. Despite Harrar's declaration that in his hospital more infections followed episiotomies than spontaneous tears, one discussant simply commented, The statement that episiotomy is followed by a higher morbidity than spontaneous tears is a surprise. It certainly does not sound logical to me that a clean-cut wound will give more temperature than a laceration which is spontaneous (Quigley, 1923:295).

The protagonists of routine episiotomy in the 1930s were equally unconcerned about demonstrating that episiotomy was in fact beneficial. None provided any research evidence to justify their calls for the routine use of episiotomy. As was noted in 1935, "opinions for and against episiotomy have been formed on the basis of individual experience, but no statistical evidence has been compiled to support the claims of either side" (Nugent, 1935:239). Some of these physicians were so convinced of the benefits of routine episiotomy that they saw no need to support their claims with evidence. They conceded that the rationales offered for performing routine episiotomy combined with a little experience with the operation should have been enough to persuade any physician to adopt the practice. Some even went so far as to dismiss the notion of systematically studying the benefits of episiotomy because they felt it was impossible to do so. The following quotation from Tritsch represents this type of thinking.

It is manifestly very difficult to obtain conclusive figures as to the end results (of episiotomy), for the condition of a perineum and allied subjects is largely a matter of personal opinion and the need for subsequent surgical repair is a matter of degree rather than fact. But we feel in the follow-up of cases taken by and large the end results are definitely better where episiotomy is done in the primiparous women as routine than in cases where it is not (1930:333).

Two studies eventually did appear in 1935 which purported to provide evidence supporting the prophylactic use of episiotomy. However, neither actually revealed that the use of episiotomy during a non-operative delivery (i.e. a spontaneous delivery) was prophylactic. In one case, the report was presented as a study of the effects of delivery with and without episiotomy when, in actuality, it was a study of forceps delivery with and without perineal incision. This semantic difference reveals the extent to which forceps delivery had come to be taken for granted as the usual mode of delivery. Nevertheless, the study by Fred Nugent of the Philadelphia Lying-In Hospital, compared the outcomes of 130 forceps deliveries in which an episiotomy was performed with the outcomes of 72 forceps deliveries in which no perineal incision was performed. Twenty one percent of those women had received an episiotomy during their forceps delivery suffered morbidity (infection) vs 14% who had not. Unable to explain away this finding by differences in the "complicated operative incidence" between the two groups, Nugent (1935:251) was forced to concluded that "there is a substantial increase in morbidity attributable to episiotomy." Nugent drew attention away from this finding by focusing attention to another type of morbidity. Upon examination six weeks postpartum, 45% of the women who had not received an episiotomy showed some failure of restoration of the pelvic floor and perineum (pelvic relaxation, small cystocele, large cystocele) compared with 26% of women receiving an episiotomy. However, in light of all of the results of his study, Nugent was unable to support calls for the routine use of episiotomy.

Inasmuch as 9.4 per cent of primiparas can be delivered without laceration and without demonstrable anatomic injury at follow up, and inasmuch as an additional 19.8%, though lacerated, show a Grade A result, we are not ready to join Gusman and Tritsch in their campaign for prophylactic episiotomy. We are ready, however, to paraphrase the old surgical dictum and say, "When in doubt, cut" (Nugent, 1935:255).

In contrast to Nugent who compared the end-results of spontaneous labors with and without episiotomy, a second study compared spontaneous labour without episiotomy to labours in which prophylactic forceps and episiotomy were used. This study, conducted at the Woman's Hospital of New York City by Albert Aldridge and Paul Watson, compared 2,800 primipara delivered on their ward between 1920-1925 and 1930-1934. These two time periods were used because spontaneous deliveries were more common during the 1920-25 period and prophylactic methods of delivery during the 1930-34 period. Ignoring the issue of whether or not performing an episiotomy during spontaneous labour was beneficial, Aldridge and Watson focused instead on forceps deliveries performed with and without episiotomy. They concluded, Perineal incision when used in conjunction with any type of vaginal operation delivery consistently reduced the incidence of birth injuries and postpartum complications (Aldridge and Watson, 1935:565).

The absence of strong evidence showing routine episiotomy was indeed

prophylactic as claimed continued into the 1940s. A 1942 report on a study of post-

partum pelvic tissue damage of 1,000 women ended by stating,

Conclusions regarding the controversial subject of routine episiotomy were avoided at this time because of an insufficient number of cases. Suffice it to say that both those with and without episiotomy suffered damage. Protagonists of either procedure need more detailed and objective evidence in order that unified thought and practice may benefit the paturient woman (Gainey, 1943).

Quite clearly, the advocacy of prophylactic and routine episiotomy during the 1920s and 1930s was not based on any evidence that the operation was beneficial. By extension, the subsequent adoption of routine episiotomy by American physicians was equally not influenced by scientific research or reasoning. What then explains the rather sudden increase in popularity of episiotomy?

#### Factors Encouraging Physician Adoption of Routine Episiotomy

While research may have had little to do with the overwhelming acceptance the operation received between the mid-teens and 1930s, a number of other factors greatly facilitated its widespread use. In large part, changes which were simultaneously occurring in the ideology and practice of obstetrics encouraged physicians to resort to the operation frequently.

### Childbirth as Pathology

One of the most important reasons for the acceptance of routine episiotomy had to do with a shift in the conceptualization of the nature of childbirth which was taking place in obstetrics during the 1920s and 30s. As was described in Chapter 3, a major impediment to the success of the 19th century episiotomy enthusiasts was the incompatibility between surgical intervention and the existing belief system in obstetrics. These early beliefs held that childbirth and the functioning of the perineum was a normal or physiological process. The prophylactic episiotomy protagonists of the early 20th century attempted to overcome this barrier to the wider use of episiotomy by recasting childbirth as a pathological and pathogenic process. They argued that childbirth was more often than not a faulty and destructive process requiring considerable obstetrical intervention to prevent, minimize and repair the damage incurred during labour and delivery.

The following passages are classical examples of how prophylactic episiotomy enthusiasts argued that childbirth was a pathological process, an argument upon which their entire "prophylactic" rationale for episiotomy rested. Note the skill with which each makes use of quite dramatic metaphors to argue that normal birth was virtually non-existent. The first passage is by Pomeroy.

Every primipara incurs a permanent modification of the pelvic floor in the course of delivery of her full-term child. In a disputed but high percentage of first births the acute stage of this modification presents some extent of open lacerated wound and in nearly all the rest, concealed damage to fascia and levator ani muscles is acknowledged to occur and to be the factor paramount in various degrees of subsequent prolapsus uteri, cystocele and rectocele. We, as gynecologists, have devoted years of thought and much ingenious labor to planning and executing operations in unhappy women disabled by childbirth; but thus far we, as obstetricians, have not faced and practiced a reasonable responsibility for the discovery of a plan to prevent by sound surgical procedures serious birth divulsion damage to the structures at the pelvic outlet (Pomeroy, 1918a:211).

...A long second stage has destroyed innumerable children by prolonged pressure effects and varying degrees of asphyxia. Why should we consider it other than reckless to allow the child's head to be used as a battering ram wherewith to shatter a resisting outlet? Why not open the gates and close them after the procession has passed? (Pomeroy, 1918a:213)

The second passage by DeLee presents the "childbirth as pathology" argument in

extremely graphic terms<sup>6</sup>.

Labor has been called, and is still believed by many to be, a normal function. It always strikes physicians as well as laymen as bizarre, to call labor an abnormal function, a disease, and yet it is a decidedly

pathologic process. Everything, of course, depends on what we define as normal. If a woman falls on a pitchfork, and drives it through her perineum, we call that pathologic- abnormal, but if a large baby is driven through the pelvic floor, we say that it is natural, and therefore normal. If a baby were to have its head caught in a door very lightly, but enough to cause cerebral hemorrhage, we would say that it is decidedly pathologic, but when a baby's head is crushed against a tight pelvic floor, and a hemorrhage in the brain kills it, we call this normal, at least we say that the function is natural, not pathogenic.

In both cases, the cause of the damage, the fall on the pitchfork, and the crushing of the door, is pathogenic, that is disease producing, and in the same sense labor is pathogenic, disease producing, and anything pathogenic is pathologic or abnormal.

Now you will say that the function of labor is normal, that only those cases which result in disease may be called abnormal. Granted, but how many labor cases, measured by modern standards, may be so classified?...it amounts to the majority today. In fact, only a small minority of women escape damage during labor, while 4 per cent of the babies are killed and a large indeterminable number are more or less injured by the direct action of the natural process itself. So frequent are these bad effects, that I have often wondered whether Nature did not deliberately intend women should be used up in the process of reproduction, in a manner analogous to that of the salmon, which dies after spawning? Perhaps laceration, prolapse and all the evils soon to be mentioned are, in fact, natural to labor and therefore normal, in the same way as the death of the mother salmon and the death of the male bee in copulation, are natural and normal. If you adopt this view, I have no ground to stand on, but, if you believe that a woman after delivery should be as healthy, as well, as anatomically perfect as she was before, and that the child should be undamaged, then you will have to agree with me that labor is pathogenic, because experience has proved such ideal results exceedingly rare (DeLee, 1920a:40-41).

#### Initial Resistance to Prophylactic Episiotomy

That the episiotomy protagonists' claim-making activities were indeed challenging the existing belief system in obstetrics is evident in the criticisms initially attracted by their campaigning. When they first advanced the notion of prophylactic episiotomy, the episiotomy advocates encountered considerable resistance from some fairly prominent physicians who continued to believe birth was a normal process not requiring prophylactic surgical intervention. Although the comments made by the discussants attending Pomeroy's talk before the American Gynecological Society suggest his paper was positively received, other notable physicians were not impressed. John Whitridge Williams, considered "the Dean of Obstetricians" at the time, rejected Pomeroy's proposition and continued advocating the accepted obstetric formula of delivering all women with as little interference as possible (Dallas, 1958:29). Williams was Professor of Obstetrics at Johns Hopkins University, Dean of the medical school, Obstetrician-in-Chief to the Johns Hopkins Hospital, and an ex-president of the AGS (1914). He was also the author of a widely used textbook, <u>Obstetrics: A Text-book for the Use of Students and Practitioners</u> (following Williams' death it was eventually renamed <u>Williams</u> <u>Obstetrics</u>). From the first edition of his textbook in 1906, Williams had little use for episiotomy. He acknowledged that many authorities advised performing an episiotomy when a rupture of the perineum seemed imminent but he did not accept the late 19th century claim that episiotomy prevented perineal lacerations or healed better than a spontaneous laceration.

Personally, I see no advantage in the procedure, as my experience is that ordinarily perineal tears will heal almost uniformly if properly sutured and cared for (Williams, 1906:289).

In the 5th edition his textbook in 1926, the edition following Pomeroy's plea for prophylactic episiotomy, Williams inserted another paragraph denouncing the practice. While not challenging the claim that episiotomy might be a prophylaxis for postpartum gynecological problems, he maintained his disapproval of elective perineal incision.

In an article entitled "Shall we cut and reconstruct the perineum in every Primipara?", Pomeroy, in 1918, advocated making a midline incision as soon as the perineum begins to bulge, with the idea that its accurate repair immediately after delivery would prevent the development of relaxation of the pelvic floor in the future. While this may be so, it would appear to be an inadvisable routine procedure for two reasons: first, that it converts every labor into an operative one, and second, that if ideally successful its repetition would be logically called for at each subsequent delivery (Williams, 1926:357).

As for DeLee, he too was strongly criticized when he first advanced prophylactic episiotomy and forceps. Many denounced the operation as radical. Following the presentation of his paper before the AGS in 1920, there were few positive comments con-

cerning his talk. By and large, the discussants were not convinced that childbirth was almost always pathological as DeLee claimed and were therefore quite hesitant to accept the position that surgical intervention in childbirth was really necessary let alone prophylactic. As the first discussant, John Whitridge Williams set the tone for the discussion by emphatically disagreeing with DeLee.

I am sorry to say that there are only two things in Dr. DeLee's paper with which I entirely agree. The first is to allow the cervix to undergo spontaneous dilatation, and the second is the correctness of the general anatomical considerations which he has adduced. With the rest I do not agree. Doubtless Dr. DeLee, or the majority of those present can deliver women in the manner he has described and leave them in better condition than had they been delivered in the usual way by the average practitioner. On the other hand, I believe that if his practice were to become general and widely adopted, women would be worse off eventually than had their labors been conducted by midwives (Williams, 1920:77).

Williams concluded his comments by stating,

If I have understood Dr. DeLee correctly, it seems to me that he interferes 19 times too often out of 20. Of course what I say applies to normal labors...I therefore believe should his recommendation be generally adopted that it would do an immense amount of harm and far counterbalance the good which it may accomplish in his expert hands. (Williams, 1920:77).

Other discussants such as Thomas Watts Eden, a distinguished English

obstetrician and invited guest, and American obstetricians Henry Byford of Chicago

and Edward Davis of Philadelphia vocalized the then widely accepted view of child-

birth as a physiological process usually not requiring surgical intervention. As Byford

put it,

I think the whole gist of the subject is that of Dr. DeLee recommending this procedure in all cases...The fact that so many cases get well of themselves where they are left to Nature shows that the procedure should be used in the individual case, not as a routine method (Byford, 1920:79).

Within a decade, the obstetrical belief system had changed in the direction Pomeroy and DeLee had advocated. Childbirth had been successfully recast as a pathological process. As the following quotation from one of the routine episiotomy protagonists reveals, the pathogenic nature of "normal" labour was no longer debatable but had become widely accepted.

That the tissues of the modern woman do not well withstand the tension and stretching incident to the average normal labor and that injuries to the pelvic soft parts occur in the great majority of so-called normal labors is *a well-known* fact (italics added) (Gillis, 1930:522)<sup>7</sup>.

So strongly had the conceptualization of childbirth as a pathological process taken hold in obstetrics that by the time routine episiotomy was being advocated in the 1930s, opposition to prophylactic episiotomy had virtually completely dissipated. Even Williams, the most influential opponent of the operation, had softened his position. In the 6th edition of his textbook, the last one authored by Williams himself, he replaced the judgemental sentence stating he saw "no advantage in the procedure" with the more neutral "I rarely employ the operation." For the first time he also recognized the operation had supporters and was used often.

On the other hand, many of my associates resort to it frequently, so that it may be said that its employment is largely a matter of taste (Williams, 1930:282).

Clearly, the success episiotomy enthusiasts had in encouraging the prophylactic use of episiotomy was inextricably linked to eventual acceptance by the obstetrical profession of childbirth as a pathological process. Without this change in the obstetrical belief system, opposition to the prophylactic routine use of episiotomy likely would have continued. Furthermore, once childbirth was recast in pathological terms, the obstetrical profession naturally placed renewed emphasis on prevention of the damage believed to be caused by childbirth. As one obstetrician of the time put it,

To discharge the patient at the end of the puerperium as well as she was before she became pregnant is the supreme test of the competent obstetric practice and the only one by which our work should be judged. This well-being or fitness applies as well to the integrity of the perineum and the pelvic floor, the size of the vagina and the proper supports of the pelvic organs as to the general constitutional health of the mother and child (Gillis, 1930:523)

## Changes in Obstetrical Practice

Changes in obstetrical practice also had a strong effect on physicians' episiotomy use. As several obstetricians have pointed out over the years, episiotomy became a significant part of obstetrical care only with the shift of obstetrics from home to hospital (Eastman, 1948; Parks and Barter, 1954; Barter et al., 1960). This shift took place during the first part of the 20th century. Wertz and Wertz (1979:135) estimate that between 1900 and 1940, hospital births increased from less than 5 to 50% of all births. In urban areas particularly, hospital deliveries increased dramatically during the 1920s and by 1939, "75% of all urban women were deliveries in hospitals" (Wertz and Wertz, 1979:132).

The moving of childbirth into hospital directly affected the use of episiotomy in at least two ways. First, it facilitated the use of the operation by making the technology necessary to safely carry out the procedure readily available to obstetricians. Physicians attending hospital deliveries were encouraged to use episioto.ny more frequently because many of the practical impediments they encountered at homebirths were not present at hospital births. As one obstetrician remarked,

Without anesthesia, proper lighting, capable assistants, adequate exposure, and the availability of aseptic technique in the home, incisions and lacerations of the perineum were avoided whenever possible (Barter at al., 1960:655).

The move to giving birth in hospital during the 1930s encouraged the widespread adoption of episiotomy in a second way. The phenomenon known as the "cascade of intervention" refers to the situation whereby one particular obstetrical intervention necessitates or encourages further intervention(s) to counteract the effects of the initial action (Inch, 1984:11). Applying this concept, as more women delivered in hospital and as increasing numbers of them received both obstetrical anesthesia and forceps (separately and combined), the use of episiotomy increased correspondingly. Anesthesia, by interfering with the natural expulsion efforts of the mother, increased the need for forceps which in turn encouraged the use of episiotomy as perineal incision provides greater room for the application of forceps. In the same vein, both general anesthesia and forceps were associated with the increasing use of lithotomy position which also increases the chances of the need for episiotomy. As Wertz and Wertz have pointed out,

...one technique could often require the use of another. Anesthesia was counteracted by oxytocin; episiotomy required local anesthesia; forceps required anesthesia and episiotomy; the lithotomy position required episiotomy (1979:165).

While there are no national statistics documenting the increasing use of anesthesia, forceps, lithotomy position or episiotomy during the 20s and 30s, there is evidence this is what occurred. As one obstetrician in the early 1950s noted,

...The introduction of Nebutal into obstetric practice and the rapid improvement of anesthetic technics further increased the use of outlet forceps with episiotomy (Dallas, 1953:29)

Aldridge and Watson's (1935) historical cohort study of episiotomy conducted at the Woman's Hospital of New York offers more evidence that between the 1920s and 30s obstetrical practice changed dramatically by becoming more interventionist. As reviewed above, this study involved 2,800 primipara and compared those who delivered on a maternity ward between 1920-1925 and those who delivered between 1930-1934. These two periods were chosen because spontaneous deliveries predominated the 1920-25 period while prophylactic methods of delivery characterized the later period. During the few years between these two periods, the prophylactic forceps operation became common practice at this hospital with a resulting increase in the use of episiotomy as well.

## Physician Convenience and the Desire to Control the Uncertainty of Childbirth

The greater use of episiotomy during the 1930s can also be traced to its promotion as a means of making the birth process more predictable and thereby facilitating the work of obstetricians. As Levitt has noted, this was a time when "hospital-based obstetricians did develop routines for managing childbirth that incorporated systematic use of pain-relieving drugs, labor inducers, and technological intervention" (1983:298). While all of the 1930s advocates of routine episiotomy reiterated with great conviction the claims about the alleged benefits of prophylactic episiotomy made by DeLee and his colleagues, some also reintroduced the late 19th century rationale that episiotomy was a convenient means of reducing the unpredictability of perineal lacerations. By performing an episiotomy, they claimed that the physician, not nature, determined the location and extent of the perineal wound. It also meant that by performing an episiotomy the physician no longer had to anticipate the possible occurrence of a perineal laceration. The episiotomy, done at the physician's discretion replaced the unpredictable, and therefore uncontrollable laceration.

The substitution of episiotomy for laceration is but replacing a jagged and irregular wound by a clean regular incision, placed to the surgeon's judgment and better adapted to surgical repair (Danforth, 1928:508).

We are definitely cognizant of the fact that a straight incised wound in a preconceived location is much safer and heals better than a ragged wound which may choose some dangerous route for extension (Lubin, 1932:81).

As the above passages also imply, many of the routine episiotomy advocates of the 1930s also reintroduced the notion that episiotomies were easier to repair than a spontaneous laceration. They alleged that because episiotomy incisions were straight surgical incisions they required less skill to repair than a spontaneous "jagged" or "irregular" laceration. This meant episiotomies were both easier and quicker to suture.

When we consider this fact (the frequency of perineal tears) we can fully appreciate the greater wisdom of incision which is sharp and clean and allows for approximation in suturing, to a tear which is very often ragged and difficult of approximation (Tritsch, 1930:329).

Episiotomy substitutes a clean straight incision for a jagged irregular lacerated wound. The more extensive laceration may be so long, so jagged, or so undermining that its repair may constitute a very difficult task (Cooke, 1930:413). In the context of the general acceptance of the pathological nature of childbirth and the rapidly rising number of hospital births during the 1930s, performing episiotomy for physician convenience may have been a compelling reason for increasingly overworked obstetricians to opt for the operation. Physicians working in hospital often found themselves caring for several women in the second stage of labour at the same time. By performing the procedure, they no longer had to worry about the possibility of a laceration and all the sequelae associated with this negative outcome. The operation also made their work that much easier, they probably felt, because of the alleged ease of repairing an episiotomy compared to a spontaneous laceration. As one obstetrician remarked in the 1920s,

Any procedure which tends to lessen irksomeness and burdens will find a ready ear in the profession (Schumman in Applegate, 1924).

Physicians also believed episiotomy shortened labour allowing them to more quickly complete a birth so that they could get on to the next patient; it was a means of streamlining the childbirth assembly line.

Additional evidence that physician convenience played some role in episiotomy's increasing popularity comes from the writings of physicians belonging to the conservative school of obstetric thought. These physicians who were otherwise opposed to elective obstetrical intervention, preferred the practice of "watchful expectancy"--waiting until intervention proved necessary. Even among such conservatively minded physicians, however, episiotomy was still strongly embraced. For example, William C. Danforth, Attending Gynecologist and Obstetrician at Evanston Hospital was a believer in conservative obstetrics but was never-the-less "strongly in favor of episiotomy in primipara" when lacerations appeared likely (1922:611). He also believed repaired incisions healed better than lacerations.

Physicians' acceptance of the "childbirth as pathology" argument, the cascade of intervention effect and physician convenience, to varying degrees, help explain the

routinization of episiotomy. Placing these factors in the context of the professionaliza-

tion of obstetrics and gynecology provides further insight into why episiotomy became

so popular.

## The Transformation of Obstetrics and Gynecology during the 20s and 30s

In obstetrics, the period roughly between 1920 and 1940 can be characterized as a period of professional "transformation." Rue Bucher has described the process of occupational transformation as follows,

Basically, there is fundamental redefinition of the nature of the field, of the underlying paradigm, of the territory, of the mission, of all of these. In carrying out this sort of redefinition, the transforming field must undergo equally fundamental alterations in its relationship with formal organizations, other occupations, or client groups. It must repudiate older images and set forth new rhetoric to justify and clarify the new roles it wishes to establish in organizations (1988:145).

Summey and Hurst's analysis of the obstetrical literature between the twenties and forties describes these years in the history of the obstetrical profession as "a period of professional establishment, characterized by self-definition, boundary setting and defensiveness of its past performance" (1986:136). It was at this time that the formal alliance between obstetrics and gynecology developed in the United States. Most importantly, the period marks the emergence of interventionist obstetrics as the new dominant belief system influencing obstetrical and gynecological practice (Summey and Hurst, 1986; Wertz and Wertz, 1979).

The development of this new professional identity can be traced to the 45th annual meeting of the American Gynecology Society in 1920. In his Presidential Address, Robert Dickinson declared, "the point is come where old fields must give new crops and new lands be opened up or our claims surrendered" (1920:1). He presented a four year plan to professionalize the field and delineate its role in medicine. The elements of his plan consisted of the need to develop a standard nomenclature of diseases and operations (i.e. develop a common vocabulary), establish certain standards in obstetrics and gynecology, improve teaching, increase involvement in social issues related to reproduction, certify specialists, train more leaders, increase the number of women in the field and the establish a journal. Dickinson's address was then followed by DeLee's paper on prophylactic forceps and the pathogenic nature of labor, which laid the foundation for the future of active obstetric intervention in childbirth. Symbolic of the new direction of the profession was embarking on, the first volume of the newly founded <u>American Journal of Obstetrics and Gynecology</u> opened with Dickinson's Presidential Address followed by DeLee's prophylactic forceps paper.

In their paper, Summey and Hurst (1986) trace the transformation of the obstetrical profession through the debates which erupted over activist ideology. As one obstetrician remarked,

Just now, obstetrics is upset by a strong radical school, which is attempting to change its point of view from physiology to surgery (Lynch, 1924:398).

As the passage above implies, the so-called "radicals" argued in favour of interventionist obstetrics (operative intervention along the lines proposed by DeLee) while the so-called "conservatives" preferred the concept of watchful expectancy (waiting until intervention proved necessary). Paradoxically, Anspach who had himself advocated the greater use of episiotomy in 1915, a few years later disparagingly describes the new obstetrics sweeping the profession. This passage describes the context in which the advocacy of routine episiotomy was taking place during the early 1920s.

At the present day, Nature no longer dominates the practice of obstetrics. The modern obstetrician no longer patiently awaits her pleasure, assisting only when it becomes evident that help is necessary. Today, on the slightest provocation and often on decidedly uncertain grounds, he takes matters into his own hands. He is not content even to await the onset of labor but takes steps to induce it at the time when he believes the process should occur. After the cervix has become dilated, or when it is easily dilatable, he turns the child in utero and delivers it feet first, or if the head of the child has reached the perineal floor, he completes delivery at once by means of episiotomy and the aid of forceps. If a case promises to be difficult, he ignores the natural channel of expulsion and delivers the child through an abdominal incision (Anspach, 1923:96).

Prophylactic episiotomy, and the initial resistance to it which I have already described, was in many cases, one element of this larger debate about the state of obstetrics and where it should be going. Where DeLee and the other radicals argued that childbirth was, and should be seen as pathogenic, the conservatives opposed this conceptualization of labour by retaining the view of childbirth as an essentially normal process that should be treated as such.

The basic error has crept into the obstetric field that pregnancy and labor are pathologic entities, that childbearing is a disease, a surgical malady which must be terminated by some spectacular procedure. There is too insistent preachment by those who are defining a reign of terror, of promiscuous operative furor, by the argument that women have so degenerated that childbearing is a phase of pathologic anatomy (Holmes, 1921:233).

Furthermore, the "childbirth as pathology" argument which underpins the radical school of obstetrical thought also served to justify the use of episiotomy on the basis of the alleged prophylactic benefits of the operation. Not surprisingly, all prophylactic interventions proposed to prevent or minimize childbirth pathology, which was thought always to occur, were rapidly taken up obstetricians. At the same time, prophylactic episiotomy, like the prophylactic forceps operation, was symbolic of the new interventionist ideology as well as representing the conscious rejection of the age-old belief that birth was normal. Performing prophylactic episiotomy, therefore, was a simple way for an obstetrician to acknowledge that he was an adherent of the new surgical obstetrics.

On a more practical level, prophylactic episiotomy played into the profession's preoccupation with status by distinguishing obstetricians from midwives and generalists. As Summey and Hurst note "external pressure for better education and training of obstetricians, and internal pressure to raise the status of the profession resulted in a move to close ranks" (1986:142). One example of this was the establishment of the American Board of Obstetrics and Gynecology (ABOG) in 1930 to certify specialists in the field of obstetrics and gynecology. In establishing the ABOG, the obstetrical "specialists" were suggesting that their methods had more to offer than those of the midwives or generalists. As the following quotations from two of the routine episiotomy protagonists indicate, episiotomy was touted as one of those methods.

The question is often raised "should we make so many of our deliveries surgical procedures?" If we are to elevate the obstetrics above the oldfashioned midwifery and if our ultimate goal is to discharge our patient with her birth canal as nearly to its pre-pregnancy state as possible, then we certainly cannot afford to be timid about such a simple procedure as episiotomy. The answer is obvious (Gusman, 1932:653).

First, we do not recommend the operation of episiotomy routinely in home confinements excepting under the most ideal conditions. Secondly, we do not recommend routine episiotomy by those untrained in obstetric surgery. In conclusion...the operation should only be performed under ideal hospital conditions by one qualified in obstetric surgery (Tritsch, 1930:333).

At the same time that episiotomy served to distance obstetrics from "old-

fashioned midwifery," the operation also appealed to obstetricians with surgical aspira-

tions. By performing episiotomy, obstetricians could feel they were using their surgical

skills which were more greatly valued than their "midwifery" skills. Another indication

of the increasing interest of obstetricians to be associated with surgical skills was the

renaming in 1920 of the American Association of Obstetricians and Gynecologists to

the American Association of Obstetricians, Gynecologists and Abdominal Surgeons.

Robbie Davis-Floyd, an anthropologist, offers the following complementary interpreta-

tion of the motivation of obstetricians to align themselves with surgery.

The episiotomy is also conceptually useful to obstetrics. From its inception, the obstetrical profession was constrained to justify itself as being equal to other branches of medicine in which the inherent pathology of the disease or accident being treated was perhaps clean r than is the inherent 'pathology' of natural childbirth. Since surgery constitutes the central core of Western medicine, the ultimate form of manipulation of the human body-machine, the legitimation of obstetrics necessitated the trar sformation of childbirth into a surgical procedure. Routinizing the episiotomy has proven to be an effective means of accomplishing this transformation (Davis-Floyd, 1988:168). Simply put, routine episiotomy was an integral part of the overwhelming acceptance of interventionist obstetrics and the pathological nature of childbirth which took place in the 1930s. As Arthur Bill, a quite distinguished obstetrician and gynecologist announced in his Presidential Address to the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons in 1931, the new obstetrics was here to stay. From this perspective, the routinization of episiotomy is illustrative of the transformation of obstetrics which took the form of the "new obstetrics" with its ideology of intervention.

Before concluding this chapter, I would like to present one other explanation for the acceptance of routine episiotomy which has been suggested in the literature. This alternative theory however, is not supported by the data presented above.

#### Discovery of the Fetus

Edward Shorter, a medical historian at the University of Toronto has advanced the thesis that the "discovery of the fetus" in the 1930s caused a substantial increase in obstetrical intervention including the routinization of episiotomy. He argues that before 1930 little medical attention had been given to the condition of the infant at birth. All obstetric interventions were directed toward sparing the mother (Shorter, 1990). This all changed in the 1930s he claims, because doctors began considering the infant's condition as a reason for intervening in the labour. As Shorter puts it,

Toward 1930 the fetus was 'discovered.' One cannot date this prise de conscience exactly, but certainly in the late 1920s and early 1930s there was a trend toward sparing the infant in delivery. Particularly in America 'fetal indications' began to be accepted for obstetric operations, in addition to 'maternal indications.' In plain language, this means intervening in birth to help the child even if the mother is perfectly all right (Shorter, 1990:166).

Specifically regarding episiotomy, Shorter contends that prior to 1930. the operation was strictly used because it was easier to repair than a spontaneous perineal laceration. After 1930 he suggests episiotomies were done primarily for the sake of the infant. But only in the 1930s did the infant start to figure in the reasons for doing an episiotomy. As a result, the frequency of the operation increased significantly. The new logic was to spare the child a prolonged expulsive stage of labor. Enlarging the vaginal outlet would permit speedy forceps delivery of its head. When in 1937 an obstetrical surgeon justified the high frequency of episiotomies, he placed "fetal indications" first: "the fetus is protected from the effects of a prolonged second stage, particularly from certain injuries which may result when the head acts as a dilator" of the mother's soft parts"...Joseph DeLee's textbook mentions protecting the fetus for the first time in 1933. <u>Williams Obstetrics</u>'s first reference appeared in 1950: "spares the baby's head the necessity of serving as a battering ram" (Shorter, 1990:172).

While I do not dispute that in general, the fetus became a new focal point in obstetrics during the 1930s, this did not produce the routine use episiotomy as Shorter claims. Shorter's interpretation of what brought about routine episiotomy in the 1930s is inaccurate. The "evidence" he presents to support his thesis is selective and misleading.

In the first place, the rationale that episiotomy can save the life of the fetus was well known and accepted before the 1930s. Both Ould in 1742 and Stahl in 1895 promoted episiotomy as a means of saving the life of an infant<sup>8</sup>. The following quotation is from a paper presented at the 1904 annual meeting of the American Gynecological Society by J. Clifton Edgar. Edgar was a prominent Nev/ York obstetrician and author of one of the major American obstetrics texts of the early 20th century (Speert, 1980:128). As the passage indicates, many turn of the century obstetricians considered saving the infant a priority over saving the perineum.

Preservation of the structures of the pelvic floor during the passage of the fetal head and shoulders has been placed by some authorities as second in importance only to preservation of the lives of the mother and child (Edgar, 1904:208).

During the second two decades of the 20th century, the rationale that episiotomy prevented or reduced infant mortality and morbidity received considerable attention from many of influential protagonists of prophylactic episiotomy (Anspach, 1915a; Pomeroy, 1918a; Child, 1919; Harrar, 1919; DeLee, 1921a)<sup>9</sup>.

Secondly, Shorter's suggestion that during the 1930s fetal indications for episiotomy replaced maternal indications as the primary reason for undertaking the operation is simply not true. Some physicians of the 1930s championed routine episiotomy on the grounds it prevented infant morbidity and mortality (namely cerebral hemorrhaged and death in premature babies) (eg. Berlind, 1932). However, many more episiotomy enthusiasts advocated the universal use of the operation because they believed it was a prophylactic for maternal trauma, specifically, postpartum gynecological problems and perineal lacerations (for example, Blevins, 1929; Gillis, 1930; Hannah, 1930; Kelly, 1930; Sellers and Sanders, 1930; Tritsch, 1930; Gusman, 1932; Galloway, 1935).

Furthermore, the quotation by the "obsterical surgeon" Shorter presents is deceptive. Shorter fails to note that the paper which immediately followed the source of this quote is devoted entirely to the issue of the management of maternal birth injuries. In the second paper by another prominent obstetrician (Cooke, 1937), episiotomy is touted exclusively as a prophylaxis against laceration of the perineum. Fetal indications for performing the operation are not mentioned. When both these articles are considered together, it is not at all clear that a shift in the prioritization of the indications for episiotomy had taken place as Shorter implies. Concerning Shorter's reference to DeLee, it should be remembered that DeLee in his 1920 paper expounded upon the dangers of labour to the infant and offered episiotomy as a means of saving babies' "brains from injuries" (p.43)<sup>10</sup>. Shorter's reference to Williams Obstetrics is also misleading in that he is suggesting this text "discovered" the fetus as a reason for performing the operation in 1950. He neglects to say that this is also the first edition of Williams Obstetrics to unequivocally endorse routine episiotomy for any reason; maternal or fetal. As described above, in the first 6 editions of the text written by Williams himself, he advised that episiotomy was not necessary and discredited the common

maternal indications suggested for performing the operation. He was unconvinced of the claims that episiotomies were easier to repair and healed better than a spontaneous perineal tear.

Shorter's theory does not appear to be supported by the data. Therefore the "discovery of the fetus" is an unlikely explanation for the introduction of routine episiotomy.

#### Summary and Discussion

This chapter has identified the individuals responsible for the routine use of episiotomy which started occurring in the 1930s and described the claims-making activities of these physicians. The remainder of the chapter was devoted to exploring the factors which encouraged the routine use of episiotomy. The chapter revealed that the popularity of episiotomy was not influenced by scientific evidence supporting the episiotomy enthusiasts' claims about the benefits of the operation nor the discovery of fetus as claimed by Shorter. Instead, factors such as changes in the obstetrical belief system, the increasing hospitalization of childbirth, physician convenience and the transformation of obstetrics were shown to have been implicated in the increased use of episiotomy.

The process by which the routine use of episiotomy in America came about involved a small number of prominent obstetrician/gynecologists who campaigned for the prophylactic use of episiotomy between 1915 and 1925. These prophylactic episiotomy protagonists claimed the operation prevented perineal lacerations, returned the perineum to its prepregnancy state, prevented infant morbidity and morality, and prevented future gynecological problems. Their claims-making activities involved presenting papers at national meetings of the American Gynecological Association and the American Association of Obstetricians, Gynecologists and Abdominal Surgeons which called on the profession's leading physicians to use episiotomy prophylactically. These pleas for episiotomy were then published in influential medical journals ensuring their wide dissemination. Between 1925 and 1935, a second wave of episiotomy activism developed within obstetrics. This time, the protagonists of prophylactic episiotomy were greater in number although considerably less prominent than their earlier colleagues. The most important difference between the episiotomy enthusiasts of these two periods was that the later group promulgated the routine or universal use of episiotomy.

Recasting of childbirth as a pathological and pathogenic process did much to encourage the acceptance of prophylactic episiotomy. With a new obstetrical belief system which held that childbirth was a dangerous and damaging process, prophylactic surgical intervention became an acceptable and even desirable practice to obstetricians during the 1930s.

Changes in obstetrical practices further encouraged physician's use of episiotomy. As women increasingly gave birth in hospitals, the technology necessary to carry out the operation safely became increasingly available to obstetricians. Furthermore, childbirth in hospital was associated with increased intervention of one type or another which often resulted in the "cascade of intervention" effect. For example, the increasing use of anesthesia and forceps being associated with increasing rates of episiotomy. The belief that an episiotomy was easier to repair than a spontaneous perineal tear and physicians' desires to overcome the unpredictability of perineal tears were other factors which promoted the increased use of episiotomy.

The one other factor the chapter identified as being involved in the routinization was the obstetrical profession's efforts to elevate its status by taking a new direction. This redefining of obstetrics resulted in intervention becoming the new cornerstone of the profession. Once obstetrics placed high value on intervention, using episiotomy was one way for an obstetrician to show he was an adherent of the "new obstetrics."
In the next chapter, I examine the emergence of routine episiotomy in the United Kingdom. The chapter presents quite a different picture of the process of innovation in maternity care. As I illustrate, the routine use of episiotomy in Britain, unlike what occurred in the U.S., came about without any overt or concerted lobbying or advocacy by prominent obstetricians.

#### Footnotes

1. The American Board of Obstetrics and Gynecology (ABOG) was established in 1930. It was the third specialty to gain specialty status as a board. The first two specialty boards to be created were the American Board of Ophthalmology (1917) and the American Board of Otolaryngology (1924). The primary function of the ABOG was to certify specialists in the field of obstetrics and gynecology by conducting examinations designed to test the qualification of voluntary candidates for certification (Dannreuther, 1931:798). It was also hoped that certification would elevate the standards and advance the cause of obstetrics and gynecology buy raising the status of the profession.

The work of the Board should be regarded and accepted as the coordinated effort of the three national organizations (AGS, AAOGAB, AMA) to elevate the plane of obstetrics and gynecology (Dannreuther, 1931:797).

2. The extremely low episiotomy rate at Johns Hopkins Hospital reflects the teaching and influence of J.W. Williams who was Professor of Obstetrics and Obstetrician-in Chief of the Hospital. The low episiotomy rate at the Chicago Lying-in Center is paradoxical as J.B. DeLee, the most influential protagonists of prophylactic episiotomy founded and ran the centre which was known for its non interventionist approach to childbirth.

3. It is interesting to note that over the years a number of physicians at Long Island College Hospital (New York) have been particularly preoccupied with surgical techniques during childbirth. Alexander Skene presented a paper on cervical lacerations at the first Annual Meeting of the AGS in 1876, in which he advised incising the cervix to promote proper union (Speert, 1980:42). Chas Jewett, issued a plea for episiotomy in 1892 and Ralph Pomeroy advocated routine episiotomy in 1918. For a few years, all three taught at this institution at the same time. Skene was Professor of Obstetrics and Gynecology between 1869 and 1899, Jewett was Professor of Obstetrics between 1880 and 1910, and Pomeroy was Instructor of Obstetrics between 1893 and 1912.

4. The American Association of Obstetricians and Gynecologists like the American Gynecology Society is an elitist specialist society with a long tradition of muted rivalry. The AAOG was founded 21 years after the AGS in 1888. Initially the number of Fellows was limited to 100 but this was subsequently increased to 150 (Speert, 1980:121). The society changed its name in 1920 to the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons but resumed its original name in 1954. In 1980-81 the AGS and AAOG amalgamated.

5. Concerned about his apparent reputation for excessive intervention, Pomeroy declared at the Annual Meeting of the AGS in 1921

... I find myself very curiously in a position among the profession of being a radical among many followers of extreme conservatism, and I do not know how to account of it...I advocated one principal kind of incision of the perineum as a prophylactic measure, and I have been accused of cutting everything. My own immediate assistants know that is not true, and that the cases are selective (1921:300). 6. Reflecting on these metaphors, Sheila Kitzinger remarked to me,

...but historically, I mean, if you look at DeLee in Chicago...I mean, his language is so extraordinary and so, I would almost say sadistic...it suggests a fevered imagination. All that business about the pitch fork and the salmon and the door jam. Incredible, it's a language of pornography (Kitzinger, interview, October 1987).

7. Here is another passage from Gillis describing in greater detail the pathogenic nature of childbirth. Note how Gillis suggests that this damage results from the faulty design of women's reproductive systems.

During parturition, however, as the child passes through the vagina, the structures of the pelvic floor are subjected to a great amount of stretching and stress, which in the majority of cases it seems unable to withstand, and which results in more or less separation of its attachments, tearing of its fascia or rupture of its muscular fibers. As soon as the structures are torn the ends separate, forming a gap similar to that which takes place in the severance of a tendon or muscle elsewhere. This results in relaxation or sagging of the pelvic diaphragm with consequent displacement, prolapse or herniation of the organs to which it gives support and relative amount of disability to the patient, depending on the temperament of the patient, the extent of the damage done and the skill with which it has been repaired...Overstretching and laceration of the pelvic floor with the formation of cystocele, urethrocele and prolapse of the anterior vaginal wall (Gillis, 1930:520).

8. The following passages from Ould and Stahl clearly state both these physicians were convinced of the value of episiotomy in saving the life of infants and reducing childbirth trauma to the baby.

It sometimes happens, though the Labour has succeeded so well, that the Head of the Child has made its way through the Bones of the Pelvis, that it cannot however come forward, by reason of the Extraordinary Constriction of the Vagina; so that the Head, after it has passed the Bones, thrusts the Flesh and Integuments before it, as if it were contained in a Purse; in which Condition if it continues long, the Labour will become dangerous, by the Orifice of the Womb contracting about the Child's Neck; wherefore it must be dilated if possible by the Fingers, and forced over the Child's Head; if this cannot be accomplished, there must be an Incision made toward the Anus with a Pair of crooked Probe Sizars; introducing one Blade between the Head and Vagina, as far as shall be thought necessary for the present Purpose, and the Business is done at one Pinch, by which the whole Body will easily come forth (Parvin citing Ould, 1882:151-2).

episiotomy is an instrument, par excellence, aiding as no other instrument in the preservation of life and body both in the foetal and maternal, and as I grow in obstetrics...I am glad to know that there is so effectual and yet simple an instrument as central episiotomy at my command. In private practice it has often assisted me in saving the life of the foetus and always in preserving the perineal body and other parts of the soft outlet (Stahl, 1895:676). 9. Following passages from Anspach, Pomeroy, Harrar, Child and DeLee all illustrate the importance these physicians placed on fetal indications for performing episiotomy.

Episiotomy by facilitating delivery would reduce infant mortality and maternal morbidity (Anspach, 1915a:714).

Before detailing our technique for perineotomy and reconstruction let us emphasize again the extreme value of the procedure in diminishing danger of death and injury to the first born. A long second stage has destroyed innumerable children by prolonged pressure effects and varying degrees of asphyxia. Why should we consider it other than reckless to allow the child's head to be used as a battering ram wherewith to shatter a resisting outlet? Why not open the gates and close them after the procession has passed? (Pomeroy, 1918a:213)

I am a firm believer in taking things slowly, to avoid laceration of the soft parts, as long as an appreciable advance of the presenting part continues. But the welfare of the baby must constantly be kept in mind. The head cannot be permitted to pound ineffectively on a too resistant vulvar barrier...We should not, to use a sporting phrase, play the baby's heart against the perineum. The odds are not even, or proper. In many such instances, a properly timed episiotomy would have saved a baby's life (Harrar, 1919:118).

It shortens the perineal stage of labor, saves the perineum, and many times, in breech deliveries, the life of the child as well (Child, 1919:143).

It saves the babies' brains from injuries and from immediate and remote effects of prolonged compression. Incision of the soft parts not alone allows us to shorten the second stage, it also relieves the pressure on the brain (DeLee, 1920a:43).

10. Despite Shorter's suggestion, DeLee was concerned about the fetus long before 1933. In his 1920 prophylactic forceps paper, DeLee devotes one and a half pages to describing the dangers of the second stage of labour to the fetus. Among these dangers he included fracture of the skull, rupture of the tentorium cerebelli, intracranial hemorrhage, retinal hemorrhage, abruptio retinae, dislocation of the lens, facial paralysis, Erb's paralysis, rupture of the sternocleidomastoid muscle, fractures of all the long bones of all the extremities, rupture of the cord, tearing of the cord from its abdominal attachment, anoxemia and asphyxia (DeLee, 1920a:41-42). During the discussion of his classic paper DeLee again brought up the fetus as a beneficiary of prophylactic forceps and episiotomy.

In what other respect is the procedure prophylactic? Where the baby's head is crowded through a contracted brim you know what has happened to the brain and its vessels. There are minute and larger hemorrhages. The same is true when a head is driven through a tight outlet.

In going over the history of primogeniture we earn that the first born had a high mortality and morbidity and that children of subsequent labors, not the first labors, were people who moved the world. Benjamin Franklin was the seventeenth child (DeLee, 1920a:79).

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#### CHAPTER 5

# THE EMERGENCE OF ROUTINE EPISIOTOMY IN THE U.K.: INNOVATION WITHOUT OVERT ADVOCACY

Where the routine use of episiotomy had become widely accepted in the U.S. by the 1940s, the liberal use of episiotomy, as the British euphemistically refer to it (Sleep et al., 1984), did not occur in the United Kingdom until the late 1960s. As Figure 2 in the Introduction illustrates, the national episiotomy rate for England and Wales began to increase dramatically only between the late 60s and 1970s. While never quite reaching the heights found in the U.S., the episiotomy rate in Englanc' more than doubled in 11 years, climbing from 25% of all hospital deliveries in 1967 to 53.4% in 1978 (Macfarlane and Mugford, 1984:245). The sharpest increase occurred during the early 70s. In some hospitals, the operation was so frequently performed that nearly every firsttime mother received an episiotomy (Buchan and Nicholls, 1980:298; Kitzinger, 1981:1)

This chapter investigates the reasons for the persistence of restrictive use of episiotomy and then the revision of this practice in favour of the more liberal use of episiotomy. The chapter is divided into two sections. In the first section, I explore the factors which effectively discouraged the medical and midwifery use of episiotomy prior to the mid-1960s. In the second, I examine the stimuli which prompted the sudden increased use of the operation during the late 1960s and 1970s.

## The Restrictive Use of Episiotomy

During the 1930s in the U.S. medical consensus favouring the emergency use of episiotomy began to give way to the elective use of episiotomy. In the U.K. this change did not occur for another three decades. Until the 1960s, physicians continued to view episiotomy as largely an emergency procedure which was seldom necessary in normal deliveries. Reluctance of the medical establishment to adopt elective episiotomy was

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related to the organisation of maternity care in the U.K. Of primary importance was the distinction between midwifery and obstetrical care and the particular view about the nature of childbirth held by each of these types of care givers.

## Obstetrical vs Midwifery Care

Where American physicians had succeeded in redefining what had been considered a normal physiological process into a potentially abnormal or pathological one by the 1920s and 30s, the boundary between "normal" and "abnormal" births continue to remain distinct in the United Kingdom. In 1902, the Midwives' Act was passed by the British parliament granting midwives the status of independent practitioners. This legislation gave midwives responsibility for "normal" births. As Oakley (1986) and others (e.g. Anisef and Basson, 1979; Arney, 1985) have observed, the act legitimized and solidified a division within childbearing between the normal and the abnormal with midwives becoming "practitioners in the art of the normal and obstetricians in that of the abnormal" (Oakley, 1986:142). A further division between midwifery and obstetrical care resulting from this dichotomous view of childbirth was in the place of birth. Until the 50s, most women with uncomplicated pregnancies and childbirth were delivered by midwives in their own homes, while obstetricians cared for the abnormal or complicated pregnancies and deliveries in hospital. Over time, the division between midwifery and obstetrical care of childbearing has been quite consistent. Midwives have historically attended and continue to attend the vast majority of deliveries in Britain. In 1946, 90% of deliveries in England and Wales were attended by a midwife, who took full responsibility in over 75% of cases (Oakley, 1986:110). By the early 80s, midwives were still the senior person present in three-quarters of all deliveries (Ontario, 1987:60).

## No Room for Elective Episiotomy In Normal Birth

As long as childbirth was considered a physiological process with domiciliary midwives and general practitioners caring for normal births, British physicians were prepared to endorse the use of episiotomy only as an emergency measure. On a theoretical level, they, like the 19th century physicians before them, saw no justification to complicate what they considered a natural process by elective surgical intervention. On a more practical level, British physicians also feared that the adoption of episiotomy would lead to the hospitalization of normal childbirth. Like all operations, they believed that episiotomy should take place in a hospital environment. The influential Scottish physician J.W. Ballentyne expressed these views in 1919 when he denounced the American obstetrician/gynecologist Pomeroy's 1918 plea for the widespread use of episiotomy. Disagreeing with Pomeroy's depiction of childbirth as a pathological process, Ballentyne rhetorically asked,

Are we really to divide the whole recto-vaginal septum in order to prevent it tearing in part? One is ready to admit the propriety of some such surgical procedure in desperate cases; but then one remembers Pomeroy's interrogative paper-title--"for every primipara." One sympathises with the surgical ambition felt by many to make as neat a job of labour as of say, an appendectomy; but dilatation of the sphincter followed by complete incision of the perineum and possibly also of the sphincter challenges inquiry and raises the question whether the perineum can be best protected by temporarily abolishing it, and that, as Mr. Pepys might have said, "seems pretty strange" (Ballantyne, 1919:411).

He went on to say that the routine use of episiotomy would turn the first confinement into a "distinct surgical proposition...(where) the operating-room should be its environment" (Ballentyne, 1919:411). The following year, Thomas Watts Eden, a prominent consulting obstetric physician at Charing Cross Hospital in London, author of the text, <u>A Manual of Midwifery</u>, and Honorary Fellow of the American Gynecological Society, rejected the prophylactic use of forceps and episiotomy for the same reasons. As is implied by the following passage, the British continued to consider normal childbirth a physiological as opposed to pathological process leaving little room for elective perineal incision. The passage comes from Eden's response to DeLee's 1920 talk on the "The Prophylactic Forceps Operation."

I doubt very much whether this is a prophylactic procedure that Dr. DeLee has described to us. He says he is going to prevent something. Unless he prevents something we are in fear of, I do not think he has made out a case for his operation...We have to remember that the number of women in hospitals is small; the majority of women are confined in their own homes under the care of general practitioners, and the technic of Dr. DeLee is a hospital "stunt," and not one for the general practitioner...What is the matter, as a preventive, with properly sewing up the ordinary laceration which is so frequently found? If we taught students how to sew up these lacerations properly by vaginal stitching and taught them aseptic methods, in my opinion we would do more to prevent prolapse than by Dr. DeLee's operation (Eden, 1920:78).

The view that episiotomy was to be reserved for only "abnormal" cases persisted during the 1920s. For example, in the first edition of the text, <u>The Queen Charlotte's</u> <u>Practice of Obstetrics</u> (1927), the description of episiotomy is found in the section of the book entitled, "Abnormal Labour." In another text, <u>A Manual of Midwifery for</u> <u>Students and Practitioners</u> (Jellett and Madill, 1927), episiotomy was discussed in the chapter on "Obstetrical Operations."

During the 1930s, when American physicians were campaigning for the routine use of episiotomy on the grounds it prevented or minimized the damage resulting from the alleged "pathological" nature of childbirth, elements within the British medical establishment, in sharp contrast, continued to hold the view that childbirth was usually a normal process which should take place at home with as little intervention as possible. To quote the British Medical Association,

(birth is) a natural physiological event, though it is one involving complex, delicate and important processes. Departures from the normal occur in a small proportion of cases...All the available evidence demonstrates that normal confinements, and those which show a minor departure from normal, can be more safely conducted at home than in hospital (BMA, 1936:656). In 1936 the British (later to become Royal) College of Obstetricians and Gynaecologists also supported this view as the following excerpt from a College of Obstetricians and Gynaecologists' memorandum on a national maternity indicates.

adequate hospital provision for all cases could only be made at great expense: the results of domiciliary midwifery do not warrant such expenditure (Campbell and Macfarlane, 1987 citing the British College of Obstetricians and Gynaecologists:).

During the 1930s, the divergence of opinion between American and British physicians on the routine use of episiotomy was so strong, one particularly prominent London obstetrician felt compelled to speak out against his American colleagues' advocacy of the operation. During a 1936 talk on birth injuries (the prevention of which being one of the rationales offered by American obstetricians for performing episiotomy), Eardley Holland, Obstetric and Gynaecological Surgeon and Lecturer on Obstetrics and Gynaecology at London Hosptial and coauther of <u>A Manual of</u> <u>Obstetrics</u> told the American Gynecological Society that "prophylactic" episiotomy actually produced pathology rather than preventing it as the Americans claimed.

The deep episiotomy is a disadvantage to a childbearing woman, in that it prevents her from losing the disadvantageous state of nulliparity as far as her pelvic floor and perineum are concerned (Holland, 1936:59).

J.M. Munro Kerr, the eminent Scottish obstetrician (Emeritus Regius Professor of Midwifery at the University of Glasgow and Honorary Fellow of the Royal Society of Medicine in Ireland, the Edinburgh Obstetrical Society and the American Gynecological Society) while accepting episiotomy was beneficial when necessary, doubted it was often required. In the 4th edition of <u>Operative Obstetrics: A Guide to</u> the Difficulties and Complications of Obstetric Practice, Kerr (1937) wrote.

There is much to be said in its (episiotomy's) favour; it is much simpler to stitch accurately a clean incised lateral wound than a ragged one in the perineum. It is an operation, however, which is seldom necessary, provided the accoucheur attends to the points already referred to in the management of the perineum (p.49). In the next edition of his text, Kerr and his coauthor J. Chassar Moir expanded the section on episiotomy. In their description of the operation in the chapter on intranatal care, they noted that "some obstetricians, notably the late DeLee, has advised the routine use of episiotomy in all primigravidae" (1949:51) and countered this by stating,

The chief objection to episiotomy is that every delivery is thereby converted into an operative procedure. The difficulty is to decide the cases in which episiotomy is required; for, on the one hand, if recourse is made to it too often it will be frequently performed unnecessarily, while on the other hand, if delayed too long any advantage to be gained in performing it will be lost. It is our opinion that, provided the accoucheur attends to the points already referred to, the operation is seldom necessary in a normal delivery (1949:51).

In their chapter on operative obstetrics, Kerr and Moir further questioned the

unnecessary use of the operation.

The deliberate incision of the perineum--"prophylactic episiotomy" as it is sometimes termed--is now a common, perhaps too common, preliminary procedure to operative vaginal delivery. If prophylactic, it may be asked, *prophylactic against what*? And this brings us face to face with the question whether this operation, excellent in certain circumstances, is not, like so many other good methods of treatment, sometimes abused by being employed for trivial indications, and by operators who care little for the finer points of obstetric art... (1949:852).

The position that British physicians rejected the use of episiotomy on the grounds

that they believed "normal delivery" did not produce sufficient damage to warrant elec-

tive episiotomy amazed American obstetricians. As one American physician observed

after consulting Kerr and Moir's text,

One of the outstanding examples of "preventive surgery" is the obstetrical episiotomy. This concept is not generally accepted since in Great Britain many object to "routine" episiotomy because it converts every delivery into an operative procedure... (Savage, 1957:167).

During the 1950s, restricting the use of episiotomy in normal deliveries continued

to be advised in British obstetrical textbooks although the benefits claimed for the

operation by American physicians were, nevertheless, also reported. For example, in

the chapter, "Maternal Injuries" in the text, British Obstetric and Gynaecological Prac-

tice edited by Sir, Eardley Holland and Aleck Bourne (1955), it was stated that,

Episiotomy is thus highly prophylactic against utero-vaginal prolapse, stress incontinence, stillbirth, and the later effects of cerebral haemorrhage. Moreover, an incision is easier to repair than a laceration and heals better (1955:785).

However, in the chapter entitled, "Management of Labour" they stated that "this small

operation is more frequently used for abnormal than for normal deliveries" (1955:147).

In the 9th edition of The Queen Charlotte's Text-Book of Obstetrics, episiotomy

was suggested as a means of preempting an unavoidable perineal laceration because "it

has the advantage that a ragged tear or a tear involving the rectum are avoided, and it

also prevents overstretching of the perineum which may subsequently be followed by

prolapse" (1956:235). However, the text then went on to state,

Some authorities have advocated that episiotomy should be performed as a routine in every case. We do not favour this practice since it is unnecessary in a large number of cases, and because the patient is much more comfortable in the puerperium if perineal stitches can be avoided (1956:236).

Still other texts while acknowledging the benefits of episiotomy also raised con-

cerns about the unnecessary use of the operation as the following passages from Practi-

cal Obstetrical Problems by Ian Donald (1955) indicates.

The importance of this little operation is out of all proportion to its simplicity. Nevertheless, it is frequently abused. As an alternative injury to a second-degree tear its value is somewhat debatable, and to inflict a cut for no other reason than to prevent a tear is of dubious advantage, because the former may be more extensive than is actually necessary. Both, if properly sutured, heal equally well.

An episiotomy is infinitely preferable to an overstretched and devitalized perineum, with its parallel weakening of the supports of the bladder neck. Timely episiotomy can prevent a great deal of damage in this respect and is regarded as an important factor in the prevention of subsequent prolapse...The chief virtue of episiotomy lies in the saving of unnecessary wear and tear upon the foetal skull. This is particularly important in cases of prematurity

... To withhold episiotomy when indicated would be wanton; nevertheless, it constitutes a mutilation, although mild, and if ruthlessly abused without good reason, it will leave a number of women exposed to the likelihood of further perineal troubles in subsequent deliveries, often necessitating repeated episiotomy... (p.421-422).

Although British national data on the use of episiotomy by physicians has never been collected, statistics from the 1958 British Perinatal Mortality Survey are suggestive of physicians' episiotomy rates. These data reveal that episiotomy was performed in only 21% of hospital births (most of these probably being performed by obstetricians or under their supervision) and in only 12% of births occurring in General Practitioner Units (small maternity units run by G.P.s usually with the assistance of midwives) (Anonymous, 1968:75).

#### Midwives and the Restricted Use of Episiotomy

While there are no data on the use of episiotomy by midwives, the 1958 British Perinatal Mortality Survey reports that episiotomy was performed in only 2% of homebirths (the majority of homebirths being conducted by midwives, a minority by G.P.s). Clearly the midwifery philosophy that "normal" cases should be left to nature promoted midwifery avoidance of episiotomy. Furthermore, the age-old midwifery practice of "guarding" the perineum, considered by many the hallmark of the midwifery expertise, totally discouraged its use in normal deliveries. However, the most important reason midwives did not perform the operation was that they were actually prohibited from doing so by law. It was not until the summer of 1967 that the Central Midwives Board, the body governing the practice of midwifery in the U.K., sanctioned for the first time the emergency use of episiotomy in normal births (Sleep, 1984:29). While authorized to perform the operation, midwives were required to refer the repair of the incision to a medical practitioner. Midwives who had been taught the technique of repairing the perineum and were judged competent to do so, could be authorized by a physician to carry out the procedure although the responsibility for the perineal repair rested with the doctor (Arthure, 1970:1405). By requiring a medical officer to suture the incision, physicians retained their authority over the birth process and any midwife

abusing the operation would be detected. For the same reason, repair of a perineal laceration has always been the responsibility of physicians. Until 1983, British midwives were required to seek a medical practitioner to suture perineal lacerations whenever they occurred (Sleep, 1984:29).

#### Why the Liberal Use of Episiotomy in the 1970s?

In contrast to the U.S. where the routinization of episiotomy was preceded by an intensive campaign to encourage the prophylactic use of episiotomy, in Britain, no prominent obstetricians issued pleas in the periodical medical literature for the elective use of episiotomy. From time to time, individual obstetricians did advocate the prophylactic use of episiotomy (e.g. Salmond and Dearnley, 1935; Flew, 1944). For the most part, these were isolated appeals which failed to attract the interest of the profession<sup>1</sup>.

The sudden popularity of episiotomy in the 1970s cannot be attributable to research demonstrating the alleged prophylactic benefits of the operation. Just as had been the case in the U.S. many decades earlier, the introduction of prophylactic episiotomy in Britain in the 60s and 70s occurred despite there being a total lack of scientific research showing the benefits or necessity of the operation. As Michael House, a Consultant Obstetrician and Senior Lecturer in the Department of Obstetrics and Gynaecology at Charing Cross Hospital in London reminded midwives in the early 1980s, "it must be stressed at the outset that there is almost complete lack of any scientific evidence that the operation has any of the beneficial effects claimed for it" (House, 1981:6).

# Episiotomy on the Rise: The Growing Obstetrical Use of Episiotomy

Unlike North America where the routinization of episiotomy can be traced to an episiotomy campaign deliberately staged to promulgate the alleged benefits of the

operation, in Britain, the liberal use of episiotomy appears to have gradually crept into obstetric practice with little fanfare or notice. It seems the liberal use of episiotomy and the rationales supporting this practice were simply imported from America without much discussion in the medical literature. Kitzinger has described what happened this way,

...American obstetric practices tend to become British practices too, and after an interval of a few years become accepted as an integral part of our own 'culture of childbirth'. Interventionist obstetrics, of a kind which is now familiar in almost every British maternity unit, owe much of their origin to American practices (Kitzinger, 1979:233).

Evidence that the American claims about episiotomy were incorporated into

British obstetric thought comes from what physicians were saying about the operation.

As has been noted above, although indicating that the operation was seldom needed in

normal deliveries, many of the most popular British obstetric textbooks from the 1930s

onward claimed the same benefits of episiotomy as their American colleagues. This

also occurred in the British periodical obstetrical literature where the American claims

about prophylactic episiotomy benifits were reported.

An episiotomy is infinitely preferable to an overstretched and deviated perineum, with its consequent and parallel weakening of the support of the bladder neck. A judiciously timed episiotomy can prevent a great deal of damage in this respect and is regarded by many as an important factor in the prevention of a prolapse of the uterus in later life (Gunn, 1967:342).

The following passage from an interview with Michael House, Consultant Obstetrician at Charing Cross Hospital in London confirms that the American claims about episiotomy were widely accepted by British physicians during the 1970s even though little direct evidence supported the claims.

...there is NO evidence at all that episiotomies heal better than tears, which is one of the basic things which has been taught. I mean, as a student I was taught that episiotomies prevent tears, they're BETTER in some divine way than tears, because doctors do them I suppose, and the heal better, they get less infection and they prevent prolapse. And really, there is no evidence for any of these statements at all. And I think most of the studies that have been done have backed this up. And I think it's, you know, it's spread...it is one of those things that sort of crept in with no real evidence that it's of any benefit. But this is a common thing in medicine (Michael House, interview, October 19, 1989).

The acceptance by some British physicians of the alleged prophylactic benefits of episiotomy is also apparent following the questioning of the elective use of episiotomy which became quite intense by the early 1980s. In coming to the defence of the practice, these physicians explicitly acknowledge their belief that episiotomy is prophylactic. For example, responding to an editorial on the growing elective use of episiotomy in Britain (Barker, 1981), Charles Flood, Senior Consultant in Obstetrics and Gynaecology at St. George's and St. James' Hospitals in London replied by saying,

Dr. Barker seems to be completely unaware of the prime reason for performing an episiotomy and that is to preserve the tone and integrity of the perineal muscles. He states that there is a lack of acceptable evidence to support such claims as the prevention of prolapse, third degree tears and so on...I do recall the late Sir Charles Read's comment, that whereas in the 1950s 'repair of prolapse' was the commonest major operation on gynaecological waiting lists in the United Kingdom, when he went to America and was asked to demonstrate a Fothergill's operation, his American colleagues had great difficulty in finding a patient upon whom he could operate! (Flood, 1982:51)

Similar views can also be found in letters to the editor of The British Medical

Journal (e.g. Crawford, 1982; Hodgkin, 1982).

An examiniation of sucessive editions of <u>Munro Kerr's Obstetrive Obstetrics</u> and John Dewhurst's, <u>Integrated Obstetrics and Gynaecology for Postgraduates</u> confirms that a shift in British obstetricians' attitudes about episiotomy occurred sometime between the early 1960s and 1980s which corresponds with the data on the rate of episiotomy in England and Wales during these years. For example, while the 7th edition of <u>Munro Kerr's Operative Obstetrics</u> published in 1964 objected to the liberal use of episiotomy, this was not the case in the 8th edition published in 1971 as the following passage reveals.

The late DeLee of Chicago was among the first to advocate routine episiotomy in all primiparae, but the more conservatively-minded obstetricians in this country were in general opposed to the idea of converting a "normal" into an "operative" delivery. In the intervening years opinion has steadily turned in its favour, and personally I use it (mid-line episiotomy) for all cases in which the foetus is large or even average in size, or in which the vulvar introitus is unnecessarily tight (Moir and Myerscough, 1971:27).

A similar shift is also evident between the 1976 and 1981 edition of John Dewhurst's, <u>Integrated Obstetrics and Gynaecology for Postgraduates</u>. In the second edition of this text published in 1976, Dewhurst simply stated that episiotomy "is most frequently done in primigravida and in hospital practice for a variety of reasons" and then goes on to list 8 indications for the operation along with the method of performing the operation. In the third edition of the text, the section on episiotomy was rewritten and included for the first time the following sentences, "The modern accoucheur simply looks for reasons why an episiotomy should not be performed. There are few." (1981:456).

The sudden and dramatic increase in the use of episiotomy in Britain resulted from a number of circumstances. Some of these prompted physicians to perform the operation more often, while others acted to encourage its use by midwives. Unfortunately, as there are no data differentiating the medical from midwifery use of episiotomy, it is impossible to know the precise impact each set of factors had on increased use.

As for the reason for this change, some have suggested the increasing popularity of episiotomy simply resulted from the growing proportion of births taking place in hospital. As a 1968 leading article<sup>2</sup> in the <u>The Lancet</u> speculated,

Eastman pointed out that it was the shift from home to hospital confinement in the United States which offered doctors better facilities and encouraged them to perform episiotomy more often. With the increase in hospital confinements in the United Kingdom a similar trend may become apparent (Anonymous, 1968:75).

The move to hospital births with the availability of "hospital facilities" (i.e. technology) does appear to have been associated with the increasing use of episiotomy by physicians. Assuming about 65% of births took place in hospital in 1958 (Campbell and Macfarlane, 1987:12) and an episiotomy rate in hospital of 21% (Anonymous, 1968). the episiotomy rate for all births in 1958 would have been at least 14% (this is a conservative estimate as this calculation ignores episiotomies performed in GPUs and at homebirths). By 1968 when The Lancet article was written, the percentage of births taking place in hospital had risen by about 15% to 80.6% (Campbell and Macfarlane, 1987:12), and the national episiotomy rate had risen by approximately 10% to 25% (Macfarlane and Mugford, 1984:245). Since only physicians were permitted to perform the operation prior to 1967, the increase in the episiotomy rate is directly attributable to increased use by physicians. Between 1968 and 1978, the proportion of births in hospital rose by another 17% (increasing from 80.6 to 97.1%). The national episiotomy rate during this period more than doubled, increasing by over 28% (rising from 25% to 53.4% of all births). While the use of episiotomy was associated with the increase in hospital births, the increasing use of the operation during the period when the percentage of hospital births had stabilized, suggests factors other than an increase in hospital births were responsible for the growing popularity of the operation.

# The "Active Management of Labour"

Active management of labour was increasingly adopted by obstetricians in the early 1970s (O'Driscoll, Stronge and Minogue, 1973; O'Driscoll and Meagher, 1980). The "active management of labour" is a method of conducting childbirth which minimizes the length of time a woman is in labour. In essence, it is the elective induction of labour. For women giving birth for the first time, artificial rupture of the membranes (ARM) is performed within one hour of the onset of labour to speed up the dilatation of the cervix. One hour later, the process is further sped up with the intravenous administration of oxytocin (O'Driscoll and Meagher, 1980). Under this model, no labour is allowed to last longer than 12 hours. During the early 1970s, the active management of labour began to firmly take hold. As Figure 5-1 illustrates, the percentage of labours induced more than doubled in 7 years, going from 16.8% of all labours in 1967 to 38.9% in 1974. These data would seem to support Oakley's observation that improvements in the safety and efficacy of pharmacologically-initiated labour since the 1950s made it "possible for obstetricians to broaden the indications for induction to include many pregnancies which 50 or 20 years before would have been regarded as normal and inappropriate candidates for artificial induction" (Oakley, 1986:206). The use of episiotomy was not an explicit component of the obstetrical package known as active management of labour. Yet as had been the case with the "prophylactic forceps operation" of the 1920s, episiotomy was nevertheless indirectly encouraged. The growing use of induction initiated a "cascade of intervention" (Inch, 1984), which lead to the presumed necessity of performing episiotomy. Sheila Kitzinger, the Dean of childbirth education, has described the process this way.

It seems to me that one could see a parallel...I don't know whether it is cause and effect or not, but once you start inducing labours, which was...and of course remember in Britain in the early, the early 70s, nearly half of all labours were induced. Once you start inducing labours and then, if you are not inducing them, augmenting them, you are actually pushing a baby down with a strongly contracting uterus before all the tissues have fanned out and the woman's body is really ready for that baby to be pushed out. And so I think what often happens is, and I have observed this sitting watching labours in hospitals, I've seen a drip set up, an intravenous drip, a uterus contracting strongly, DOWN comes the head and then they do an episiotomy because they get a shiny almost white perineum looking like a balloon about to pop (Sheila Kitzinger, interview, October 20, 1989)

A study of obstetrical practices in the Oxford area between 1965 and 1972, documents what Kitzinger and others suspected (eg. Massey and Bates, 1975; Adamson, 1978). The increasing use of episiotomy was in part attributable to a cascade of intervention which was initiated by the induction of labour. In this study, episiotomy was found to be "twice as prevalent in induced as in non-induced cases" (Fedrick and Yudkin, 1976:738).



While the rising rate of induction may have encouraged the use of episiotomy in some cases, this too is only a partial explanation. As indicated in Figure 5-1, throughout this period, the episiotomy rate exceeded the induction rate. Furthermore, the induction rate peaked in 1974 at 38.9% and then dropped, leveling off at about 35% from 1975-1978. For the most part, decrease in the use of induction resulted from a nation wide debate which erupted over the widespread use of induction in normal labour (Chalmers, 1976; interview, October 5, 1989; Anonymous, 1974). Had the increasing episiotomy rate been solely related to the use of induction, both interventions should have shown similar declines. Since the episiotomy rate has always been higher than the induction rate and continued to climb despite the reduction in induced labours, factors other than induction were also important in bringing about the liberal use of episiotomy. This figure also reveals that the rising episiotomy rate appears not to have been correlated with to the rate of instrumental delivery (forceps) as it was in America so many years earlier.

#### Midwifery Use of Episiotomy

The rapid assimilation of episiotomy into British midwifery practice resulted from both the lifting of the Central Midwives' Board regulation which had barred midwives from performing perineal incision, and the almost complete integration of midwifery into hospital practice during the early 1970s. Following the authorization of midwives to perform emergency episiotomy in 1967 and the release of the 1970 Peel Report recommending that all births take place in hospital, both the episiotomy rate and the proportion of births taking place in hospital increased sharply. As one consultant obstetrician and gynaecologist observed in 1973, "it is an operation which is being left more and more to midwives to perform...In fact it is becoming an important midwife's operation" (Beynon, 1973:25).

Data from the West Middlesex Hospital in London, indicate that the increasing use of episiotomy was directly related to the shift from community to hospital midwifery. In the early 1970s, this hospital, like many others in Britain, set up a system known as the "domino" scheme to integrate community midwifery into hospital practice. Domino is an acronym for domiciliary in and out of hospital. Under this scheme, community midwives taking care of "normal" or low risk women would, at the onset of labor, accompany their clients into hospital and take responsibility for the delivery. If there were no complications, the women could go home within a few hours after the delivery. When the domino scheme was first set up in 1971, the episiotomy rate for the hospital was 40%, rising to 55% by 1977. The episiotomy rate for domino cases for these years was 4% and 38% respectively. When the program first started, the domiciliary midwives were performing episiotomy at the same rate they had at home births (4%). Within 6 years of working within the hospital system, their use of episiotomy had increased 8 fold and was nearing the episiotomy rate found in the hospital when the domino scheme started. At the time, the explanation given for the domino midwives' rapid adoption of episiotomy was that being in hospital, the midwives now had ready access to the physicians who could immediately suture episiotomy incisions. In contrast, at homebirths, a major impediment to midwives performing the operation was having to call for a physician to repair an episiotomy incision after the delivery. As the Honorary Consultant Obstetrician and Gynaecologist to the West Middlesex Hospital pointed out.

Prior to this (the introduction of the domino scheme), as domiciliary midwives, they were dependent on general practitioners for perineal suturing. The doctor's availability was subsequently affected by other commitments, and the prospect of a long wait for their mothers discouraged a more liberal use of episiotomy. Now, with immediate access to a doctor's services in the delivery suite for those midwives who prefer not to undertake perineal repairs, the episiotomy rate is approaching that found in the overall obstetric population (Fox, 1979:337-8).

As I have described above, the availability of facilities and technology in American hospitals encouraged the routine use of episiotomy. In a similar fashion, British community midwives who were becoming integrated into hospital practice and midwives already working in hospitals, probably also found the hospital environment encouraged the liberal use of the operation. No doubt, midwives found both the "operating-room" conditions in hospital and the availability of physicians who could immediately suture an episiotomy incision conducive to performing the operation. In addition to the availability of hospital facilities and personnel, other factors related to midwifery autonomy and local practice norms also helped accelerate the liberal use of episiotomy.

## The Loss of Autonomy of Hospital Midwives

As more and more midwives began working in hospitals, they found themselves within an organizational structure which limited, and in many cases greatly diminished, their autonomy and ability to assist in labours as they saw fit. Where domiciliary midwives accepted total responsibility for the homebirths and sought medical attention only when a particular case warranted it, hospital midwives came under the direct supervision and direction of consultant obstetricians. As Robinson (1990) noted, during the 1960s and 1970s medical staff became increasingly involved in normal maternity care while the freedom of midwives to exercise clinical judgement diminished. The following passages from interviews with Mary Renfrew, midwifery researcher at the National Perinatal Epidemiology Unit, Oxford and Michael House, Consultant Obstetrician Gynaecologist, Charing Cross Hospital, London explain how the assimilation of midwives into hospital practice impacted on their activities during labour and delivery.

You are quite right to target the Peel report because up until that point, if you like, midwives were very much in charge of what they did at delivery. Because of a lot of what was going on was at home, even in hospital, there was not a lot of intervention or doctors in births where midwives were in charge of. And you know that in this country, I mean even now days, almost 70% of births, the midwife is the senior person present, there isn't actually a doctor physically present in the room unless they're needed for instrumental births. And so the midwife, certainly let's talk about up until the time the Peel report and the MOVE from home into hospital, was very much in charge of what was happening and was carrying out traditional midwifery practice which was episiotomy when necessary but generally trying to have an intact perineum. Once everything began to get more and more hospitalized, interventions were easier for the obstetricians to impose. I mean, I think electronic fetal monitoring is part of that picture and the other things that were possible because of hospitalization. And episiotomy rose dramatically during that time. And when I trained as a midwife in 1978, it was never questioned but every first time mother had an episiotomy. That was how I was taught in 1978 by midwives. So what you saw from the 60s through into the 70s was an increase in routine intervention that midwives simply took on board for a while, although there were movements against it but for a while, I think, swept over the midwifery profession very fast (Mary Renfrew, interview, October 5, 1989).

I think it all...you know what happened was, there was a change in sort of emphasis on obstetric care which is now swinging the other way. The pendulum is going across. Basically, midwives used to do... There was a real swing from midwives being the...sort of the primary carers and obstetricians dealing with the problems, like when I was a student perhaps 20 or 30 years ago, to all of it being not midwifery. When I was a student, the textbooks were called textbooks of midwifery and then it changed to obstetrics. And there was a big change in emphasis you know, DOCTORS were now in charge. And midwives, basically their role became degraded down to obstetric nurses. This was another thing I thought was a very BAD move. And as a result of this, I think because obstetricians are basically, are surgeons and they for some reason or other convinced themselves that episiotomies were good, but this tremendous up swing in episiotomies occurred. And as I said already, with obstetricians saying that tears were bad, midwives started to copy them (Michael House, interview, October 19, 1989).

#### Local Norms of Practice and Maternity Unit Policies

As Renfrew and House suggest, physicians largely influenced hospital midwifery practice through both informal and formal means. Informally, physicians established and reinforced local "norms" which promoted the liberal use of episiotomy by midwives. One such norm relates to the intolerance consultant obstetricians held for perineal lacerations. Many consultant obstetricians had come to believe the American claims that episiotomies prevent perineal lacerations, are easier to repair and heal better than a spontaneous tear. The following passages suggest that such norms existed in some maternity units. The quotations are taken from a letters written by consultant obstetrician and gynaecologists in response to a 1980 survey of obstetrical units conducted by House.

In general terms I am quite prepared to make the statement that perineal tears occur in my unit infrequently as the staff know how much better it

is to repair a clean episiotomy and carry it out when a tear can be foreseen (italics added) (House, 1981, privileged correspondence).

I think it reasonable to state that our policy would be that we would prefer to carry out a controlled episiotomy than an uncontrolled tear. (House, 1981, privileged correspondence).

In units where this view predominated, a perineal tear, even a small one, was

often considered evidence of poor delivery technique while performing an episiotomy

was absolutely acceptable (Levitt, 1974; Fisher, 1981). Under these circumstances,

many midwives tended to opt for performing an episiotomy to avoid the occurrence of

a perineal laceration and the reprimand which would have gone along with it. The fol-

lowing passage from a community midwife describes how this "local norm" affected

many midwives in the 1970s and early 1980s.

...in hospital, where episiotomies are so much the norm, it becomes an absolute disgrace on the midwives' part to allow a perineum to teareven a small nick which requires no suturing is considered a mark of gross inefficiency. Thus, as a young midwife or a pupil, one becomes so terrified of allowing a perineum to tear that to do a routine episiotomy becomes the easiest answer- no one is ever criticised for an unnecessary episiotomy! (Levett, 1974:89)

House offers a similar interpretation of what occurred during the 1970s.

Midwives didn't like doing episiotomies. But the reason they did so many, is for years they have been rapped on the knuckles, metaphorically speaking, for ALLOWING tears to happen. So their response, well if you say episiotomy prevents tears, and I know I'm never going to get told off for doing an episiotomy, I'll do episiotomies. And so it crept up. That's the reason, I'm absolutely sure. Obstetricians say tears are bad, episiotomies are good. That went down the line to the midwives and they started doing a lot but they didn't like doing it (Michael House, interview, October 19, 1989).

Depending on the institution, midwives' fears of criticism for allowing a tear to occur was a strong factor motivating them to perform episiotomy. As midwives at one hospital pointed out. a major stimulus for doing an episiotomy was the "ignominy of calling a registrar [a medical resident] for a third degree tear because an episiotomy was not performed in time" (Barker, 1981:41).

Consultant obstetricians also influenced midwifery use of episiotomy by setting formal maternity unit policies and protocols. Although a 1984 survey of English Health Districts (Garcia and Garforth, 1989) failed to reveal any written maternity unit policies requiring routine episiotomy, the results of House's survey suggest such policies, while perhaps not explicitly documented, were nonetheless operating in some hospitals. The survey reveals huge variations in the rates of episiotomy with the rate for primigravids and multips ranging from 14 to 96% and 16 to 71% respectively (House, 1985). As the following passage indicates, some midwives were well aware of the role unit policies played in their increased use of episiotomy.

Presumably the incidence of episiotomy is largely determined by obstetric unit policy...Left to themselves and to their own judgement however, there are certainly those midwives who would be far more reluctant to resort to the scissors than at present were they not obliged to bow to a higher authority (Dixon, 1981).

In a few cases, midwives have even been ordered to perform the operation in normal deliveries. In at least one documented case, such an order resulted in a midwife performing an episiotomy after the delivery because she had not had time to do it before (Robinson, 1982). Beverley Beech, Honorary Chair of the Association for Improvement in the Maternity Services, a maternity pressure group, tells of other cases of which she has personal knowledge where midwives were told to do episiotomies and "had been carpeted by the consultant for not doing an episiotomy" (Beverley Beech, interview, October 21, 1989). In most cases, however, it is more likely that midwives simply deferred to the consultant obstetrician's favourable opinion of elective episiotomy. Because the consultant obstetrician is at the pinnacle of the maternity unit hierarchy, midwives simply accepted what the consultant said about the prophylactic benefits of episiotomy and followed their wishes. As Caroline Flint, a midwife, consultant in maternity and child health and author of a midwifery textbook points out. the power differential between midwives and obstetricians made midwives vulnerable to the consultant's pronouncements about elective episiotomy. Obstetricians are very self-confident and they expect people to do what they say. And so you have midwives going, you know, hearing what...these very important, powerful men were saying, (putting on an a British upper class accent) "Episiotomies. We need to do episiotomies. We can't let these poor women suffer. Their pelvic floors will be destroyed." And the midwife says (lowering her voice and sounding diminutive and respectful), "Alright. Yes sir, yes sir." You know, and no midwife ever thought, is there any research justification? She would no more challenge this great man than fly to the moon (Caroline Flint, interview, October 16, 1989).

Another maternity unit protocol which midwives (Fisher, 1981; Dixon, 1981;

Wilkerson, 1984) and women (Adamson, 1978) have identified as encouraging the use of episiotomy relates to the setting of time limits on the second stage of labour. In some cases, these protocols required midwives to call an obstetrician to perform a forceps delivery when the allowable time limit had been reached. To avoid a forceps delivery, midwives would perform an episiotomy to facilitate and hasten the labour. In the following passage, Chloe Fisher, Senior Nursing Officer for Community Midwifery at the John Radcliffe Hospital in Oxford describes how the integration of midwives into hospital practice and the obstetrical imposition of time limits on labour influenced the midwifery use of episiotomy.

During the last twenty years or so the percentage of women giving birth in hospitals with obstetricians in charge has risen enormously. Previously they had been the responsibility of midwives and general practitioners either at home or in small cottage hospital-type general practitioner units. During this time the permissible duration of the second stage for primigravida has become shorter and shorter- even to as little as thirty minutes. A major reason for this increase in episiotomies, therefore, has been the midwife's attempt to enable the woman in her care to achieve a spontaneous delivery in the limited time allowed- knowing that otherwise she must hand her delivery over to the obstetrician to be delivered by forceps (Fisher, 1981:12).

## The Pressures on the Ward

Finally, one other factor which played a role in the increasing reliance on episiotomy by midwives was the hospital work environment. When midwives attended women in their homes, they had only one patient to care for, there were no arbitrary time limits set on the length of the second stage, and they could provide continuity of care (they stayed with the woman throughout the delivery). All of these factors help develop the relationship between the midwife and the woman, making it much less likely the midwife would need to resort to episiotomy. As one community midwife has noted.

...the nurse-patient relationship at home is often very much better by this stage of labour than in hospital (because of hospital staff changes, of duty, etc.) so the home midwife is much more able to rely on maximum co-operation from the mother at crowning, and so ensure slow delivery of a well-flexed vertex and thus minimal damage to the perineum" (Levett, 1974:89).

On a busy maternity unit with staff changing at each shift, a midwife who might be caring for several women simultaneously approaching second stage crowning, might not be able to assure a slow unhurried second stage, the very conditions needed to avoid an episiotomy. These conditions can contribute to the more liberal use of episiotomy by midwives by interfering with the midwife-patient relationship and by causing midwives to be overworked. When the midwife-patient relationship is less well developed, the patient is less able to co-operate with the midwife during the birth as described above by Levett. On the other hand, caring for several women at the same time places pressure on a midwife to deliver each woman as quickly as possible so as to be able to attend to the next expectant mother who is waiting for her. Observational data from the Royal Berkshire in Reading, England would seem to support the latter view. As Jennifer Sleep, a midwifery researcher explained to me, "the busier the labour ward is, the more episiotomies are done. If you've got a very busy month, you get a high episiotomy rate, if you get a slower month you get a lower one." (Sleep, interview, October 17, 1989). Wilkerson (1984) has made a similar observation. In the following passage, Sleep elaborates on the pressure hospital midwives experience on a busy maternity unit and the importance of their having the confidence to resist performing an episiotomy under these conditions.

midwives have just got to stick with it, they've just got to maintain that confidence that they can deliver with minimal intervention and then it's alright to not be hassled by somebody else saying, "Well come on hurry up." You know, "we need...we've got people waiting for this room, " or "you need to be next door because there is somebody else advanced there and we haven't got another member of the staff to look after her," or whatever (Jennifer Sleep, interview, October 17, 1989).

## Summary and Discussion

This chapter has focused on both the process of innovation in medicine and the resistance to innovation. I have identified factors which initially impeded and then encouraged the elective use of episiotomy in Britain. I have also shown the importance of identifying the parties interested in adopting an innovation and explaining their use of it. In this case differentiating between medical and midwifery use of episiotomy led to the identification of different factors which stimulated the use of the operation in each profession.

In the U.K. the restrictive use of episiotomy by physicians persisted well into the 1960s. This occurred largely because elective episiotomy was not supported by the obstetrical belief system which considered childbirth a "normal" process not requiring surgical intervention. Because of this, midwives were considered the appropriate caregivers in normal pregnancy and childbirth. Prior to 1967, midwifery use of episiotomy was virtually non-existent. Midwifery training with its strong emphasis on acquiring the skill of guarding the perineum during childbirth precluded the use of episiotomy and, perhaps more importantly, midwives were simply prohibited from performing the operation by a dictate of the Central Midwives' Board.

In this chapter, I have identified a number of professional, technical and organization factors responsible for the emergence of the liberal use of episiotomy beginning in the late 1960s. In contrast to the way routine episiotomy came about in America, systematic and organized physician claims-making or lobbying did not precede the liberal use of episiotomy in Britain. Nor did the liberal use of episiotomy result from the publication of scientific evidence demonstrating the benefits of the operation. Instead, it appears that episiotomy quietly infiltrated British obstetric and then midwifery practice without much discussion or resistance.

In the case of physicians, I traced the increased use of episiotomy to both the uncritical acceptance of the American claims for prophylactic episiotomy and the movement within obstetrics toward the more active management of labour. For midwives, quite different factors promoted the use of the operation. Overturning of the Central Midwives' Board directive prohibiting midwives from performing the operation combined with rapid integration of midwives into the hospital system created a climate conducive to the midwifery use of episiotomy. A practical barrier to midwifery use of the operation was removed in that hospital midwives had ready access to medical staff to suture the incision. Furthermore, hospital midwives found themselves under the direct supervision of consultant obstetricians and less able to exercise clinical freedom.

Powerful physicians set maternity unit policies and protocols which directly and indirectly motivated midwives to perform episiotomy. Consultant obstetricians were also able to influence midwifery practice by establishing the norms of acceptable practice within their maternity unit. For example, midwifery use of episiotomy was stimulated by maternity unit norms which approved of performing the operation under any circumstance while disapproving of any perineal lacerations which might occur in the absence of an episiotomy. Finally, pressures related to the inherent nature of the hospital work environment, namely, having to care for more than one patient at a time also influenced midwifery use of episiotomy.

In the following chapter I examine another phase in the process of innovation in medicine, the challenging of a routine procedure. The chapter describes how the practice of routine episiotomy which had become largely taken-for-granted, came to be questioned in the U.K. during the 1970s and 80s.

# **Footnotes**

1. Flew's article did receive wider exposured when it was cited by at least one obstetrical text. In the 5th edition of <u>Operative Obstetrics: A Guide to the Difficulties and</u> <u>Complications of Obstetric Practice</u>, Kerr and Moir (1949:855) refer to the article as being "well-balanced and informative" and "commend it" to their readers.

2. A "leading article" is an article expressing an editorial opinion.

#### <u>CHAPTER 6</u>

#### EFFECTIVELY CHALLENGING OBSTETRIC ORTHODOXY: ROUTINE EPISIOTOMY UNDER FIRE IN THE U.K.

Despite the rapid and steady increase in the use of episiotomy during the 1970s in the U.K., this trend leveled off and reversed in the early 1980s. As graphically presented in Figure 2 in the Introduction, within 7 years (1978-1985), the national episiotomy rate in England declined from 53.4% to 36.6%, an absolute reduction of 17% or a relative reduction of 31%. This chapter examines the events and activities which led to the practice of routine episiotomy losing favour in England during the early 1980s. I begin this chapter begins by tracing the emergence and burgeoning of medical and midwifery controversy over the routine use of episiotomy, coinciding with the declining popularity of the operation. I then place the professional questioning of episiotomy within its broader social context and describe the many pressures from outside the professions which significantly influenced both the development of the debate about episiotomy and the subsequent decline in use of the procedure.

#### The Rise of Professional Questioning of Episiotomy

Concerns about the increasing popularity of episiotomy and lack of evidence of the benefits of the operation were raised early on in the medical literature in a leading article in <u>The Lancet</u> (Anonymous, 1968). This article appears not to have attracted the attention of the medical profession. More questions were raised about episiotomy in early 1974 in a letter in response to an editorial on pain after childbirth published in <u>The British Medical Journal</u> (Anonymous, 1973). Robyn Pogmore, an Australian trained woman physician who was living in England, bitterly complained that midwives and obstetricians showed little interest in perineal pain after birth. She referred to episiotomy as "deliberate mutilation of the maternal perineum<sup>1</sup>," and challenged the widely accepted rationale that episiotomy prevented perineal lacerations. She also identified post-episiotomy pain as a serious problem for many women.

I think that episiotomies are performed much too freely. They do not necessarily prevent tearing and the wound is hideously painful for weeks afterwards, and maybe for years (Pogmore, 1974:37).

As Pogmore herself predicted, her letter failed to provoke any comment or discussion in <u>The BMJ</u> about the benefits of episiotomy or its increasing use. It did however, prompt two letters which attempted to explain the reasons for post partum perineal pain rather than questioning the practice of episiotomy as Pogmore had done. One letter by J. Chassar Moir, Emeritus Professor of Obstetrics and Gynaecology at Oxford University and author of several editions of <u>Munro Kerr's Operative Obstetrics</u>, suggested that the type of episiotomy performed was related to the amount of perineal discomfort women experienced (Chassar Moir, 1974). The other letter blamed the method of suturing perineal incisions as the cause of much post-episiotomy pain (Morris, 1974).

Midwifery questioning of the practice appeared for the first time in 1974 when Dinah Levett, a midwife and antenatal teacher for the National Childbirth Trust (NCT) published a one page polemical report on episiotomy in <u>Nursing Mirror</u> (Levett, 1974). In the article, Levett noted that the operation had become almost routine in hospital births and questioned the alleged benefits of episiotomy in preventing tears and prolapse. This article, like earlier medical questioning of episiotomy, failed to encourage broader midwifery questioning of episiotomy.

In 1975, Iain Chalmers a Medical Research Fellow in the Department of Medical Statistics at the Welsh National School of Medicine, observed that despite the increasing use of episiotomy in the country, the tear rate had not been significantly reduced as would be expected had the claim that episiotomy prevents tears been true (Chalmers, 1975). Additional concern about episiotomy which also appears to have been to no avail came in 1976 with Chalmers' advocacy of evidence-based perinatal medicine (Chalmers, 1976). In a paper published in the journal <u>Pediatrics</u>, Chaimers called on researchers to conduct randomized controlled trials (RCTs) to evaluate new and widely accepted perinatal practices. He noted that episiotomy was one of the many maternity practices for which there was little scientific data showing circumstances under which the operation was beneficial.

Not until three years later, in 1979, did the concerted and repeated questioning of episiotomy begin. Juliet Willmott, a community midwife, noted in Nursing Mirror that routine episiotomy was the "latest craze" in some obstetrics departments (1979:31). Referring to the idea of routine episiotomy as "atrocious," Willmott questioned the alleged prophylactic benefits of the operation. She took particular exception to the obstetrical theory "that women have an in-built pelvic flaw which makes it imperative to do an episiotomy" (1979:31). In February of 1980, Willmott published a second critique, this time in Midwives Chronicle and Nursing Notes, the official journal of the Royal College of Midwives. Willmott reiterated her earlier concerns about the indiscriminate use of episiotomy which appeared to be taking place in many hospitals. Based on her own clinical experience, she disputed the "irresponsible medical propaganda" about the prophylactic benefits of episiotomy. In early 1981, controversy about the operation was generated within the midwifery profession by Norman Morris who was Deputy Vice Chancellor of London University, President of the Royal Society of Medicine's section on Obstetrics and Gynaecology, Professor of Obstetrics and Gynaecology at London University at Charing Cross Hospital Medical School and editor of Midwife, Health Visitor and Community Nurse. Morris opened the January issue of his journal with an editorial questioning the scientific basis for the frequent use of episiotomy. He ended the editorial by challenging obstetric units to consider their use of the practice.

It is time that every obstetric unit re-examined its policy in relation to this very common, but very important operation (Morris, 1981:3).

Morris' editorial was immediately followed by a review of the episiotomy literature by Michael House, a consultant obstetrician gynaecologist and Senior Lecturer in Obstetrics and Gynaecology at Charing Cross Hospital in London. In reviewing the literature, House found little evidence to support the claims made for routinely performing the operation and called for a complete reappraisal of the whole matter "in hope a drastic reduction in the incidence of this 'minor' operation can be achieved in the future" (House, 1981:9). House's article prompted several letters to the journal which expressed gratitude that someone of the stature of a consultant obstetrician was seriously questioning the practice of routine episiotomy (e.g. Dixon, 1981; Bromwich, 1981). It was also around this same time that House began inquiring about the episiotomy rate in all the maternity units in the United Kingdom. The many hostile responses House received would seem to suggest that many maternity units across the country were unprepared at this time to seriously question their unit's policies regarding the use of episiotomy (Michael House, interview, October 19, 1989).

While debate within midwifery about the value of routine episiotomy began developing in 1979, the same thing did not occur within the medical literature until a senior registrar (resident) in obstetrics and gynaecology published a one page critique in <u>World Medicine</u> in August of 1981 (Barker, 1981). The article noted the developing divergence of opinion about the need for, or benefits of, routine episiotomy. A large part of the article was devoted to presenting House's views on episiotomy.

By January of 1982, the medical controversy over the routine use of episiotomy intensified greatly with the publication of an editorial in the <u>British Medical Journal</u> by James Knox Russell, Professor of Obstetrics and Gynaecology and Dean of Postgraduate Medicine at the University of Newcastle-Upon-Tyne (Russell, 1982). Russell cautiously defended episiotomy. Attention was further focused on episiotomy with the publication of an uncontrolled prospective study of postepisiotomy pain which appeared later in the same issue of the <u>BMJ</u> (Reading et al., 1982). The study of 101 women offered evidence that episiotomy was associated with high levels of pain, in many cases persisting for up to three months. At three months postpartum, one third of women reported having had a problem with the episiotomy repair that required them to seek professional help.

In the subsequent four issues of the <u>BMJ</u>, an interactive debate over episiotomy erupted; no less than 12 letters were published which either questioned or defended the practice (Cockersell, 1982; Crawford, 1982; Beynon, 1982; Lee, 1982; Woinarski, 1982; Garrey, 1982; Polden, 1982; Kitzinger, 1982; Lau, 1982; Reading, 1982; Hodgkin, 1982; Pretorius, 1982).

In February discussion about routine episiotomy continued when Charles Flood a Senior Consultant in Obstetrics and Gynaecology at St. George's and St. James Hospitals (London) and Vice President of the South West London Obstetrical Society, replied to Barker's <u>World Medicine</u> article. Flood, attacked House for questioning the value of and indications for episiotomy and chastised Barker for seemingly being "completely unaware...(that) the prime reason for performing an episiotomy...(was) to preserve the tone and integrity of the perineal muscles" (Flood, 1982:51). Flood maintained that episiotomy prevented uterine and vaginal prolapse and pointed to the lower incidence of these conditions in the U.S. where "practically every primigravida patient has an episiotomy" (p. 51).

By summer of 1982, questioning of episiotomy by physicians and midwives had become so significant that the first two randomized controlled trials (RCTs) were mounted to scientifically evaluate the alleged prophylactic benefits of episiotomy (Harrison et al., 1984; Sleep et al., 1984). A RCT as Oakley describes it is "an experimental test of a particular treatment/approach (or set of treatments/ approaches) com-
paring one or more groups of subjects who are allocated to these groups at random, i.e. according to the play of chance" (1990:168). The RCT is considered the gold standard in medical research. As Oakley explains, trials are undertaken only at that point when controversy about a particular treatment or practice is so great that many clinicians become uncertain as to the most appropriate action to take.

It is important to note that the prerequisite for any RCT is *uncertainty* about the effects of a particular treatment. If something is known to work (and to be acceptable and without harmful effects), then there is no reason to put it to the test in the form of a trial (Oakley, 1990:168).

During the summer of 1982, controversy about routine episiotomy continued when general practitioners were brought into the debate by Luke Zander (1982), expresident of the General Practice section of the Royal Society of Medicine and Senior Lecturer in the Department of General Practice at St. Thomas' Hospital in London. In an editorial in the Journal of the Royal College of General Practitioners entitled, "Episiotomy: Has Familiarity Bred Contempt?" Zander called for a whole reappraisal of the conduct of labour, including the use of episiotomy. In the fall, discussions about routine episiotomy persisted in the midwifery literature, this time with respect to the issue of informed consent (Finch, 1982). Midwives were cautioned by a barrister that an episiotomy performed routinely or which was opposed by a client was tantamount to battery.

In 1983, questioning of episiotomy by midwives continued with the publication of results of a small unreprese...tative survey on tears and episiotomies (Needham and Sheriff, 1983). The study, while not generalisable, undermined some of the traditional rationales for performing the operation. The midwifery investigators concluded that "a perineal tear heals and is far more comfortable than episiotomy," and that patients experiencing problems were more likely to be those who had had an episiotomy. Also during 1983 a third episiotomy RCT went into the field (House, Cario and Jones, 1986).

In 1984, results of the episiotomy RCTs began appearing in the professional literature. In January, Jennifer Sleep, principal investigator of the West Berkshire episiotomy trial, reported preliminary analysis of the study in the journal Nursing. She stated that the data suggested "the liberal use of episiotomy was unjustified in terms of minimizing trauma, reducing pain (including dyspareunia- difficult painful sexual intercourse) and improved healing after delivery" (Sleep, 1984a:54). In April, medicolegal issues relating to the routine use of episiotomy were revisited in the midwifery literature. Midwives were counseled to obtain maternity patients' consent for all procedures, even routine ones such as episiotomy, and warned "...performing episiotomy without adequate consent is a serious offense and is an act which could open up the possibility of an action for heavy damages against those involved" (Finch, 1984:40). Still more questioning of episiotomy occurred with the publication in Midwives Chronicle and Nursing Notes of a retrospective study of episiotomy rates from one obstetric unit. Valerie Wilkerson, a hospital midwifery sister studied the episiotomy rate of 21 midwives. She found huge variations between midwives, suggesting that the use of episiotomy, at least in her hospital, was not rational. Observing the lack of consistency in performing the operation, she concluded "...the likelihood of episiotomy is apparently determined, not by the condition of the mother or baby, but by which midwife is allocated to the case" (Wilkerson, 1984:109). Wilkerson called on the advocates of episiotomy to justify the claims made for it and, until evidence was offered, she instructed midwives to "again seek to establish the intact perineum as one of the hallmarks" of midwifery skill (p.109). By the summer of 1984, the scientific evidence from RCTs was mounting against the routine use of episiotomy. Data from the Dublin and West Berkshire trials indicated that the routine or liberal use of episiotomy was unjustified. Neither trial produced evidence to support the alleged prophylactic benefits of episiotomy--that it minimized perineal trauma, reduced post-partum pain, or

improved perineal healing after delivery. Based on their results, the researchers of both trials called for the abandonment of the practice of routine episiotomy. The results from the Dublin trial were the first to be published in the June 30, 1984 issue of the <u>BMJ</u> (Harrison et al., 1984) followed shortly thereafter by the publication of the results of the West Berkshire trial in the September 8, 1984 issue of the same journal (Sleep et al., 1984). The summaries of the results of the West Berkshire trial were also published by Sleep (1984b; 1984c) in the nursing literature.

Controversy about episiotomy was fueled in 1984 with the publication of other observational episiotomy studies; one by a midwife (Carter, 1984), and another by a general practice trainee and a consultant obstetrician (Jackson and Dunster, 1984). During this time, more non-evidence-based criticism also appeared in the medical and midwifery literature (McCullough, 1984; Flint, 1984).

In 1985, discussion of episiotomy declined substantially from the flurry of activity in 1984. One controlled non-randomized study was published, however, which disputed the claim that episiotomy prevented pelvic relaxation. The authors concluded that the study failed "to support the theory that episiotomy results in improved healing and better perineal muscle function, and there is no evidence to suggest that an intact perineum in childbirth gives rise to deficient function due to over stretching" (Gordon and Logue, 1985). A Belgian observational study published in the <u>British Journal of Obstetrics and Gynaecology</u> in August of 1985 addressed the relationship between episiotomy and third degree tears. British obstetricians often offered prevention of third degree perineal lacerations as the rationale for performing episiotomy. Contrary to physician belief, the study of nearly 22,000 births found no relation between episiotomy and third degree tears after stratifying the data by birthweight and parity. Additional questions of the value of episiotomy in preventing third degree tears appeared in an October editorial in <u>The Lancet</u> (Anonymous, 1985). The editorial

reported the results of the Belgian study and called for a RCT to evaluate the relationship between episiotomy and third degree tears. Discussion about episiotomy and third degree tears continued with letters to the editor of the <u>British Journal of Obstetrics and</u> <u>Gynaecology</u> (Blondel and Kaminski, 1985) and <u>The Lancet</u> (Dunn, 1985; Buekens, Lagasse and Woliast, 1986).

It was also in 1985 that the European regional office of the World Health Organization, the Pan American Health Organization, and the WHO regional office of the Americas held a conference on appropriate technology for birth<sup>2</sup>. The delegates to the conference accepted childbirth as a natural and normal process. Among the list of recommendations unanimously adopted by the conference was one rejecting the routine use of episiotomy.

The perineum should be protected wherever possible. Systematic use of episiotomy is not justified (World Health Organization, 1985:437). Although published in <u>The Lancet</u> and the <u>AIMS (Association for Improvement in the Maternity Services)</u> Quarterly Journal, these recommendations were not widely dis-

seminated in Britain.

### Strategies for Bringing About Change

During the 1970s in Great Britain, the rationales for routine episiotomy were largely taken-for-granted. An examination of the professional literature critical of routine episiotomy reveals three ways in which opponents went about undermining these rationales. First, similar to American physicians who advocated routine episiotomy based on clinical assumptions rather empirical evidence, some of the earliest episiotomy critiques relied heavily on clinical experience and common sense to argue against the practice (eg. Levett, 1974; Willmott, 1979; 1980). The following passages from Levett and Willmott are typical this sort of argument.

The episiotomy has become almost routine now to mothers delivered in hospital. I question whether or not this is a good thing. Has the average

perineum become completely unable to do its job both during and after birth without the aid of scissors and thread?

...the ordinary primipara or multipara with the average-length second stage, average perineum, average-sized baby, and normal cephalic presentation-does she deserve a cut perineum?

The arguments for episiotomies in these cases are, I feel, not always valid. The argument that an episiotomy is better for the perineum than a tear I can accept, but would there always have been a tear? The argument that the perineum will be forever incapable of supporting the pelvic contents again after a couple of normal births is surely a slight exaggeration (Levett, 1974:89).

The advocates of such policies (routine episiotomy) suggest that women have an inbuilt pelvic 'flaw'. A lot of irresponsible medical propaganda is being put about claiming that unless an episiotomy is performed there will be stretching and damage of the pelvic supports, leading to prolapse in later life. If they were correct, it would seem strange that evolution should have produced such an imperfect structure, wouldn't it?" (Willmott, 1981:26)

As suggested by these two passages, this type of critique questions the need for

episiotomy by challenging the existing obstetric belief system supporting the practice.

These critics refuted the argument that the functioning of the perineum during child-

birth was pathological (i.e. produced prolapse in later life). By invoking the philosophi-

cal argument that childbirth was actually a normal process, they held that routine surgi-

cal intervention was not required. As the following passage reveals, this type of reason-

ing is remarkably similar to the one made by late 19th century physicians. Pondering a

remark made by an eminent American physician (Dr. Emmet) that lacerations of the

uterus were quite common, Samuel Gross, Emeritus Professor of Surgery at Jefferson

Medical College and founder of the American of the American Surgical Association

commented,

If it be true, it would inevitably go to prove that God has made woman much less perfect than the world has given him credit for. As childbirth is one of the special prerogatives of women, designed to perpetuate the race, there is something peculiarly distressing in such an idea. Looking at the matter from a practical standpoint, one would naturally conclude that the Author of our being had constructed the womb with special care to protect the organ. at least as a rule, against the possibility of contingency fraught with such sad consequences. If we assume the correctness of Dr. Emmet's statement, we may well wonder, without irreverence, why Almighty God did not create simultaneously with woman a competent gynecologist, ready to meet this inevitable evil, for which such unquestionably it must be whenever it occurs (Gross, 1884:338).

Other examples of this type of argument appear in leading articles, editorials and letters to the editor of the journals pointing out the lack of research supporting the routine use of episiotomy and call for the practice to be reevaluated scientifically (e.g. Anonymous, 1968; Zander, 1982). These non-evidence based challenges of episiotomy raised consciousness about the operation by sensitizing the average clinician to the fact there was growing disagreement within professional circles about the value of the practice. In some cases, these presentations also had the effect of provoking clinicians who strongly believed in the practice to come to its defense (e.g. Flood, 1982). This helped to further bring the episiotomy debate out into the open and create greater uncertainty about the claims which had been made for performing the operation.

A second and more convincing type of critique relies on reviews of the literature to challenge the very basis on which the practice of episiotomy had been built, that is, the benefits claimed for the procedure. These papers, more difficult for clinicians to dismiss outright than the non-evidence-based criticisms, produced greater uncertainty about the value of episiotomy. They did so by revealing that little evidence existed in the literature supporting the rationales which had been offered for the operation. House's 1981 review is an example of this type of critique:

...but it must be stressed at the outset that there is an almost complete lack of any scientific evidence that the operation has any of the beneficial effects claimed for it. A search of the literature has failed to reveal any study designed to compare the effects on mother and baby of doing or not doing episiotomies (House, 1981:6)

...It would be expected that for a standard procedure that is performed hundreds of thousands of times every year there would be solid evidence in the world literature comparing the results of delivery without episiotomy. Without such evidence, how could such a widespread procedure become so well established? In fact, no such evidence exists (House, 1981:8).

The third type of critique and the one probably thought to be the most influential in bringing about change in medicine, challenges the alleged benefits of routine episiotomy with actual data from recently conducted research. These studies, which included observational studies (eg. Needham and Sheriff, 1983; Wilkerson, 1984; Gordon and Logue, 1985) as well as prospective RCTs (Harrison et al., 1984; Sleep et al., 1984; House et al., 1986) set out to evaluate the claims made about episiotomy but were typically unable to produce evidence supporting routine use of the procedure.

#### The Effect of Questioning

Unfortunately Department of Health officials inform me that national data for England on episiotomy rates for 1979, and 1981-1984 are unavailable (R.A. Yeats, personal communication, July 6, 1992; Alan Gurney, personal communication, May 19, 1994; March 15, 1995). This makes it impossible to establish exactly when episiotomy rates began falling or how the rate of decline in the use of episiotomy changed during these years. Data does exist for one hospital for the period 1980 to 1984 (Reynolds and Yudin, 1987). In the four years between 1980 and 1984, the episiotomy rate at the John Radcliffe Hospital in Oxford declined in absolute terms 27.7% for primips and 21.4% for multips (refer to Figure 6-1). This translates into an absolute rate of decline in episiotomy use of 38.2% for primips and 58.2% for multips. Throughout this period the use of episiotomy continued to drop, although the rate of decline slowed for primips. When the rate of decline is calculated for individual years, the greatest reduction occurred between 1981 and 1982 for primips (18.9%). For multips, the greatest decline occurred between 1983-1984 (27.7%), although the rate of decline between 1981-1982 was almost as great (26.5%). It should also be noted that the decline in episiotomy at John Radcliffe Hospital cannot be explained away by changes in other obstetric interventions which may have also been occurring at the same time.

...since the fall in the episiotomy rate was the most striking of all the changes (obstetric interventions), it seems to have had its own



momentum and not to have been dependent on other changes in the management of the second stage (Reynolds and Yudkin, 1987:1048).

When these data are juxtaposed with the questioning of episiotomy which was taking place between 1980 and 1984, it appears the non-evidence-based episiotomy critiques, which began accumulating in a significant way only in 1982, had an impact on the use of the operation. The evidence-based critiques on the other hand, played little role in bringing about the initial reduction in the use of the operation. While the vast majority of evidence-based critiques did not appear in print until the late summer and fall of 1984, the episiotomy rate had already dropped in absolute terms 22.8% for primips and 15.5% for multips by 1983.

Unfortunately, the Reynolds and Yudkin study examines the episiotomy rate only up to 1984, the year the results of two of the RCTs were published. This makes it impossible to know the extent to which the results of these trials may have further stimulated a decline in the use of episiotomy. Unlike the 1982 editorial in the BMJ by Professor Russell which stimulated the medical debate about the use of episiotomy, neither the Dublin nor West Berkshire RCTs generated much discussion in the literature. In all, both trials prompted only 3 letters to the editor. One letter related to the "informed consent" procedures followed in the Dublin study (Neville-Smith, 1984); another by a biomathematician challenged the interpretation of the results of the Dublin on methodological grounds (Läärä, 1984); and the third wished for a more definitive statement from the West Berkshire trial that episiotomy is not beneficial and should not be done (Lewis, 1984). While it is not possible to quantify the effect these two RCTs may have had on clinicians' use of episiotomy, they undoubtedly had an impact in the literature. The results of these trials were cited by clinicians and childbirth advocates to justify abandoning the routine use of episiotomy (Chalmers, Enkin and Keirse, 1989; Kitzinger, 1984). While not themselves producing a reduction in the use of episiotomy, these trials provided the scientific rationale for the limited use of episiotomy which had already come about.

# Obstetrical and Midwifery Interest in Questioning Episiotomy

Having traced the development of professional criticism of routine episiotomy and discussed its relationship to the use of the operation, it is also useful to consider some of the factors which motivated this questioning. The critiques themselves and interviews with the key informants offer insights into what some of these factors might have been.

## Midwifery Interest in Questioning of Episiotomy

Midwifery interest in questioning episiotomy and midwives receptivity to such questioning was very much related to the issue of professional preservation; both in terms of maintaining a particular skill (management of the perineum) and in terms of the broader concept of professional autonomy. For many of the midwives who authored episiotomy critiques, the trend toward the routine use of episiotomy was perceived to be a serious threat to the traditional and revered midwifery skill of managing the perineum so as to minimize perineal trauma. Delivery over an intact perineum was and is considered one of the hallmark midwifery skills. Midwives were concerned that as more and more of their cohort and midwives in training cut episiotomies, the skill of managing the perineum with the intention of leaving the perineum intact would be lost.

Through psychoprophylaxis, we are helping our mothers to be controlled with their pushing, to co-operate with the midwife by resisting the pushing urge at crowning. Are not these skills and the potential skills of the midwife being thwarted by the increasing frequency of episiotomy? (Levett, 1974:89)

It was always considered, in the past, that the supreme skill of the midwife was her ability, in most cases, gently to deliver the baby, leaving the mother unscathed, with an intact perineum...It is a matter of judgment...Surely it all boils down to good midwifery. Mechanical practices, like routine episiotomy, are tending to mar the beauty of childbirth (Willmott, 1979:31). The midwifery skill of perineal management is under threat of extinction, this has been brought about largely as a consequence of reduced professional confidence, coupled with a growing obsession with the role of episiotomy to the exclusion of other aspects of perineal management during and following childbirth (Sleep, 1987:455).

The questioning of episiotomy also had to do with asserting midwives' profes-

sional autonomy by resisting an intervention they perceived as being imposed by

obstetricians. As I have described in Chapter 5, the routine use of episiotomy was in

part related to the increasing involvement of medical practitioners in normal maternity

care as childbirth moved from home to hospital. Episiotomy was one of many obstetri-

cal practices which midwives were encouraged (or even ordered) by obstetricians to

take up. For many midwives, this came to symbolize the medical take-over of mid-

wifery decision-making in the management of normal labour. As one scholar has

observed.

The end of the 1970s was in many ways a turning-point for the profession, with the recognition that certain trends in the health services over the past two decades had undermined various aspects of their contribution to maternity care (Robinson, 1990:81).

Mary Renfrew, a midwifery researcher at the National Perinatal Epidemiology Unit in

Oxford described what happened this way,

...from the 60s through into the 70s there is an increase in routine intervention that midwives simply took on board for a while, although there were movements against it but for a while, swept over the midwifery profession very fast. And THEN all of a sudden people started to say that, "This isn't right because we never used to do that and it was never a problem before." And they would target single practices...And episiotomy was one of the big ones because of course lots of midwives didn't want to do routine episiotomy, had never done them before so why should they now. And the younger ones started to say, "Well how do I deliver babies without episiotomy? You know, teach me." So as the move against episiotomy started to happen, as I understand it from my own personal experience from the late 70s, 1979 through 1984. probably was a very important period for midwives turning against episiotomy. It may have been happening earlier than that, but I was not aware of it.

Then midwives started to say, we don't have to do this stuff. They were also starting to say, we don't have to do routine monitoring, we don't have to do certain things...position in labour was another one. Why were women all lying down these days in labour, why aren't they up and about? And if you like, that was a return to midwifery practice as it used to occur but a while got swept over with the move into hospital. Then they started to say, "Hey, we have to stop doing that (Mary Renfrew, interview, October 5, 1989).

In publicly questioning episiotomy, midwives were resisting obstetrical intrusion into midwifery decision making and reasserting their professional independence. These critiques were intended to draw attention to the fact, that by performing episiotomy routinely, midwives were surrendering "yet one more area of their specialist professional knowledge to the obstetrician" (Kitzinger, 1979:233). The following passage from Jennifer Sleep, offers a sense of the strong desire some midwives felt about the need for the midwifery profession to be self-directing and midwives to regain the freedom to exercise clinical judgement.

And the way that it lent impetus to what I was doing (Kitzinger's <u>Some</u> <u>Women's Experiences Of Episiotomy</u>) was her concluding sentence which was, "It is up to obstetricians who perform this invasive procedure to justify that its benefits outweigh its hazards." And I think that is verbatim. Because I had thought it is not obstetricians who do episiotomies, it is midwives. In 75% of vaginal deliveries, the senior person present is the midwife. Midwives do episiotomies not obstetricians. And I thought, well if we don't look at it, again, an obstetrician will and will turn around and make recommendations to the midwifery practice. And we have really got to stand up and do something about it (Jennifer Sleep, interview, October 17, 1989).

# Medical Interest in Ouestioning Episiotomy

The reasons for medical interest in questioning episiotomy are much less clear. Some physicians like Iain Chalmers (author of a 1976 episiotomy critique, coinvestigator of the West Berkshire episiotomy RCT, and Director of the National Perinatal Epidemiology Unit) and Michael House (author of several episiotomy critiques and PI of the London RCT), raised questions about routine episiotomy out of strong personal convictions that obstetric practice should be based on evidence rather than the opinion of authorities. It is interesting to note that both men believe they were greatly influenced by practicing obstetrics in developing countries early in their careers. During these periods, they found that much of what they had been taught in medical school about the need for obstetrical intervention in childbirth did not apply to the women they were assisting to deliver. These observations raised doubts in their minds about the evidence for obstetrical interventions.

The thing that changed my LIFE was working in a Palestinian refugee camp for two years. THERE I saw women having babies without any sort of intervention, many, having reasonably good outcome of pregnancy and it raised in my mind the question of what is the evidence to justify all the things that are done, in my home country. So it was the experience of working with the Palestinians, that, that made me question the need for many of the things that were being done in my own community back home. THAT'S what did it, and it wasn't specifically with episiotomy although episiotomy was extremely rare there. I don't know, but the fact of the matter was, that stitching after childbirth was actually quite rarely needed in that particular community. And episiotomy was done exceedingly...very very very rarely indeed. So, so that was just part of a general sort of um, ah, UP-ENDING of so many assumptions that I had. (Iain Chalmers, interview, October 5, 1989).

I trained in this country and then a year after qualification I went to the West Indies on a two year contract and stayed there 10 years. Now, over there, where I was anyhow, it was in a small island, there weren't many midwives and more or less no doctors. So episiotomy was very rarely performed. And a lot of patients had a large number of children and from my observation, perineal lacerations were not a big problem. They didn't seem to be any commoner than I remembered them here. And long term problems of perineal discomfort or prolapse or whatever else you talk about didn't seem to be bad. So when I came back to this country, and came to this unit, I found that even though this unit prided itself on, on a non interventionalist sort of natural approach to obstetrics, that the episiotomy rate in primigravids anyhow, was extraordinarily high. I mean it was nearly 80% in primigravids. And ah, it was so high that it was almost the policy to, not quite but almost the policy to do episiotomy in most people having their first baby, unless they strongly objected for some reason. And I thought this was a bad policy... (Michael House, interview, October 19, 1989).

Something else which was extremely important, if not critical, in prompting the production of many of the professional episiotomy critiques was pressure from outside the professions to reevaluate the practice. This pressure came largely from Sheila Kitzinger, the National Childbirth Trust (NCT), the Association for Improvement in the Maternity Services (AIMS) and childbearing women. The NCT is "THE" organization in Britain devoted to childbirth education. By 1986 the national membership was 40,000 (Kitzinger, 1990:92). AIMS is a national maternity care pressure group believed to have a considerably smaller membership, although its exact size is a carefully guarded trade secret.

# Women Initiating and Nurturing Professional Controversy

By 1972, when the episiotomy rate had risen appreciably, Sheila Kitzinger, Britain's most influential authority on childbirth education, was the first to raise serious lay concerns about its routine use. Kitzinger prompted by "the large number of accounts of painful stitching and post-partum discomfort which arrived on the National Childbirth Trust headquarters desk" (Kitzinger, 1972:preface), edited a booklet on episiotomy for the NCT entitled, Episiotomy, Physical and Emotional Aspects. The booklet was intended for those working in midwifery, obstetrics and antenatal teaching and suggested ways to reduce episiotomy and presented technical advice on means of reducing complications when episiotomy was necessary.

In retrospect, this document launched a lay campaign to reduce the indiscriminate use of episiotomy. By reporting women's negative experiences of the operation, Kitzinger essentially legitimated and validated these women's experiences. Furthermore, based on a small survey (N=145) of NCT women's experiences with episiotomy, Kitzinger suggested that the iatrogenic episiotomy complications, which had up to this time been considered only a problem experienced by a few individual women, might actually be much more widespread. Kitzinger's survey revealed one third of the sample complained of pain at the time their episiotomy incision was stitched, and one fifth spontaneously commented that the pain was severe. Although two thirds of the sample were sutured within a half hour of the birth, one third waited longer than this (35 women waited longer than one hour, 22 over two hours and 8 waited 6 hours). Much of the delay in episiotomy repair was attributed to waiting for a medical practitioner to arrive to suture the incision (Kitzinger, 1972). In the years to follow, public awareness of the operation was heightened by articles in the popular British press which reported on the devastating emotional and sexual side-effects of the operation and called for a reappraisal of the whole subject of episiotomy. For example, in September of 1974, a month before the appearance of the first midwifery critique, Judy Froshaug (1974) published an article by the title "The unkindest cut of all" in the "glossy 'socially aware' women's magazine" (Kitzinger, 1990:96) Nova. The following excerpts from the article reported the seriousness with which Froshaug was criticising episiotomy.

A clumsy incision and incorrect stitching can alter not only the appearance of the most important part of a woman's sexuality, but also her entire capacity to respond to and enjo, sexual intercourse...

Anatomically speaking then, the repair of an episiotomy is crucial to a woman's future health, both physically and sexually. But the actual feelings experienced by women whilst being stitched, and during the time-lapse between delivery and stitching, can have an equally traumatic and far reaching effect (Froshaug, 1974:84).

The article ended by presenting several women's stories to illustrated how traumatic an experience a botched episiotomy repair could be for women.

During the mid 70s, the lay questioning of episiotomy intensified when AIMS began publicizing women's dissatisfaction with episiotomy and overtly campaigning against the operation. AIMS opposition to routine episiotomy developed as women suffering from the most serious and unpleasant episiotomy complications began contacting them seeking their help and advice. Using the <u>AIMS Quarterly Newsletter</u> as a "campaigning document," (Beverley Beech, interview, October 21, 1989), AIMS illustrated the devastating effects the operation could have on the birth experience as well as women's lives, questioned the routine use of episiotomy, demanded that fewer episiotomies be performed and insisted that those that were performed be done with greater care.

The AIMS newsletter began publicizing women's complaints about episiotomy in March 1976. This article expressed AIMS' anger about problems related to repair of the incision (Anonymous, 1976). The following passages provide an indication of the

tone of the article.

It is therefore of great concern that stitching should be conducted by highly skilled personnel. Often episiotomies are left to medical students for practice. Young men who have never held a needle and thread before learn their first surgical skills on this most precious part of the female anatomy. When complaints are made by mothers of pain months later (and strained marital relations), these are dismissed as meuroses (sic). Tranquilisers are administered- which may cure a sore mind, but hardly a sore seat!

Another source of complaint is the way doctors treat mothers after episiotomy. In the majority of cases, midwives deliver the baby, then leave the delivery room. The mother then waits (often hours) for a (usually strange) doctor to stitch the wound. Not only can this be extremely humiliating for the mother, but it must also be the least rewarding part of obstetrics to the doctor. He or she has not shared in the birth experience, and therefore has no involvement with the mother. Thus the natural exhilaration felt by the mother after the birth of her baby is squashed by complete lack of sympathy (Anonymous, 1976:7).

In March of that same year, members of AIMS also met with officials of the

Maternity Services of the Department of Health and Social Services to raise maternity care issues of concern to AIMS. The problem of bad episiotomy repairs was brought up by the AIMS delegates. They informed the Health Department officials that AIMS was disconcerted to learn that medical students at one prestigious London medical school were carrying out episiotomies and repairing them despite never before having done any stitching on anyone (AIMS Quarterly Newsletter, 1976:9). The Health Department officials appeared not to take this concern seriously as they replied by saying, "Well, they have to learn on someone."

In October of 1977, the <u>AIMS Quarterly Newsletter</u> featured a second and more informative piece on episiotomy. Previously, AIMS had requested women's experiences with episiotomy in <u>Mother and Baby</u> magazine and received responses from 13 mothers. The article summarized and presented these mothers' horrendous experiences, often quoting them directly. The first paragraph of the article summarizes AIMS findings regarding episiotomy. Thirteen mothers replied, and it was immediately clear that the one thing they all had in common was the long and painful aftermath of birth during which stitches were healing, or, more commonly, failing to heal. One is still waiting to be re-stitched, more than a year after the birth of her baby. It seems as though the trauma of the recovery period, regardless of the circumstances of the birth, and aside from the issue of whether the episiotomy was "necessary", dominated feelings about the whole process and brought many undesirable effects, e.g., failure about breast-feeding, post-natal depression, sexual problems, difficulty in coping with the baby, or even in loving it enough, and reluctance to conceive again (Pallett, 1977:3).

This article concluded by attempting to provoke professionals to do something

about women's complaints about episiotomy.

The NCT published a booklet, 'Episiotomy, Physical and Emotional Aspects', written by sympathetic professionals (midwives, doctors, etc.) which makes many of the same points as these letters. It was written 5 years ago and the letters we have received this year are making the same complaints. Perhaps we need some research into episiotomy and its consequences, if only to prevent the sort of unnecessary suffering that goes on, more important in a way, to avoid endangering or jeopardizing vital relationships such as that between a woman and her husband, and a mother and her child (Pallet, 1977:4).

By the end of 1978, the National Childbirth Trust renewed its interest in

episiotomy when it again started asking if routine episiotomy was really necessary. As

a 1978 article in the national newspaper The Guardian reported,

The National Childbirth Trust, which did much to expose the toofrequent use of induction, has now turned its attention to the equally suspicious numbers of episiotomies (Adamson, 1978:9).

By the Spring of 1979, when the routine use of episiotomy was beginning to be questioned in the midwifery literature, lay questioning of the practice had already reached substantial proportions. For example, Willmott in her 1979 midwifery critique acknowledges the "rising tide of professional and lay opinion against this wholesale practice (routine episiotomy)." Some obstetricians as well, were also beginning to feel the heat of women's questioning of the procedure. For example, in a 1979 paper explaining how to perform and repair episiotomy incision, J.S. Fox, Senior Lecturer in Obstetrics at Charing Cross Hospital in London remarked, episiotomy is often under fire from our militant "consumers," who maintain that episiotomies are often done unnecessarily and that the pain subsequently experienced in the puerperium from this "unkindest cut of all" interferes with bonding between mother and baby (Fox, 1979:337).

At exactly this same time Kitzinger (1979), frustrated by the midwifery profession's apparent willingness to accept and even perform routine episiotomy, brought the episiotomy debate directly to the attention of midwives by writing a critique on episiotomy which was published in one of the profession's own journals. In the "controversy" section of the widely read <u>Midwife</u>, <u>Health Visitor and Community Nurse</u>, Kitzinger discussed the iatrogenic complications produced by episiotomy, disputed the claim that episiotomy prevented subsequent gynecological problems and appealed to midwives to reject routine episiotomy in favour of their traditional skill of delivering women with minimal perineal trauma.

In 1979, Kitzinger also published <u>A Good Birth Guide</u>. In this best seller, she summarized reports she received from a total of 1,800 women with experiences in maternity units from across the country and issued stars for each maternity unit's sensitivity to women's childbearing needs. While the focus of the book was on the treatment of childbearing women in maternity units, the issue of episiotomy figured prominently throughout. For example, when Kitzinger's informers included information on a unit's use of episiotomy, this information was included in the Guide, as was any information provided by the units themselves. Episiotomy was also discussed in a section of the book explaining obstetrical procedures commonly encountered during childbirth. Kitzinger challenged the practice of routine episiotomy and urged expectant mothers to discuss all aspects of episiotomy with their care-givers in advance. She also encouraged them to tell their attendants if they wanted to be helped to manage their birth without an episiotomy.

This book had a phenomenal impact on professionals. For the first time, many of them were made aware that they provided a service and that consumers had preferences which they considered important and wished to have respected. Furthermore, anecdotal evidence suggests this book "prompted some British maternity units to abandon some routine practices unsupported by any good evidence" (Banta, 1989:1455). This interpretation is also supported by several of my key informants, an obstetrician, a general practitioner, a midwife and an consumer advocate.

Oh, I think, if I was to identify one single thing which had opened up the debate about childbirth in this country it would Sheila Kitzinger's <u>Good Birth Guide</u>. I think she probably did more to...push proper consideration of women's needs in childbirth into a forum for debate by publication of that book that any other single person has done with any other intervention they have made in this whole area. So far as I am concerned she is a big heroine for having published that book. It gave maternity hospitals, evidence that they had a public face and that this was published for people to see (Iain Chalmers, interview, October 5, 1989).

Um, she wrote the <u>Good Birth Guide</u> rather like a witch report or a good food guide or something and people were furious, obstetricians. Absolutely furious. "How unmethodical. What sort of a report is this? How can you judge quality by one person?" Because what she did was just ask for comments from mothers. And sometimes there was only one comment from one mother from a hospital or two comments or three or whatever...It has nothing to do with um, all the sort of ways that we talk about as in depth studies before you really evaluate. It was just another approach. It's very anecdotal but it was, it had an effect. And I think it had an effect um, by again demonstrating something which is more um, more advanced in America, the realization of the importance of the consumer view. But I think that in the maternity care, people began to realize that um, the consumer view had a potential for changing things (Luke Zander, interview, October 18, 1989).

Yes, yes. Sheila Kitzinger has been a very...well, she has just changed so much. I mean, one of the most dramatic things that she has ever done was doing the <u>Good Birth Guide</u>. I mean, the anger it engendered. And she did all the, you know, these stars for maternity units. Maternity units were INCENSED. WHAT WAS THIS WOMAN DOING? SHE WASN'T EVEN A MIDWIFE, SHE WASN'T EVEN A DOCTOR AND SHE WAS SAYING, SHE WAS QUESTIONING OUR PRAC-TICE. HUH! And they were so angry. And you see, she, I think for the first time she pointed out to midwives and doctors, she said, "You're providing us with a service, the service you are providing is not pleasing us. Get your finger out" (Caroline Flint, interview, October 16, 1989). And <u>The Good Birth Guide</u> had an influence, most certainly had an influence because, she was the one who...she had obstetricians ringing her up when they had only got one star saying, "We have changed a lot of things and we are doing this and you know...It is much better now, much better now. We've had a total change of staff." And terribly keen to make sure they got into the next one um, you know, got into the next publication so that their hospital got 4 or 5 stars. <u>The Good Birth Guide</u> was very useful in focusing attention on choice and making them realize that women actually had the choice to do that and to move around (Beverley Beech, interview, October 21, 1989).

<u>The Good Birth Guide</u> was revised and republished in 1983 as <u>The New Good Birth</u> <u>Guide</u>.

Also in 1979, the NCT and AIMS joined forces to raise professional awareness of lay opposition to routine episiotomy. The two childbirth organizations jointly approached the national British Department of Health and Social Services (D.ISS) to criticize the indiscriminate use of episiotomy. Complaining to the DHSS about the rate of episiotomy succeeded in getting the government department to publicly state its opposition to the routine use of the operation. The DHSS replied to AIMS and the NCT by saying,

We would never be happy to see a procedure such as episiotomy regarded as 'routine'. Our policy has been, and will continue to be that the needs of the individual patient are paramount. We regard as unacceptable the setting of any arbitrary time limit in the second stage of labour, after which episiotomy or forceps delivery would automatically be performed without regard to the clinical circumstances (Anonymous, 1979:7).

Two of the most important activities Kitzinger and the NCT undertook specifically related to the issue of episiotomy also began in early 1979. Between March of 1979 and 1980, Kitzinger and Rhiannon Walters, in collaboration with the NCT, conducted a survey of 1,795 NCT mothers' subjective experiences with episiotomy and the subsequent suturing.

In September of 1981, the NCT published the results of Kitzinger's episiotomy study under the title <u>Some Women's Experiences of Episiotomy</u> (Kitzinger and

Walters, 1981). The most striking findings of the survey were that women who had had episiotomies experienced more pain at the end of the first week post partum than women who had lacerations; found it more difficult to get into or maintain a comfortable position to breastfeed than women with lacerations; were more likely to experience dyspareunia (painful intercourse) and for a longer period than those with lacerations. Suturing also appeared as a common problem experienced by women. Nearly half the women requiring suturing had to wait longer than 30 minutes to be stitched and approximately one quarter of the women who were stitched found the experience painful or very painful.

Having documented that women receiving an episiotomy (as opposed to remaining intact or experiencing a spontaneous second degree tear) experienced greater pain and dyspareunia, Kitzinger and Walters concluded their report by challenging physicians to either prove the benefits of episiotomy or stop performing it.

Episiotomy causes women often unnecessary pain at and following delivery. It does not, despite claims to the contrary, avoid tears, does not improve the condition of the perineum in the weeks following childbirth, may interfere with the mother's initial relationship with her baby and the start of breastfeeding and can adversely affect the couple's sexual relationship for a long time after.

It is up to women to refuse to give consent to any intervention unless it can be shown to be necessary and evidence is produced to back up this claim. It is up to obstetricians who make this surgical wound to prove that its benefits outweigh its hazards, or to stop a practice which is demonstrably harmful to many women and causes a great deal of needless suffering (Kitzinger and Walters, 1981:10).

At the same time <u>Some Women's Experiences of Episiotomy</u> was released, the

NCT also released an updated and expanded version of Kitzinger's 1972 booklet,

Episiotomy, Physical and Emotional Aspects (Kitzinger, 1981). In this version, all but

Kitzinger's chapter were written by health care professionals sympathetic to women's

concerns about the overuse of episiotomy. Two of the chapters were reprints or

modified versions of earlier articles; Willmott's 1980 critique which appeared in Mid-

wives Chronicle, and House's 1981 episiotomy literature review which appeared in <u>Midwife, Health Visitor and Community Nurse</u>. Both NCT publications were extremely critical of the operation and called for a reduction in its use. Not surprisingly given Kitzinger's stature and media connections, the results of her episiotomy survey were widely reported in both <u>The Sunday Times</u> (Gillie, 1981) and <u>The Times</u> (of London) (Haigh, 1981), newspapers with circulations of several million. Two weeks before the booklets were released by the NCT, Rhiannon Walter, Kitzinger's research assistant and co-author on the episiotomy survey, further publicized the lay questioning of episiotomy by drawing midwives' attention to the fact, physicians seemed completely disinterested in questioning the practice despite women's concern about the issue. In a one page article in <u>Nursing Times</u>, Walters noted,

...it is distressing to find while women are questioning the practice of episiotomy, while it has well documented risks, and while none of the benefits claimed for it are adequately demonstrated, none of this concern is reflected in the medical journals. Obstetricians are debating about whether to perform midline or mediolateral episiotomy, and whether to stitch with catgut or polyglycolic acid, while many mothers and mid-wives are finding that their rather different priorities are ignored or dismissed (1981:14).

As the following passages reveal, Kitzinger's episiotomy booklets and all the

attention they received in the media, were directly responsible for provoking the 1982

<u>BMJ</u> editorial which cautiously defended episiotomy and the debate which subsequently

ensued in the correspondence section of the journal.

With increasing insistence individual women, and sometimes wellorganized groups, are asking whether some procedure is manifestly to the advantage of mother and baby or amounts to unnecessary interference by doctors.

... The spotlight of public concern has now moved to episiotomy. The National Childbirth Trust has recently published a collection of essays on the physical and emotional aspects of episiotomy with contributions from obstetricians and midwives, concluding with Sheila Kitzinger's assessment of its effects on postnatal adjustment. One page 243 Reading et al. report their account of patients' attitudes towards the pain and discomfort that may occur after episiotomy. All these studies show how many questions remain unanswered (Russell, 1982:154).

It is not until the last paragraph of the editorial, however, that the success women were having in challenging episiotomy becomes clear.

...And as women become better informed and more articulate they are sure to have strong views on this important subject. It would, however, be a pity if clinical practice were changed on insufficient evidence of a patient-led protest. The answers should come from clinical research (Russell, 1982:154).

Not only was Kitzinger ultimately responsible for provoking the Russell article in the first place, she also directly entered the medical debate by writing a letter to the editor of the <u>BMJ</u>. In her letter, Kitzinger reviewed the results of her episiotomy study and ended it by chastising physicians for not taking it upon themselves to question the practice.

The onus is on obstetricians to justify intervention, of whatever kind, not on women to prove that it is harmful. With episiotomy, as with induction, it should be a matter of some concern that criticism has had to come from outside the profession before obstetricians themselves got down to questioning a routine practice. (Kitzinger, 1982:823)

Coincidently, Kitzinger was inducted as a Member of the Order of British Empire (MBE) by the Queen in 1982, the first person ever to be so honoured for anything to do with childbirth education. As Kitzinger remarked about receiving the MBE, "I felt that it was saying something about the acceptance of the work that women were doing in childbirth education as a whole rather than about me personally" (Sheila Kitzinger, interview, October 20, 1989). Kitzinger's MBE is but another indication of her prominence within childbirth education and the influence she exerts in this area.

In 1982, lay questioning of childbirth practices became even more difficult for professionals to ignore. In response to the action of a London hospital in banning "Active Birth" the Active Birth Movement was founded in April. Active Birth is the term used by women wanting to give with in upright positions (Balaskas, 1989:X). To protest the hospital's policy which denied women the freedom to move around in labour and assume any birthing position they chose, Janet Balaskas, who developed the concept of Active Birth, organized a Birthrights Rally. The rally drew a crowd of 6,000 to the hospital on a Sunday afternoon. Sheila Kitzinger and Michael Odent, a French obstetrician were speakers at the rally. Following the demonstration, the physician responsible for the decision to ban Active Birth resigned as Professor and women wanting Active Births were accommodated by the hospital.

A survey conducted by a television program generated additional discussion about childbirth practices in 1982. The program received nearly 10,000 letters and nearly 6,000 women returned questionnaires (Jacoby and Cartwright, 1990:250). The results of the survey were later published in <u>The British Way of Birth</u> (Boyd and Sellers, 1982). Begarding emisietemy, the survey revealed three issues of concern to women

1982). Regarding episiotomy, the survey revealed three issues of concern to women.

The strongest comments on episiotomies and tears came firstly from women who had to wait a long time for a doctor to come and put stitches in -- sometimes for several hours. When the stitches were frequently painful and in some cases more painful than the delivery. Secondly, many women mentioned with great gratitude midwives who helped them to give birth in such a was as to avoid the need for an episiotomy or a tear -- by slow and gentle stretching. Other women said they wished they had been cut rather than torn (Boyd and Sellers, 1982:120).

While generally refraining from questioning the benefits of the liberal use of episiotomy, Boyd and Sellers did conclude their discussion of episiotomy by noting that when episiotomy is performed routinely, the midwifery skill of guarding the perineum is lost.

It seems that women prefer to be cut than to tear, but best of all, as with roughly a quarter of our survey, they want to be helped to avoid the need for either. But where there is a virtual assumption that an episiotomy will be performed, the skills involved in avoiding the need for a cut or a tear may be lost (Boyd and Sellers, 1982:122).

This television programme and the subsequent book did much to heighten the

public's awareness of maternity practices including episiotomy. As Iain Chalmers put

it,

<u>The British Way of Birth</u> is a, was a big survey done through a television programme, consumer orientated television programme called "That's Life," which was introduced by a women called Esther Rantzen. And

that was extremely influential in raising people's awareness of what was going on. That was published as a paper back, <u>British Way of Birth</u>. You know, inductions, episiotomy, caesarean sections, position during birth all of those things got raised in that. So there has been a very very vibrant debate going on in this country about childbirth, no shadow of a doubt about that. And I don't know that it has gone on in quite the same way in other European countries (Iain Chalmers, interview, October 5, 1989).

Another event took place in 1982 which helped bolster lay opposition to traditional obstetrical management of childbirth. That year, Sally Inch's book, <u>Birth-Rights.</u> <u>What Every Parent Should Know About Childbirth in Hospitals</u> became a best seller in Great Britain. In the book, Inch, a community midwife in Oxford, described all of the obstetrical practices commonly performed during childbirth and carefully assessed the evidence for each one. Specifically regarding episiotomy, Inch devoted a total of 16 pages to this practice. She presented each of the rationales offered by physicians for performing the operation and then methodically disputed each one.

Beverley Beech, the Honorary chair of AIMS, describes yet one more lay activity which occurred in 1982, which contributed to changing the midwifery profession's view of routine episiotomy.

I mean, routine episiotomy was something we were constantly SCREAMING about. You see, in 82 we launched the Maternity Defence Fund, that was the most significant thing we did. The Maternity Defence Fund...we were so fed up with women coming to us and saying, "I didn't want this drip (IV), I didn't want pethidine (pain medication like demeral), I didn't want an episiotomy." Pethidine was one of the major things that...they were told um, you know, you are so many centimetres, pethidine. And the women would say, "I'd rather you didn't do that. I don't want that." "Oh, it's our policy." And there was no argument, they got it. The same thing happened with episiotomy, women would say "I'd rather not have one" and they would be told, "it's our policy." So we said, "Right. We are going to sue you for assault. We've had enough." And within weeks the medical press, the midwifery press were full of articles discussing informed consent. They had never discussed it up till then seriously, there had been nothing serious about informed consent. SUDDENLY we have discussions about informed consent (Beverley Beech, interview, October 21, 1989).

While difficult to show empirically, the establishment of the Maternity Defence Fund probably stimulated professional interest in re-evaluating the routine use of episiotomy. For example, within two weeks of the press release announcing the launch of the MDF, two articles appeared in <u>Nursing Mirror</u> dealing with the issue. One was by a patient activist which explained why patients were going to sue professionals (Robinson, 1982) and a second by a barrister (Finch, 1982) explained the legal ramifications of informed consent. The following passages from Finch's article must have encouraged some midwives to re-think the meaning of informed consent, as well as the routine use of episiotomy.

The law says, in clear and unambiguous terms, that an unwarranted interference with another person's body without that person's consent, or the lawful consent of a person recognized as entitled to give that consent, is an assault. Or rather, to be strictly legally accurate, a battery. ...A 'routine' (unnecessary or objected to) episiotomy is a serious assault (and battery) against a patient. It is no different in law from a knife wound delivered in a fight (Finch, 1982).

Further evidence that lay questioning of episiotomy stimulated professional

questioning of the practice as well as encouraged the declining use of the operation

comes from several of my professional key informants. Iain Chalmers, describes the

events which led to the midwifery questioning of episiotomy this way,

Women themselves start it off. Midwives came into the debate, but it was women who started the whole thing rolling. And they used what ever evidence they could and whatever support they could from professionals who joined in. Midwives came in, I would say very late in the day, they were brought along by women. Obviously, some of the midwives most active in the those debates were indeed, not just young midwives who wanted to sort of challenge the status quo, but also midwives who had had babies themselves and who had felt fed up with some of the things that went on when they were having babies. So I'd say that midwives started to come in about 1979, but that was sort of 7 or 8 years after women had started this whole thing going. So, I think this is a very encouraging example of consumer power actually creating a debate, the extent to which they have been able to actually change the system, is another question. But in terms of the credit for actually getting the debate going, it's theirs (Iain Chalmers, interview, October 5, 1989).

Luke Zander, ex-president of the Royal Society of Medicine's section on general practice and author of the editorial "Episiotomy: Has Familiarity Bred Contempt?" had no hesitation in identifying Sheila Kitzinger as the driving force behind much of the flurry of professional interest in episiotomy which took place in the 1980s, particularly around 1982. In response to a question about what had led to so much medical and midwifery interest in episiotomy in the early 1980s, Zander replied,

Sheila Kitzinger! She had an enormous effect... My own reading of what's happened is that if you do something which runs counter, or discredits a procedure, it is exceedingly difficult to get this from within. And in issues of birth I think there are a number of examples where the community based studies and pressure has had amazing effect. Now, episiotomy is one because Sheila did this study of her 2,000 NCT mothers. Now that was the first time, as far as I remember, that there had been any serious look at what the benefits or otherwise of episiotomies, ANYWHERE in the Western literature. And that was in 81. And it caused a great deal of...it got a great deal of publicity. There were a few people who were very struck by Sheila's approach or report, it played a big part in making people have to rethink the issue. It took an issue which hadn't been done before and then... I mean, everyone said, "Why it's not scientific, they just asked NCT people." But it was the first time in the literature, as far as I remember, that anyone questioned whether this was really necessary...this was a figure of 2,000 women. So then a few people sat down and started doing some medical, obstetric research. But it was...they were...the initial stimulus came from pressure from outside the profession (Luke Zander, interview, October 18, 1989).

Lastly, Jennifer Sleep, also identified Kitzinger and her NCT booklets as agents

of change.

Well of course that was when Sheila published her 'Some Women's Experiences,' which I'm sure was instrumental in spearheading the whole thing. And Sheila's purple booklet was launched and the whole paperback was launched in quite a big blaze of publicity because she mobilizes a powerful machinery when she publishes. So it had a huge press coverage in the national media and so it was hard to ignore. I mean, whether you were a woman or a professional, she was highlighting the lack of evidence. She was also suggesting, based on a very biased survey of National Childbirth Trust enthusiasts, that episiotomies were infinitely worse in terms of maternal outcome than either spontaneous trauma, the perfect thing of course being an intact perineum which I don't happen to believe, necessarily. But that did lend a lot of impetus and women did take notice and they started coming to the units in labour and would say, "Look, precisely what is going on. What are my choices?" (Jennifer Sleep, interview, October 17, 1989)

Another indication of the considerable influence wielded by Kitzinger in relation

to the questioning of episiotomy has to do with the Health Department's discussions

around inclusion of episiotomy in the Hospital Episode System (HES). HES is a data

collection system which replaced the Maternity Hospital In-patient Enquiry (HIPE) which was abolished in 1985. According to one of my key informants knowledgeable about the development of HES, Department of Health officials insisted there be no explicit question about episiotomy in HES as had been the case in HIPE. The reason for this was that they "did not want to have reliable enough data to answer par-liamentary questions on the subject arising out of Sheila Kitzinger's writings on the subject!" The omission of episiotomy from HES thus explains the lack of data on the national episiotomy rate since 1985. To confirm that these data was not available, I wrote to the Department of Health requesting the national episiotomy rate since 1985. After several such requests, I was informed by an official in the Statistics Division of the Department of Health that "unfortunately the HES maternity data are of such poor quality that I am unable to supply you with any information" (R.A. Yeats, personal communication, July 6, 1992). From the perspective of childbirth activists, it would appear that this is an example of lay questioning having a negative rather than positive effect in bringing about change.

#### Summary and Discussion

This chapter described the decline of episiotomy in Britain in the early 1980s. In explaining this decline, I first showed how the reduction in the episiotomy rate was correlated with the emergence and burgeoning of medical and midwifery controversy over the routine use of episiotomy. Within professional circles, this controversy was created initially by clinicians producing non-evidence-based critiques which simply called into question the frequent use of the operation. These critiques challenged the largely takenfor-granted rationales for performing the operation. Uncertainty about the alleged prophylactic benefits of the operation was further heightened when advocates of episiotomy responded to the episiotomy critiques by defending the practice. Responses created an open debate in the literature about the value of the operation. By 1982, when the episiotomy rate had already sharply declined, the routine use of episiotomy had become just controversial enough to warrant the mounting of randomized controlled trials to scientifically evaluate the alleged prophylactic benefits of episiotomy. In other words, a state of clinical equipoise about episiotomy followed rather than preceded the declining use of episiotomy. Clinical equipoise is defined as a state of genuine uncertainty among the expert medical community regarding the comparative therapeutic merits of two alternative therapies resulting from present or imminent controversy over the preferred treatment (Freedman, 1987:141).

The controversy which had developed around episiotomy by 1982 also stimulated other medical and midwifery studies which set out to evaluate the claims made for the operation. These studies, which offered evidence that routine use of episiotomy was no more beneficial than the restrictive use of the operation, while encouraging a reduction in the use of episiotomy, did not produce the decline. The evidence from these episiotomy studies did not appear until 1983, well after the episiotomy rate had declined substantially, with the results of the RCTs only being published in 1984.

The chapter then places the professional questioning of episiotomy and decline of the procedure in a broader societal context. I show how pressure from outside medicine and midwifery was responsible for initiating the episiotomy debate in the first place and stimulated many of the professional episiotomy critiques. These professional critiques encouraged midwives and physicians to reevaluate their use of episiotomy. This outside pressure originated from an anti-episiotomy campaign which was led by Sheila Kitzinger, the country's most influential childbirth educator and activist. The campaign was supported by two childbirth organizations, the National Childbirth Trust and the Association for the Improvement in Maternity Services, as well as by childbearing women. The strategy which proved so effective in stimulating critical professional interest in the operation involved disputing the medical rationales for performing the operation (i.e. challenging episiotomy's alleged prophylactic benefits), conducting and reporting on lay survey's which suggested some women were experiencing serious, and in some cases, debilitating side-effects from episiotomy, and calling on clinicians to prove that episiotomy was beneficial or stop performing it. In questioning episiotomy publicly in this way, Kitzinger and the childbirth groups transformed episiotomy from what professionals tended to consider an issue for individual women into a collective or social issue which was impossible for professionals to ignore.

## Footnotes

1. No doubt Pogmore's views on episiotomy were influenced by her Australian medical training. While not the focus of this research, the questioning of episiotomy in Australian dates back to the late 1950s. As late as 1958, the practice of delivering a woman over an intact perineum was being supported in letters to the editor of the <u>Medical Journal of Australia</u>. For example, one letter published in March of 1958 even went so far as to declare that "episiotomy is a relic of the barbaric age should never be done" (Hodgkinson, 1958:373).

2. Beverley Beech (Honorary Chair of AIMS) was a co-chair of the conference.

#### CHAPTER 7

# RESISTANCE TO CHANGE: THE PERSISTENCE OF ROUTINE EPISIOTOMY IN AMERICA

Since <u>Williams Obstetrics</u> first stated that "except for cutting and tying of the of the umbilical cord, episiotomy is the most common operation in obstetrics" (Eastman, 1950:410), routine episiotomy has remained standard practice in American obstetrics. By the early 1980s, episiotomy had become so popular that individual institutions reported episiotomy rates for first-time mothers as high as 80-90% (Banta and Thacker, 1982:27). In 1979, the first year U.S. national statistics on episiotomy were collected, the operation was performed in 65.1% of all vaginal deliveries (Ed Graves, personal communication, June 21, 1991)<sup>1</sup>. As graphically presented in Figure 2 in the Introduction, between 1979 and 1990 the episiotomy rate edged down from 65.1% to 56.8%, an absolute and relative decline of 8.3% and 12.7% respectively. This is in contrast to an absolute decline of 17% and a relative decline of 31% which took place in the U.K. between 1978 and 1985.

This chapter focuses on the American efforts and activities to reduce the use of episiotomy and reasons why these efforts have been less successful than apparently similar efforts in Britain. As the decline in the U.K. national episiotomy rate was preceded by professional questioning of the practice, this chapter begins by tracing and describing the professional questioning of episiotomy which took place in the United States. However, because the patterning of the episiotomy questioning in the U.S. is somewhat different from what occurred in the U.K., I consider nurse-midwifery and medical questioning separately. The chapter goes on to examine the role played by lay efforts to undermine the medical rationales for the operation and thereby encourage the professional questioning of episiotomy. Nurse-midwifery and family practice physicians' concerns about obstetrical domination are also considered. The chapter ends by comparing and contrasting U.S. and U.K. challenges to obstetrical orthodoxy (both

lay and professional). Specific forces responsible for the differential decline in the U.S. and English national episiotomy rates during the 1980s are proposed.

## Ouestioning of Routine Episiotomy by Nurse-midwives

The routine use of episiotomy was challenged for the first time in the American midwifery literature in the summer of 1977. In an important critique in the <u>American</u> Journal of Maternal and Child Nursing Sandra Anderson, a nurse-midwife<sup>2</sup>, argued that the extension of obstetrical interventions for limited use with high risk labors to almost all laboring women, was turning childbirth into a pathological event. She asserted that because birth was a physiologic process for most women, high levels of obstetric intervention were unnecessary and even damaging to mothers and infants. Referring to what she called the "chain of events distorting childbirth" she suggested that interference in any part of the birth process had ramifications for later parts of the process. Although criticizing the entire phenomenon of interventionist childbirth, episiotomy was one of the practices Anderson singled out. She hypothesized that the use of episiotomy was often precipitated by the earlier use of such routine procedures and practices as IVs, confining women to bed, induction, anesthesia, forceps and lithotomy position (i.e. the effect known as the "cascade of intervention"). After presenting the commonly held beliefs about the prophylactic benefits of episiotomy, Anderson reported that there was little evidence to support any of these beliefs.

The following year, controversy over episiotomy erupted among student nurses at the 1978 annual convention of the National Student Nurses Association. The student nurses debated the issue of episiotomy and passed a resolution "opposing the unnecessary routine use of episiotomies for normal, spontaneous deliveries" (National Student Nurses Association, 1979:31).

Within months, controversy over the routine use of episiotomy heightened within nurse-midwifery with the publication of a review of the episiotomy literature. This paper appeared in the spring/summer issue of the Journal of Nurse-Midwifery, the official journal of the American College of Nurse-Midwives (Cogan and Edmunds, 1978), and was a republication of an earlier article in an obstetrical journal (Cogan and Edmunds, 1977). The paper found little evidence for the prophylactic benefits claimed for episiotomy. The editorial board of the Journal of Nurse-Midwifery further ensured that the issue would receive a sound airing by soliciting comments on the paper from three nurse-midwives and a physician (Phillips, 1978; Hartko, 1978; Burkhardt, 1978; Elliott, 1978). Many of the comments reveal that the commentators were reluctant to completely accept Cogan and Edmunds' reservations about routine episiotomy. Two of the writers were quite defensive. For example, the physician, while agreeing "it is probably useful...to re-examine various principle and techniques in any field," and "that the justification for performing episiotomies requires further investigation," doubted if such an investigation would be possible (Hartko, 1978:22). A director of a nurse-midwifery service criticised Cogan and Edmunds for failing to indicate that under some circumstances episiotomy is necessary. She further attempted to discredit Cogan and Edmunds' findings by suggesting that their "lack of medical knowledge and history" led them to use data "too outdated to have a bearing on Modern Obstetrics" (Elliott, 1978:23). A second nurse-midwife stated she did not support episiotomy as an established routine, yet ended up defending the practice based on her clinical experience and common sense reasoning.

One cannot resist thinking why repairs of pelvic floor muscles would be done if damage to these structures was not a reality, whether it was due to overstretching or tearing or even poor repair after episiotomy. Only the woman who has had this procedure done can truly say how revitalized she feels, and what a difference it has made to her sex life (Phillips, 1978:22).

The only letter to completely support the questioning of episiotomy came from a nursemidwife who was completing a Ph.D. in Public Health. She emphasized the need for midwifery practice to be guided by sound research findings and called on midwives not only to "raise questions but also to investigate them" (Burkhardt, 1978:23).

The questioning of episiotomy continued to mount as the first empirical evidence denying the claimed prophylactic benefits of episiotomy appeared. This evidence came from studies specifically designed to evaluate the alleged benefits of the operation. For example, at the third annual National Association of Parents and Professionals for Safe Alternatives in Childbirth (NAPSAC) conference in May of 1978, Carol Brendsel, R.N., Gail Peterson, M.S.S.W., and Lewis Mel. M.D., presented the results of a prospective study which matched 50 women who had received an episiotomy with 50 who had not. Contrary to established medical belief, analysis of the clinical examination data led these researchers to conclude "episiotomy is definitely not prophylactic against pelvic relaxation and is merely another factor in a large multifactorial process" (Brendsel et al., 1979:174). This study, attained greater visibility when slightly modified versions of it were later published in <u>Women and Health</u>, a feminist journal, and Sheila Kitzinger's <u>Episiotomy: Physical and Emotional Aspects</u> (Brendsel, Peterson and Mehl, 1980; 1981) (also cited in ECPC)

Around this same time, skepticism within the nurse-midwifery profession about the alleged benefits of episiotomy began gaining momentum. Nurse-midwives continued publishing episiotomy critiques, but now evidence-based articles refuted many of the age-old rationales for performing the operation. Between 1979 and 1982, at least five papers by nurse-midwives were published questioning the routine use of episiotomy; three in the Journal of Nurse-Midwifery. Two of these articles were reports of retrospective studies of nurse-midwife attended births. One found that, contrary to the claim that episiotomy prevented third- and fourth-degree perineal lacerations, these lacerations were actually associated with the use of the operation (Fischer, 1979). The second investigated the claim that episiotomy prevented fetal injury. Contrary to obstetrical belief, this study found that slow delivery over an intact perineum did not comprise the well being of the baby (Bowe, 1981). Two additional critiques reviewed the literature for evidence of the alleged prophylactic benefits of episiotomy. Neither review found evidence to support routine use of episiotomy (Schrag, 1979; Jennings, 1982). One other critique noted the controversy over the use of episiotomy and offered midwifery techniques for avoiding the need to perform the operation (Stile, 1980). That the issue of episiotomy had become a "hot" topic in American nursemidwifery by the early 1980s is evident by the appearance of the growing number of critiques of the practice. Furthermore, three studies were the product of master's research projects, an indication that the issue of episiotomy had become topical (Fischer, 1979; Schrag, 1979; Bowe, 1981). During this same time, there were also at least three other nurse-midwifery master's theses submitted which questioned the practice (Foss, 1977; Alden, 1979; Triphen, 1983).

Between 1984 and 1989, the publication of evidence-based critiques in the nursemidwifery literature continued. During these years, no less than 9 papers appeared, five in the <u>Journal of Nurse-Midwifery</u>. In all, 8 of the critiques presented the results of empirical studies which undermined the medical rationales offered for performing routine episiotomy. Of these, six were retrospective studies of nurse-midwife attended births which demonstrated that the absence of prophylactic episiotomy did not adversely affect either infant or maternal perineal outcomes as historically presumed by physicians (Dunne, 1984; Roberts and Mokos Kriz, 1984; Formato, 1985; Nodine and Roberts, 1987; Kaufman and MacDonald, 1988; Rockner, Wahlberg and Olund, 1989).

Two critiques presented the results from prospective randomized studies showing that the prenatal practice of perineal massage decreased the need for episiotomy and the incidence of perineal laceration (Avery and Burket, 1986; Avery and Van Arsdale.
1987). An additional paper reviewed the literature for evidence of the "presumptive maternal benefits of routine episiotomy" (Bromberg, 1986). This article included literature published before 1985, and most importantly, the English and Irish randomized controlled trials of episiotomy carried out by Sleep and colleagues (1984) and Harrison and colleagues (1984). Like all the episiotomy literature reviews before it, this review also concluded that little evidence past or present, existed to substantiate the claims that episiotomy maintains pelvic floor integrity and prevents lacerations.

A MEDLINE search of the literature published in year 1990 did not pick up any nurse-midwifery episiotomy critiques, or any midwifery papers on episiotomy for that matter. It did, however, pick up two papers in non-obstetrical journals which can be classified as episiotomy critiques. One was a commentary in <u>Birth</u> which offered arguments against episiotomy and in favor of squatting for birth (Paciornik, 1990). The other reported the results of a survey of obstetrical practitioners' attitudes and use of episiotomy. The study found that routine episiotomy was favoured by obstetricians, less by family physicians, even less by nurse-midwives and least by lay midwives (Graham, Catanzarite, Bernstein and Varela-Gittings, 1990). The various categories of respondents offered many of the same reasons for both performing and not performing routine episiotomy. The authors explained these conflicting findings by the lack of scientific data or prospective studies of episiotomy.

### The Questioning of Episiotomy by Physicians

Within medicine, questioning of the routine use of episiotomy was extremely infrequent prior to 1982. One of the earliest occasions at which routine episiotomy was publicly challenged occurred at the second conference of the National Association of Parents and Professionals for Safe Alternatives in Childbirth (NAPSAC) in March of 1977. NAPSAC is devoted to reforming and humanizing maternity services. At this conference, the rationale for performing routine episiotomy was disputed in papers presented by Lewis Mehl, M.D. and Herbert Ratner, M.D..

Mehl, presented data on over 1,000 homebirths which were matched with the same number of hospital births. In his analysis, Mehl empirically disputes claims made about the prophylactic benefits of the operation. The data revealed that episiotomy was performed significantly more often in hospital than homebirths (87.4% vs 9.8%) yet the incidence of third and fourth degree perineal lacerations was also significantly higher in hospital than at homebirths (third-degree-tears: 4.3% vs 0.7%; fourth-degreetears: 7.0% vs 0.5%) (Mehl, 1978:192). This finding was striking as prevention of these severe tears was one of the rationales for performing an episiotomy in the first place. Ratner's paper, "The History of the Dehumanization of American Medical Practice," was more theoretical in nature and reviewed the origins of many routine American obstetrical interventions including episiotomy. This paper undermined routine obstetrical practices by suggesting that non-medical (i.e. non-scientific) factors greatly influenced early 20th century obstetricians' adoption of episiotomy and other procedures. Ratner suggested that obstetricians advocated routine intervention for firsttime mothers because they had an ego-need to disassociate themselves from midwives; they made unwarranted extrapolations from the harm associated with some second stage deliveries to all primiparous deliveries; they did not take into account the risks associated with intervention; they accepted labour as a physiological process normative to all mammalia but singled out homosapiens as the species in which labour was pathologic; they refused to accept the multiparous state as normal; they disregarded the evidence of safety of homebirths for normal pregnancy in normal women, and they assumed but did not scientifically demonstrate the superiority of routinized obstetric intervention over natural delivery (Ratner, 1977:131).

Because these papers were presented at essentially a home birth conference, their dissemination was initially limited. Subsequently, however, the conference proceedings

were published in book form with the title, <u>21st Century Obstetrics Now!</u> While neither this book, nor any of its chapters, was indexed on MEDLINE, making it inaccessible to the average physician, the material was known to the small minority of professionals involved in the childbirth reform movement of the 1970s. In total, after two printings, 7,000 copies of the book were printed. An earlier version of Mehl's paper was also presented at the annual meeting of the American Public Health Association in the fall of 1976. His home birth research gained wider exposure when it was presented in articles published in <u>Women and Health</u> (1977-78) and the <u>Journal of Reproductive Medicine</u> (1977), and as a chapter in Kitzinger and Davis', <u>The Place of Birth</u> (1978).

In April of 1977, the first paper to question the practice of routine episiotomy in the obstetrical literature appeared in <u>Contemporary OB/GYN</u>. This journal is distributed without charge to obstetricians and is what is considered a throw-away journal. The authors were interested in the possible effects episiotomy might have on infantmaternal bonding because the repair of the episiotomy occurs during the "maternalsensitive period." They reviewed the episiotomy literature for any evidence which would support any of the alleged advantages of the operation. They also examined the evidence relating to known episiotomy side effects. Concluding their literature review, "The Unkindest Cut?," Cogan and Edmunds reported that,

although episiotomy may somewhat reduce the laceration rate and shorten the second stage of labor, it may also have unsatisfactory anatomic results and lead to increased blood loss and postpartum and coital pain. We found little evidence that episiotomy improves or maintains the condition of the pelvic floor and no evidence that it reduces the likelihood of cystocele or rectocyle or improves sexual functioning after birth...Perhaps what is most striking about the literature on episiotomy is the absence of clear evidence as to the advantage of the procedure. We have found no data showing a positive relationship between episiotomy and subsequent maternal or infant health in births that are not forcepsassisted...Review of the episiotomy literature might lead to increasingly conservative and thoughtful use of the procedure (Cogan and Edmunds, 1977:60).

Despite prompting three letters to the editor (Newton, 1977; Hyams, 1977; Eich-

ner, 1977)<sup>3</sup>, this early episiotomy critique had little impact on the broader obstetrical

community. <u>Contemporary OB/GYN</u> is a relatively unknown and marginal obstetrical journal. It has a low circulation, less than 13,000 in 1990 and has yet to be indexed on MEDLINE or <u>Index Medicus</u>. This not only indicates the lower status of this journal but reflects the limited dissemination of papers published in it. In an age when computerized searches of the medical literature are relied upon heavily to locate literature on topics of interest, papers published in journals not indexed on MEDLINE tend to be overlooked. Ironically, Cogan and Edmunds' paper would have been completely ignored by physicians had it not been for the response it received from <u>Williams</u> <u>Obstetrics</u>. Intending to discredit and silence those daring enough to question routine episiotomy, the editors of <u>Williams Obstetrics</u>, by citing Cogan and Edmunds, actually helped publicized this paper among obstetricians, or at the very least, among medical students (even if in a negative way).

More recently, the advantages provided by episiotomy have been questioned by some individuals (Cogan and Edmunds, 1977), as have most aspects of obstetric care. It can be said with certainty that, since the era of in-hospital deliveries with episiotomy, there has been an appreciable decrease in the number of women subsequently hospitalized for treatment of symptomatic cystocele, rectocele, uterine prolapse, and stress incontinence! (Pritchard and MacDonald, 1980:430)

Between 1977 and 1980, the medical questioning of routine episiotomy was practically non-existent. The issue was not raised again until 1981 when family practitioners in both the U.S. and Canada simultaneously called for a critical appraisal of the management of normal labor and delivery. In the <u>Journal of Family Practice</u>, Howard Brody and James Thompson (1981) published an important critique of what they called the "maximin (sic) strategy in modern obstetrics." They described this strategy as "making the best of the worst possible outcome, regardless of the actual probability of that outcome occurring" (i.e. treating all patients as though something might go wrong and taking action to prevent this possible negative outcome before it occurred) (Brody and Thompson, 1981:977). Brody and Thompson contend that many accepted obstetrical practices and interventions, including prophylactic episiotomy, exemplify this maximin strategy despite there being little research documenting superior clinical results when this strategy is used. In questioning the routine use of episiotomy, Brody and Thompson reported,

Studies demonstrate the safety of midline episiotomy and episioproctotomy, but have not documented the need for episiotomy of any sort in the first place. This lack of documentation is striking given the wide disparity between the 80 percent episiotomy rate in standard obstetrical units and the nearly zero percent rate among some midwives, who emphasize a slower second stage of labor, careful control of the descending part, and perineal massage. However, the question whether acceptance of a slow second stage places the fetus at greater risk leads directly to the question of instrumental delivery, and early episiotomy is a necessary concomitant of most instrumental approaches (Brody and Thompson, 1981:982).

In a similar type of discussion piece in the <u>Canadian Medical Association</u> Journal, Gerd Schneider (1981), a family practitioner, also called for a reevaluation of maternity care. Supporting the "humanization of the birth process," he too reviewed the evidence for routine or common hospital practices. Schneider disputed the "usual belief" that episiotomy decreased the risk of pelvic relaxation and perineal tears by citing studies by Mehl (1977) and Chalmers and associates (1976). Mehl illustrated that severe perineal lacerations were associated with higher episiotomy rates. Chalmers revealed that as the episiotomy rate doubled in Cardiff, Wales, the rate of perineal lacerations remained unchanged.

The first critique of episiotomy in the obstetrical literature written by an obstetrician appeared in 1982 in the highly respected journal, <u>Obstetrical and</u> <u>Gynecological Survey</u>. In a note appended to a condensation of a <u>British Medi-</u> <u>cal Journal</u> article on postepisiotomy pain (Reading, Sledmere, Cox and Campbell, 1982), Edward Stewart Taylor, editor-in-chief of <u>Obstetrical and</u> <u>Gynecological Survey</u> and a past president of the American Association of Obstetricians and Gynecologists (1971) and past vice-president of the American Gynecological Society (1975) wrote,

When labor is normal and delivery spontaneous, episiotomy is usually not required. There will soon be a review article appearing in the <u>Survey</u> which discusses the use and overuse of episiotomy. The procedure has not been scientifically tested to determine its true indications. The procedure has been classified as routine for primiparous deliveries, but it is debatable that it has all the virtues attributed to it, such as preservation of the perineum and prevention of rectocele and cystocele...I think that patients who have a normal spontaneous vertex delivery usually do not benefit from episiotomy (Taylor, 1982:614).

It was not until the following year, however, that the questioning of episiotomy

was brought undeniably into obstetrical circles with the publication of the review article

Taylor anticipated. This important article presented the results of a U.S. government

sponsored study of the risks and benefits of episiotomy (Thacker and Banta, 1983). It

was the first truly exhaustive review of the English language episiotomy literature from

1860-1980. In reviewing over 350 books and articles, the authors, Stephen Thacker

M.D. and David Banta, M.D., M.P.H.<sup>4</sup> revealed considerable evidence of risks associ-

ated with the episiotomy (pain, dyspareunia, edema and infection), but found "no

clearly defined evidence for its efficacy, particularly for routine use" (1983:322).

Regarding the medical allegations that episiotomy prevented perineal, pelvic relaxation

or fetal brain damage, Thacker and Banta reported,

Overall, these studies do not indicate that episiotomy offers a clear benefit to women in terms of decreased numbers of lacerations...Clearly, none of the studies have adequately analyzed the relationship of episiotomy to lacerations (Thacker and Banta, 1983:327).

Although the prevention of long-term damage to the pelvic floor and interference with sexual function are frequently cited as reasons for episiotomy, there are few data to support or refute this clinical hypothesis (Thacker and Banta, 1983:327)...In summary, the role of episiotomy in preventing serious pelvic relaxation has not been adequately studied (Thacker and Banta, 1983:328).

As with other possible benefits of episiotomy, little data exist to support the utilization of the procedure to prevent cerebral damage to the fetus, and no follow-up studies of infants have been designed to address this particular issue (Thacker and Banta, 1983:329). Based on these findings, Thacker and Banta recommend that physicians restrict their use of episiotomy. In much the same way Sheila Kitzinger had done in England two years earlier, Thacker and Banta challenged the obstetric community to practice evidence-based medicine and prove episiotomy beneficial in adequately designed clinical trials.

Despite undertaking the most comprehensive review of the evidence relating to the risk and benefits of episiotomy to date, this paper failed to generate any controversy or debate about episiotomy within American obstetrics. As had occurred with Cogan and Edmunds' (1977) review, the 17th edition of <u>Williams Obstetrics</u> acknowledges Thacker and Banta's (1983) analysis then dismisses it. The only difference between the 16th and 17th edition of the text was that the reference to Cogan and Edmunds was replaced by one to Thacker and Banta. According to Banta very little interest was shown in their work on episiotomy which contrasted sharply with what had occurred around an earlier review they had done on the benefits and risks of electronic fetal monitoring.

One of my greatest disappointments professionally has been the limited impact of this paper. In contrast to the EFM paper, it got little attention. One or the other of us did present it in a number of places. There was little criticism this time, little controversy...Physicians showed little interest in our work. Although we had much loud criticism of our EFM work, we had some rather impressive congratulations, and a number of quiet encouragements from physicians concerned about the issue. In the episiotomy case, I don't remember any physician interest at all, except for Murray Enkin...So I just felt that across the board, it just fell flat, completely flat (David Banta, interview, October 12, 1989).

Outside of medicine, however, the paper was widely disseminated within the childbirth and women's health movements. The paper in <u>Obstetrical and Gynecological</u> <u>Survey</u> was in fact the third to be published by Thacker and Banta. They first presented the results of the review at the Technological Approaches to Obstetrics: Benefits, Risks, Alternatives conference in October of 1981. The following spring, this present-ation was published in the journal <u>Birth</u>, Issues in Perinatal Care and Education (Banta

and Thacker, 1982). Also in 1982, another slightly modified version of the paper appeared in the journal Women and Health (Thacker and Banta, 1982). Furthermore, the article published in Women and Health was included in Diony Young's book, Obstetrical Intervention and Technology in the 1980s (1983) and the article in Birth was reprinted in Sheila Kitzinger and Penny Simkin's Episiotomy and the Second Stage of Labor (1984; 1986). In total, the original three papers by Thanker and Banta prompted only one letter to the editor of Birth. Similar to some of the responses to Cogan and Edmund's (1977; 1978) paper, the letter vehemently defended routine episiotomy (Papst, 1982:268). In essence, the letter from a physician, simply stated that he believed the claims made about the operation were true and that it mattered little to him that there was no evidence supporting them. Taking an anti-positivist stance, the physician went on to dismiss Banta and Thacker's call for obstetrical practices to be scientifically evaluated by stating that a controlled study of episiotomy would probably not be possible anyway because of "all the variables involved in each delivery and variability in individual pain perception and the need for long-term follow-up evaluation of pelvic trauma" (Papst, 1982:268).

In September of 1983, the second ever critique written by an obstetrician appeared in <u>Obstetrics and Gynecology</u>. In the section of the journal which is devoted to commentaries called "After Office Hours," Robert Goodlin (1983) of the Department of Obstetrics and Gynecology at the University of Nebraska Medical Center, briefly reviewed the literature on methods of protecting the perineum during childbirth and described his own birthing room experience. His conclusion was that prophylactic episiotomy was not indicated.

Between 1984 to 1990, just over a dozen episiotomy critiques appeared in the medical literature. With the exception of 1989 when 5 critiques were published, the greatest number of critiques for any of the other years during this period was only 3 (this occurred in 1987).

Of the critiques to appear from 1984 to 1990, one presented data showing that the non-routine use of episiotomy did not compromise the health of mothers or infants (Baruffi, Dellinger, Strobino, Rudolp, Timmons, and Ross, 1984). Describing the results of their retrospective matching study in <u>Obstetrics and Gynecology</u>, these researchers, from the Department of Maternal and Child Health at Johns Hopkins University School of Hygiene and Public Health, reported that after controlling for prenatal and intrapartum risk factors, fewer episiotomies were performed during 796 nurse-midwife assisted deliveries in a maternity center than during 804 deliveries at a teaching hospital. The more restrictive use of episiotomy in the maternity center was not found to be associated with any increased adverse effects for either infants or mothers.

Another two critiques reviewed the literature on sexuality in pregnancy and the puerperium (Reamy and White, 1985; 1987). Published in <u>Obstetrical and Gynecological Survey</u> (Reamy and White, 1985) and <u>Archives of Sexual Behavior</u> (Reamy and White, 1987), these almost identical reviews included a section which questioned the need for routine episiotomy by directing attention to the suspected relationship between the use of episiotomy and postpartum dyspareunia (painful sexual intercourse).

The greatest number of critiques during this time are, however, devoted to challenging the presumption that episiotomy prevented perineal trauma. For example, in 1986 a Belgian observational study was abstracted in <u>Obstetrical and Gynecological</u> <u>Survey</u>. This study of 21,278 deliveries compared the frequency of third-degree tears in patients who received an episiotomy with those who did not (Buekens et al., 1985). The study found that after stratifying for birth weight and parity, there were no significant differences in the rates of third-degree lacerations between the groups with and without episiotomy. In the editorial note appended to the abstract, Edward Stewart Taylor remarked that avoidance of third-degree perineal lacerations was one of the "proposed" advantages of liberal use of mediolateral episiotomy and noted that this study failed to demonstrate that episiotomy prevented severe perineal lacerations (Taylor, 1986:230). He also cited Thacker and Banta's (1983) article and declared that "there is no proof that any of the (alleged) benefits occur from episiotomy when the patient has a normal spontaneous vaginal delivery of a full-term infant in occipitoanterior position" (Taylor, 1986:231). The same year, in the <u>Journal of Reproductive Medicine</u>, Margery Stoops Gass, M.D., and colleagues (Gass, Dunn, and Stys, 1986) reported the results of a retrospective study which matched 205 women who had had a spontaneous vaginal delivery without an episiotomy with the same number of women who had received a midline episiotomy. The results indicated that contrary to obstetrical belief, episiotomy was not prophylactic for severe perineal lacerations. In fact, in this study, third- and fourth-degree lacerations occurred only in those women for whom an episiotomy had been performed.

In 1987 the editor of <u>Obstetrical and Gynecological Survey</u> again questioned the practice of routin, 'pisiotomy in 1987. In his editorial note attached to an article about repair of episiotomy, Taylor (1987) reported that episiotomy was often performed unnecessarily and cited Thacker and Banta's (1983) review in the same journal which challenged the presumed benefits of the operation. Also that year in <u>Obstetrics and Gynecology</u>, John Thorp Jr. and his colleagues (Thorp, Bowes, Brame, Cefalo, 1987) reported on a prospective non-randomized controlled study of 379 women which set out to determine the effect of restricting the use of episiotomy to operative vaginal deliveries (vacuum extraction or forceps) and/or cases of fetal distress. The study design called for one resident physician to perform only "selective" episiotomy on his patients (referred to as the "restricted use of episiotomy") while his fellow residents performed episiotomy at their own discretion to limit perineal trauma (referred to as the "unrestrictive use of episiotomy"). The study found that third- and fourth-degree

lacerations were significantly less frequent when the use of episiotomy was restricted and that no one had a third-or fourth-degree laceration without an episiotomy. Thorp and colleagues interpreted the results of the study to "suggest that episiotomy is a factor in the occurrence of third- and fourth-degree perineal lacerations" and concluded "it would seem prudent to reevaluate its (episiotomy's) routine use" (Thorp, Bowes, Brame, and Cefalo, 1987:262).

Two years later, a retrospective study examining the relationship between both episiotomy and the use of stirrups for delivery and the occurrence of third- and fourthdegree perineal lacerations was published in the American Journal of Obstetrics and Gynecology (Borgatta, Piening and Cohen, 1989). This study of 241 nulliparous women revealed that rates of severe perineal lacerations where highest for women who delivered with both episiotomy and stirrups (27.9%), less so for women who were exposed to either episiotomy (19.1%) or stirrups (8.3%) and least for women delivered without either (0.9%). Borgatta and colleagues concluded that the selective use of episiotomy and stirrups minimized perineal trauma during spontaneous delivery. Within two months, a second article by John Thorp and Watson Bowes (1989) entitled, "Episiotomy: Can Its Routine Use Be Defended?" appeared in the "Clinical Opinion" section of the same journal. This critique reviewed the literature for evidence that routine episiotomy reduced perineal trauma and prevents subsequent pelvic relaxation. Thorp and Bowes (1989) found little empirical support for either of these claims and called for "efforts...(to) be directed toward objectively ascertaining whether routine episiotomy is truly beneficial" (p.1030). Also in the May issue of the American Journal of Obstetrics and Gynecology, researchers from the Johns Hopkins University School of Hygiene and Public Health, published a second report from their retrospective matching study which focused on episiotomy and its role in the incidence of perineal lacerations (Wilcox, Stobino, Baruffi, and Dellinger, 1989). After controlling for other

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significant factors including intrapartum risk, women delivered in a teaching hospital by physicians were twice as likely to have an episiotomy as women delivered in the maternity center by nurse-midwives. Furthermore, the use of episiotomy was associated with a fourfold increase in the incidence of third-degree lacerations, suggesting that episiotomy did not prevent perineal lacerations.

By far the most authoritative and empirically based indictment of the practice of routine episiotomy to appear during this period appeared in 1989 in a new obstetrical textbook, <u>Effective Care in Childbirth and Pregnancy</u> (ECPC) (Chalmers, Enkin and Kierse, 1989). ECPC represents the most rigorous research synthesis ever undertaken in the area of obstetrics and maternity care. Each of the substantive chapters of the text present a critical analysis of the relevant research and where appropriate, a meta-analysis of existing randomized controlled trials. Although originating from the National Perinatal Epidemiology Unit at Oxford, a majority of the 98 chapter authors are Canadian, American, Australian or European.

Specifically relating to the use of episiotomy, Jennifer Sleep, Joyce Roberts, and Iain Chalmers in their chapter on care during the second stage of labour, reported that there was "no evidence...that the liberal use of episiotomy reduces the risk of severe perineal trauma, improves perineal healing, prevents fetal trauma, or reduces the risk of urinary stress incontinence after delivery" (Sleep, Roberts, Chalmers, 1989:1141). They advised that the practice of routine episiotomy should immediately be abandoned. That same year, <u>A Guide to Effective Care in Pregnancy and Childbirth</u> (Enkin, Keirse, and Chalmers, 1989), a summarized paperback version of ECPC, was also released. The recommendation to abandon the routine use of episiotomy was repeated in this publication.

Although both of these publications were sold worldwide by Oxford University Press, neither appear to have had a very large impact on obstetrical practices in the United States during the first few years following publication. By April of 1991, only 450 copies of ECPC and 1,000 copies of the guide had been sold in the United States, suggesting that few clinicians had ready access to them (Sisk, 1993:481).

Finally, in 1990, another evidence-based episiotomy critique focused exclusively on the value of episiotomy in preventing perineal trauma appeared in Obstetrics and Gynecology. This paper, by researchers at the National Institute of Child Health and the University of Oklahoma School of Medicine (Shiono, Klebanoff and Carey, 1990) examined the association between episiotomy and severe (third-and fourth- degree) perineal lacerations in a case series of 24, 144 women. These researchers found that severe perineal lacerations were 50 times more likely in women who had midline episiotomies and 8 times more likely in women who had mediolateral episiotomies than in women who did not undergo an episiotomy. After statistically adjusting for risk factors, median episiotomy was associated with a 4.2-fold increased risk of third- or fourth-degree tears among primiparas and a 12.8-fold increase among multiparas. Mediolateral episiotomy was associated with a 2.5-fold reduction in the risk of severe laceration among primiparous women and a statistically nonsignificant 2.4-fold increase in multiparous women. Shiono and associates interpreted their data to "indicate that midline episiotomies fail to prevent these lacerations and may be associated with a significantly higher rate of severe laceration than is no episiotomy." They concluded "the risks and benefits of episiotomy, as practiced in the United States, should be evaluated in a randomized clinical trial that compares policies of "usual" versus conservative use of episiotomy" (1990:769).

Despite all of these pleas to abandon, or at the very least, reevaluate the routine use of episiotomy, controversy about the practice never materialized in the U.S. medical literature as it did in Britain in the early 1980s. Of all of the critiques which followed Banta and Thacker's review of the literature, only Shiono, Klebanoff and

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Carey's (1990) paper prompted a letter to the editor. This single letter to the editor of <u>Obstetrics and Gynecology</u> (Berlin, 1990) cautiously challenged Shiono and colleagues' position that midline episiotomies did more harm than good.

## Creating a Climate Conducive to the Professional Questioning of Episiotomy

When professional questioning of routine episiotomy is placed within a societal context, it is clear that an important factor responsible for precipitating the production of these critiques was from outside of nurse-midwifery or medicine. Similar to the United Kingdom, this pressure in the U.S. came from prominent childbirth reformers and childbearing women. It also came from another source which had not been present in the U.K., the women's health movement. As took place in Britain, these individuals and organizations raised lay and professional consciousness about episiotomy by helping transform it into a collective or social issue. This consciousness raising involved airing doubts about the obstetric rationale for performing the operation and drawing attention to the adverse effects of the episiotomy. The effect of lay questioning of episiotomy was to generate uncertainty. This produced a climate in which sympathetic health professionals felt justified, in some cases even compelled, to investigate the lay claims and produce their own critiques of the practice for professional consumption.

The evidence that the professionals who were writing episiotomy critiques were often responding to, or, at the very least, receptive to, the lay challenge of routine episiotomy is quite strong. First of all, lay questioning of episiotomy was an antecedent to the professional questioning of the practice. This is evident in the fact the writings of prominent lay childbirth reformers such as Doris Haire and Suzanne Arms were cited by some of the earliest professional critics. Typically, Haire and Arms' writings were referenced as evidence that the alleged prophylactic benefits of episiotomy were not supported by research (e.g., Anderson, 1977; Mehl, 1977; Mehl, 1977-78; Schrag, 1979; Brendsel et al., 1980; Bowe, 1981; Brody and Thompson, 1981; Banta and Thacker, 1981; Jennings, 1982; Thacker and Banta, 1982; 1983; Bromberg, 1986). As professionals are often reluctant to admit being influenced by outsiders, their willingness to cite lay sources suggests they must have found the lay questioning somewhat compelling.

Another indication that the professional critics were sensitive to lay questioning of episiotomy is their acknowledgement of these critiques in their own presentations. This can be seen in many of the professional critiques dating from the late 1970s through the 1980s. The following are a few examples illustrating the critics' awareness of the lay questioning of episiotomy.

Although we find wide medical acceptance of episiotomy, there are arguments against the procedure in contemporary literature, particularly from the growing women's health consciousness movement. In popular books, such as <u>Our Bodies</u>, <u>Ourselves</u>, women have questioned the practice of routinely performing episiotomies during the second stage...We should expect to find some compelling arguments in favor of a procedure that has been so widely accepted in this country but about which a muted disagreement seems to be emerging. We must now turn our attention to discussions of the pros and cons of the procedure (Cogan and Edmunds, 1977:56).

Growing consumer interest is forcing the questioning of routine episiotomy (Stiles, 1980:106).

At the least, I believe the routine practice of episiotomy deserves some serious reconsideration; indeed some consumers are demanding it (Schneider, 1981:352).

Routine episiotomy is being called into question by patients. Several articles have appeared in women's magazines about unnecessary episiotomies, and the subject has been discussed on radio and television talk shows (Taylor, 1982:614).

The public is questioning the routine use of episiotomy (Nodine and Roberts, 1987:123).

Other critics to make reference to the lay questioning of episiotomy include Fischer

(1979), Bowe (1981). Banta and Thacker (1981), Jennings (1982), Thacker and Banta

(1982), Goodlin (1983), Dunne (1984), Roberts and Kriz (1984), Formato (1985), Bromberg (1986), Avery and Burket (1986), Nodine and Roberts (1987) Reamy and White (1985; 1987), and Wilcox (1989).

In a few cases, the critics state explicitly that lay questioning of episiotomy was the primary reason they conducted their own studies of the procedure (Fischer, 1979; Avery and Burkey, 1986; Nodine and Roberts, 1987). The following quotation from Avery and Burkley is representative of this view.

...as a result of interest from clients (in avoiding an episiotomy), it was decided a controlled study to examine the effective:.ess of perineal massage would be of value in directing practice (1986:134).

# The Lay Questioning of Episiotomy

The earliest comprehensive lay questioning of episiotomy that I was able to locate was published five years before professionals began writing their episiotomy critiques. In 1972 Doris Haire, nationally recognized "as the foremost American lobbyist for pregnant women and their unborn children" (Edwards and Waldorf, 1984:109) published a special report on American childbirth practices for the International Childbirth Education Association (ICEA). The 30 page monograph containing 102 references to the scientific literature was entitled, The Cultural Warping of Childbirth. Haire, copresident of the ICEA in 1972, wrote this monograph because she was troubled by America's relatively high infant mortality rates compared to other industrialized countries, and what she considered the staggering incidence of neurological impairment among American children and adults. To find explanations for these phenomena, Haire visited 30 foreign countries observing their obstetric techniques and procedures and interviewing physicians, midwives, and parents. Evaluating all the obstetrical practices performed during a typical American delivery, Haire concluded that the high rates of infant mortality and neurological impairment were attributable to interventionist obstetrics which had a "...tendency to warp the birth experience, distorting it into a

pathological event, rather than a physiological one, for the normal childbearing woman" (Haire, 1976:7). In all, Haire considered the scientific evidence for nearly two dozen routine American obstetrical procedures, one of which being episiotomy. Calling into doubt the usual medical rationales for episiotomy, Haire reported,

There is no research or evidence to indicate that routine episiotomy reduces the incidence of pelvic relaxation (structural damage to the pelvic floor musculature) in the mother. Nor is there any research or evidence that routine episiotomy reduces neurological impairment in the child who has shown no signs of fetal distress or that the procedure helps maintain subsequent male or female sexual response (Haire, 1976:20).

In addition to reviewing the literature for evidence of the presumed benefits of episiotomy, Haire used cross-cultural comparison, research studies and personal observations to dispute the rationales offered for performing the operation<sup>5</sup>.

At the time and for years afterwards, <u>The Cultural Warping of Childbirth</u> was responsible for drawing attention to American childbirth practices, including episiotomy. Haire's monograph was widely distributed. It was initially released in 1972 and reprinted in a special issue of <u>Environmental Child Health</u> in June of 1973. It also served as a book chapter in <u>The Cultural Crisis of Modern Medicine</u> edited by John Ehrenreich (1978) and was reprinted by the ICEA in 1976 with a postscript. Because it was still in demand, it was reprinted again by the ICEA in 1985. Furthermore, most experts in the fields of maternity care and childbirth education agree, the monograph had a tremendous impact on maternity care and providers of maternity care.

...(the) monograph was so influential that it altered forever the way in which American birth customs were regarded by critics and reformers. Many observers had criticized one procedure or another in labor and birth protocols, but no one had placed all components of an average hospital birth in chronological order together with their justification and outcome. Few had articulated how much such a pattern of intervention distorted the physiology of childbirth so that it was transferred into pathology. And none had had the inspiration to name the pattern by its accumulated effect: The Cultural Warping of Childbirth (Edwards and Waldorf, 1984:109).

The routine use of episiotomy received more exposure in 1973, when the women's health movement came out strongly against the practice. In <u>Our Bodies Our</u>-

selves, the first handbook of the women's health movement, the Boston Women's

Health Book Collective (1973) rejected routine episiotomy.

Although episiotomies are done routinely in the United States, there is often no need for them. If the mother is unanesthetized, she will feel when to stop pushing and when to start easing her baby gently out. Her doctor can direct her. The vaginal opening can stretch to very wide proportions without tearing.

...We question the practice of administering episiotomies to all women before delivery (Boston Women's Book Collective, 1973:187).

While the Boston Women's Book Collective (1973:187) was willing to agree that

it made sense for a doctor to perform an episiotomy to either "avoid a possible ragged-

edged tear in the perineum or to ensure the birth of the baby as speedily as possible,"

they were less convinced of the arguments that episiotomy prevented pelvic relaxation

or improved sexual functioning. Indeed, the Boston Women's Book Collective found

the idea of episiotomies being performed for men's sexual pleasure extremely

offensive.

Often male doctors are concerned that the woman's looser vagina will interfere with the man's sexual pleasure during intercourse.

(quoting a woman) I saw my doctor at the checkup six weeks after my baby was born. Full of male pride, he told me during my pelvic exam, "I did a beautiful job sewing you up. You're as tight as a virgin; your husband should thank me" (Boston Women's Book Collective, 1973:187).

There is little doubt the questioning of routine episiotomy by the Boston Women's Book Collective greatly popularized women's discontent with the indiscriminate use of the operation. By 1976, when a second revised edition of <u>Our</u> <u>Bodies Ourselves</u> was issued, over 1 million copies of the first edition had already been sold (Ruzek, 1978:32). Furthermore, the anti-episiotomy sentiments expressed in the 1973 edition were repeated in the 1976 edition.

The questioning of the routine use of episiotomy was brought once more before the American public in the spring of 1975, with the publication of Suzanne Arms' best seller Immaculate Deception. This book took issue with the medicalization of childbirth

and episiotomy was one of many obstetrical practices Arms discussed. In much the

same way as Haire had done several years earlier, Arms presented the medical

rationales that physicians had tended to put forward for performing episiotomy and then

skillfully discredited each one using common sense arguments, anecdotal evidence,

statistics and whatever other evidence she could find. For example, for the claim that

episiotomy replaces a jagged tear with a straight clean-cut, Arms wrote,

Such interference (episiotomy) has become so routine in American hospitals that many women believe no birth could take place without tremendous, jagged tears ripping open their perineal tissues because their bodies do not react with the same resiliency as the bodies of primitive women, and that a straight surgical cut is always preferable to a ragged tear. Neither argument is true: the same processes that naturally enlarge primitive women's perineal tissues are still at work in the modern body, and they still function just as well (Arms, 1975:98).

Quoting Williams Obstetrics that the operation is done for the sake of the infant (to

prevent fetal brain damage), Arms responded,

This may be true if the doctor has already speeded up the birth process to such an extent that the baby is practically careening down the birth canal before the perineal tissue has fully stretched. And it is certainly true if the doctor has neither the time not the patience to massage and gently restrain the perineal tissues around the baby's head, giving them time to adjust and stretch as the infant moves through the opening (Arms, 1975:100).

Referring to the claim episiotomy improves sexual functioning, Arms wrote,

Doctors have a further (and more insidious) argument to convince their patients of the value of an episiotomy, if none of the above are found acceptable. They state that after birth husbands will be unable to enjoy intercourse with their wives if an episioton'y has not been performed, because the vagina will be permanently enlarged and misshapen (Arms, 1975:100).

Disputing this rationale for performing episiotomy, Arms pointed out that Doctor

Robert Bradley, author of Husband-Coached Childbirth, suggests that exercises can

help return the vaginal canal to its former size. Arms challenged the argument that

episiotomy prevents subsequent gynecological problems by saying,

there is no evidence that prolapse of organs or collapse of the pelvic floor can occur just because an episiotomy is not performed at birth (Arms, 1975:101).

Finally, Arms also took issue with the claim that episiotomy prevented third and fourth degree tears. Arms compared the episiotomy rate of over 70% in many U.S. hospitals with the episiotomy rate in Holland (8%) and England (15%), where the operation is performed only when medical evidence indicates that it is necessary, and noted that, along with the rise in the use of episiotomy in the U.S., the incidence of 4th degree tears actually increased instead of decreasing.

This book had wide exposure; it was first published by Houghton Mifflin in May, 1975, with a second printing in June. It was subsequently published by Bantam in June of 1977, with a second printing in December of 1979 and a third in October of 1981. In addition, the book was serialized in the <u>San Francisco Chronicle-Examiner</u> in April, 1975 and in the journal <u>Prevention</u>, in May of 1975. Arms' questioning of routine episiotomy also figured prominently in an article she wrote for <u>Ms</u> magazine in May of 1975 (Arms, 1975).

As implied by several of the professional critiques, the lay questioning and undermining of the medical rationales for performing episiotomy became fairly extensive during the early and mid 1970s. In addition to the criticism from Haire, Arms, and the Boston Women's Health Book Collective, challenges to routine episiotomy also appeared in popular childbirth education books directed at expectant parents. For example, Constance Bean's (1972) <u>Methods of Childbirth: A Complete</u> <u>Guide to Childbirth Classes and Maternity Care</u> and Lester Hazell's (1976), <u>Commonsense Childbirth</u> both critically discussed the routine use of episiotomy in American hospitals and disputed the medical rationales for performing the operation<sup>6</sup>. Furthermore, doubts about the need for routine episiotomy had become so common in lay circles that by the mid 70s the questioning of routine episiotomy could be found in mainstream or traditional women's magazines. For example, some childbirth articles which disputed the alleged prophylactic benefits of episiotomy appeared in such popular magazines as <u>Good Housekeeping</u> (Yunker, 1975:58), <u>McCall's</u> (Lake, 1976; Pacsoe, 1977) and <u>Woman's Day</u> (Davis, 1976)<sup>7</sup>.

Throughout the 1980s, the lay questioning of episiotomy persisted. Articles appeared in women's and childbirth magazines which were totally devoted to episiotomy or included a section which discussed the operation. Some of these articles challenged the practice of routine episiotomy, or at the very least, described the controversy surrounding it (e.g. Yarrow, 1982; Hillard, 1984; Shea, 1985; Toal, 1986; Lieberman, 1989; Longo, 1989); others presented ways to avoid the operation (e.g. MacCallum, 1982); and still others drew attention to the side effects of the operation (e.g. Gaylin, 1982).

Episiotomy was also questioned in best-selling childbirth education books. Usually in the chapter describing hospital procedures, the medical rationales for episiotomy are presented along with the lack of evidence for each (e.g. Bean, 1982:135-140; Brackbill, Rice and Young, 1984:14-16; Elkins, 1985:75-79; Inch, 1984:114-129; Korte and Scaer, 1990:42-43; Young, 1983:161-178). The Boston Women's Health Book Collective (1984) continued to question the practice in <u>The New</u> <u>Our Bodies, Ourselves</u>. Michelle Harrison (1982) in her best seller, <u>A Woman in</u> <u>Residence</u> raised questions about the practice and described physicians' resistance to limiting its use. Sheila Kitzinger, probably the most well known childbirth educator, also questioned the use of episiotomy in the American editions of her books (for example, Kitzinger, 1987:262-264; 1988:135-136, 249-250) and in a chapter she authored in the <u>Textbook of Pain</u> (Kitzinger, 1984).

In 1984, Kitzinger with Penny Simkin, an American physical therapist and childbirth educator, edited a book entitled, "Episiotomy and the Second Stage of Labor." This 135 page book contains both a collection of critiques on episiotomy and the second stage labour, and advice on how to conduct the second stage so as to minimize the need for the operation. Episiotomy and the Second Stage is the only English language book devoted to influencing second stage management practices and reducing the use of episiotomy.

The book began as the North American edition of <u>Episiotomy: Physical and Emo-</u> tional Aspects, which Kitzinger (1981) edited for the National Childbirth Trust in the United Kingdom. In adapting <u>Episiotomy: Physical and Emotional Aspects</u> for North America, it underwent vast changes. Of the original chapters, three remained essentially unchanged and two were modified. To these, seven new chapters and four appendices were added. The chapters were written by an "international panel of experts" (Simkin, 1986:5) which included physicians, midwives, and childbirth educators from the United States, Great Britain, Uraguay, and Canada. The topics included,

a review and comparison of active and physiological management of the second stage; benefits and risks of episiotomy; management of the second stage to avoid episiotomy from points of view of several physicians and midwives; pelvic floor awareness; analysis of maternal positions; the influence of bearing-down efforts on the fetus; reprint of a classic paper describing and discussing spontaneous maternal behavior during second stage; the technique of midline episiotomy; indications for and avoidance of episiotomy; and long-range effects of episiotomy (Kitzinger and Simkin, 1986:back cover).

Apart from the two chapters written by Kitzinger, two others were by professionals who had been quite prominent in questioning the practice. These authors were the American physicians, David Banta and Stephen Thacker, who reviewed the episiotomy literature from 1860-1980 (Banta and Thacker, 1981; Thacker and Banta, 1982; 1983) and the British obstetrician, Michael House, who questioned the practice in the British midwifery literature and later undertook a randomized controlled trial of episiotomy (House, 1981a; 1981b; 1986).

As a result of the interest shown in the book, it was reprinted in 1986. The second edition remained the same except for the addition of a chapter which reviewed the research findings on episiotomy and management of the second stage which had been published since the release of the first edition in 1984.

Sheila Kitzinger was also involved in the lay questioning of episiotomy in America in one other way<sup>8</sup>. Kitzinger, a consultant to the International Childbirth Education Association (an American based organization), authored an <u>ICEA Review</u> (a newsletter) devoted to the issue of episiotomy in August of 1985. Following a commentary in which she noted the lack of research on episiotomy and its sequelae and questioned the evidence for the routine use of episiotomy, Kitzinger presented abstracts of a number of research articles on the topic as well as her own writings on episiotomy.

During the 1970s and 1980s, there was yet another source of non-health professional questioning of episiotomy. The controversy about the routine use of episiotomy was also raised in more academic works dealing with the history of childbirth and childbirth practices. During discussions of typica<sup>1</sup> American obstetrical practices, a few pages are usually devoted to describing DeLee's influence on the development of routine episiotomy in America and the lack of evidence justifying the practice. The unproven benefits of episiotomy are noted in such works as Richard and Dorothy Wertz's, <u>Childbirth in America</u> (1979:141-143, 183-4; 1989:141-143, 183-4), Romalis' <u>Childbirth: Alternatives to Medical Control</u> (1981:76; 150-151), Barbara Katz Rothman's <u>Giving Birth: Alternatives in Childbirth</u> (1984:58-61), Margot Edwards and Mary Waldorf's, <u>Reclaiming Birth</u> (1984:i42-145), and William Arney's, <u>The Power and the Profession of Obstetrics</u> (1985:69-75), and Judith Leavitt's, <u>Brought to Bed</u> (1986:179-180).

As for childbearing women, there is some evidence they too were questioning the need for routine episiotomy. For example, Lester Hazell's mid-1970s study of homebirths reveals that the desire to avoid episiotomies was one of the main reasons given by couples for choosing a homebirth over a hospital birth (Hazell, 1974; Hazell,

1975). A similar finding was also reported in an article in <u>Women's Day</u> (Maynard, 1977). A number of other papers and articles also suggest that consumer interest during the 1970s and 1980s in midwifery care and alternative birth centers was prompted in part by women who wanted to avoid routine episiotomies (e.g. Norwood, 1979; Randal, 1979; Goodlin, 1983). A 1979 survey of Washington State hospitals that reveals the presence of alternative birth rooms was associated with more delivery options. One of these options was no episiotomy (Dobbs and Shy, 1981). Furthermore, it is not uncommon to find reports, such as the following, which allude to women's desire to avoid episiotomies.

Women who have attended childbirth classes realize that an episiotomy is necessary in some deliveries, but ask, "Why must it always be done?" (Lake, 1976:129).

While North America probably leads the world in its acceptance of routine episiotomy, in the last decade we have seen and heard women protesting what they interpret as a thoughtless disregard for this highly sensuous and sexual part of their bodies (Simkin, 1986:4).

Women are requesting intact perineums with delivery (Nodine and Roberts, 1987:123).

On one rare occasion, consumer preferences about routine episiotomy were actually quantified in a scientific manner. A 1977 survey of a random sample of 694 Boulder City mothers found that 78% did not want an episiotomy unless absolutely necessary (Pascoe, 1977). If the results of this survey are generalizable to the population, women's opposition to routine episiotomy in the late 1970s may have been considerable.

### The Influence of Childbirth Reformers on Professional Questioning

I have described how at the societal level, the combined and continuous challenging of episiotomy by prominent childbirth reformers and childbearing women during the 1970s and 1980s created a climate in which some professionals (more so nursemidwives than physicians) were prompted to question the practice themselves. I now consider three examples of how childbirth reformers influenced the professional questioning of episiotomy in more direct ways than simply through their writings. Doris Haire, for example, was instrumental in bringing about the first prospective matching study which evaluated the allegation that episiotomy was prophylactic against subsequent pelvic relaxation. This study, which was carried out by Brendsel, Peterson, and Mehl (1979; 1980; 1981), matched 50 women who had received an episiotomy with 50 women who had not. The study found no significant differences between the two groups in the incidence of postpartum gynecological problems, thus providing data discrediting the well established medical belief that episiotomy was prophylactic for pelvic relaxation.

Doris Haire not only encouraged the decision to conduct the research (Brendsel, et al. 1979:169), she also supported the project financially. The study was partially funded by a grant from the American Foundation For Maternal and Child Health. Haire is president and founder of this foundation, which she set up to fund "'counterstream' research, outside the popular interventionist trends in childbirth" (Edwards and Waldorf, 1984:115).

Another example of research motivated by childbirth reformers is Thacker and Banta's (Banta and Thacker, 1981; Thacker and Banta, 1982; 1983) study of the risks and benefits of episiotomy. In response to a question about why they chose to study episiotomy, Banta told me that it was because many people suggested they evaluate this procedure. With the study nearly a decade old, he could not remember all the particular details about their decision to study episiotomy. However, he did admit that discussions with Norma Swenson, one of the editors of <u>Our Bodies</u>, <u>Ourselves</u> had influenced the decision. This is supported by the following statement which appears in Banta and Thacker's paper in <u>Birth</u>.

The practice of episiotomy has also been questioned in the lay literature and, in fact, conversations with the editors of Our Bodies, Ourselves were a stimulus to this work (Banta and Thacker, 1982:25). He also stated that he had received considerable help from Sheila Kitzinger and Doris Haire as well as encouragement from Iain Chalmers and Murray Enkin.

In addition, Banta told me that Haire and her foundation were directly responsible for the timely publication of their paper in <u>Obstetrical and Gynecological Survey</u>. By paying a subsidy, she ensured the paper was published a year earlier than it would have otherwise been. I later confirmed this with Doris Haire.

#### The Challenging Routine Episiotomy and Staking Out Turf

Another stimulus which fueled the professional questioning of episiotomy was related to the inter-professional concerns of nurse-midwives and the intra-professional concerns of family physicians. For both these groups, interest in the questioning of episiotomy was related to attempts to resist obstetrical control and provide justification for deviating from the obstemacal norm of routine episiotomy.

Nurse-midwifery is a profession dedicated to patient satisfaction and reduction of the use of unnecessary interventions (Avery and Burket, 1986:134). During the 1970s and 80s, it was also a relatively new health care profession seeking widespread recognition from both the public and obstetric communities. For nurse-midwives, not performing routine episiotomy which is a hallmark of their profession, differentiated the maternity care they provided from that provided by obstetricians. For some childbearing women, this was a primary reason for wanting to be attended by a nurse-midwife as opposed to an obstetrician. The avoidance of episiotomy, however, posed a dilemma for the nurse-midwifery profession. Not performing routine episiotomy involved going against obstetric orthodoxy, thereby exposing the profession to medical criticism at a very vulnerable period in its development. Many of the nurse-midwifery critiques of episiotomy were written with the intent of remedying this dilemma. By using original nurse-midwifery research to challenge the obstetrical rationales behind routine episiotomy, the critiques showed that the nurse-midwifery practice of avoiding routine episiotomy was evidence-based and defensible. In effect, it was part of an effort to develop a scientific body of nurse-midwifery knowledge which could be used to justify non-interventionist nurse-midwifery practices to both physicians and the public. The following passages show that some nurse-midwives were keenly aware of their profession's vulnerability to consumer demand and its tenuous professional status in relation to medicine.

For long periods midwives had not been allowed to perform or repair episiotomies. For this and other reasons many midwives became skilled at delivering babies over intact perineums with minor or no lacerations. Today many maternity patients are beginning to ask midwives not to use episiotomies. Midwives are torn between accepted standards of medical practice and the wishes of their clients and traditional approaches of midwifery practice. Nurse midwives must begin to seek information about the causes of perineal tears and the best methods of protecting the pelvic floor tissues (Fisher, 1979:19).

One of the newest requests is to deliver without an episiotomy. This request is controversial and is awkward for birth attendants. Should they comply with accepted medical standards or with the wishes of their clients? Nurse-midwives are especially affected by this controversy. Because the profession is still gaining acceptance in the American medical community, the actions of nurse-midwives, are often highly scrutinized (Dunne, 1984:29).

Although the role of general practitioners in American maternity care was con-

siderably more established than that of nurse-midwives, the development of the specialty of family practice, with family practice residency training, did not occur until the 1970s. In family practice, emphasis is placed on the family as a psychological unit and the assessment of individual emotional needs, making client satisfaction an important outcome (Brody, 1981). By capitalizing on the public's dissatisfaction with traditional obstetrical care, the questioning of routine episiotomy by family practitioners in the early 1980s provided the newly developing specialty with an opportunity to advance its own agenda. As some family physicians observed,

Maternal satisfaction with the labor and delivery experience is an important goal in itself in addition to whatever it may contribute to the bonding process. Maternal dissatisfaction plays a major role in the current public criticism of obstetrical practices, and in the push for more maternity center care... (Brody and Thompson, 1981:983).

Furthermore, like nurse-midwives, the questioning of episiotomy by family physicians was also part of an effort to stake claim to low risk, non-interventionist, family centred maternity care. By undermining the rationales for routine obstetrical practices, family physicians created a climate where not performing unproven interventionist obstetrical practices was defensible. This was considered a necessary and useful tactic for securing and maintaining a share of the maternity care market.

### The Ouestioning of Episiotomy and Use of the Operation

Although the data on physicians' response to the questioning of episiotomy is limited, at least two American prominent obstetricians have publicly stated they believed the questioning of episiotomy by women influenced obstetricians' use of the operation. For example, remarks made by David Danforth during his presidential address before the American Gynecological Society in 1974, suggest that not only were some women expressing preferences to avoid episiotomies, their physicians were cooperating with these preferences. In his address entitled, "Contemporary Titans: Joseph Bolivar DeLee and John Whitridge Williams," Danforth presented the many accomplishments of DeLee including the prophylactic forceps and episiotomy operation. He repeated DeLee's now famous claims that prophylactic episiotomy and forceps prevented damage to women's pelvic soft parts and spared babies' brains from injury. Danforth then said parenthetically,

...it is disconcerting to some of us, and at times even grotesque, to observe the increasing numbers of modern women who demand spontaneous delivery, and whose obstetricians comply, regardless of the length of time the fetal head must pound against the pelvic floor (Danforth, 1974:581). Similar comments were echoed a decade later by Robert Wilson, a past president of the AGS in an editorial in <u>Postgraduate Medicine</u> on the effects of consumerism in obstetric care. Wilson commented,

A further example of an area where physicians may have given away too much in responding to patient pressure is use of the episiotomy, which is popularly considered unnecessary, even for primigravidas (Wilson, 1984:25).

These perceptions do not hold up however, when the national episiotomy rate is examined (Figure 1-1 in the Introduction). In the U.S., in contrast to the U.K., the questioning of episiotomy was not correlated with a sudden and sharp decline in the episiotomy rate. Although the challenging of the routine use of episiotomy by women and professionals was ongoing from 1979 to 1990, the U.S. national episiotomy rate declined only minimally during these years. The most pronounced decline occurred from 1987 to 1990 when it fell by 6.1%. According to statistical analysis carried out by the National Center for Health Statistics, changes in the rate of episiotomy were not statistically significant from 1980 to 1984 and from 1984 to 1987, or during the entire period from 1980 to 1987 (Kozak, 1989:212).

## Why Ouestioning Episiotomy Had Limited Impact

In contrast to Britain where the questioning of the practice of routine episiotomy eventually led to the operation becoming quite controversial, within the expert medical community, in the United States, controversy was minimal. Unlike episiotomy critiques in the U.K., those in the U.S. failed to create, sufficient certainty about the value of routine episiotomy to produce a state of clinical equipoise which would behoove the mounting of randomized controlled trials<sup>9</sup>.

With the exception of Edward Stewart Taylor (1982; 1986; 1987), Robert Goodlin (1983), Margery Gass and colleagues (1986), and John Thorp and colleagues (1987; 1989), American obstetricians showed little interest in questioning episiotomy. Furthermore, at the same time that these mostly unknown obstetricians were questioning the practice, leading obstetricians supported its routine use and promulgated the putative benefits of the operation (for example, David Danforth (1974) and Robert Wilson (1984)). Other well-respected obstetricians such as Robert Bradley (1965; 1974; 1981) and Clark Gillespie (1977; 1982; 1985; 1992) strongly endorsed the use of routine episiotomy and advised women of the wonderful "benefits" of the operation. Bradley is considered the father of husband-coached childbirth and is president and co-founder of the Academy of Parapsychology and Medicine and president of the American Academy of Husband-Coached Childbirth. Gillespie is a Fellow of both the American College of Obstetricians and Gynecologists and the Royal College of Obstetricians and Gynecologists (London), diplomat of the American Board of Obstetrics and Gynecology and author of Your Pregnancy Month by Month, which has sold over 150,000 copies. The following passages by these obstetricians reveal how strongly they believe the alleged prophylactic benefits of episiotomy. They also show that neither physician was swayed by the lay questioning of the practice. In Gillespies' case, note the condescending and disparaging tone directed at those doing the questioning.

...I know there are occasions where a little cutting does a great deal of good. No, your wife doesn't *have* to be cut. I think she would *prefer* to be cut. With term-sized babies the cut is beneficial in most instances (Bradley, 1981:145) (italics in the original).

Although your episiotomy may cause you some discomfort after you deliver, it heals much better than a tear and gives you much better support for later years (Gillespie, 1992:226)...Lately the episiotomy, as with so many other important things, has fallen victim to the frantic race among some of the cultists to get motherhood back to nature before things get too good. Many women who do not receive interventions such as a deep and proper episiotomy tend to develop several specific disorders from the resultant muscle and skin damage. The rectum and the bladder tend to push through the damaged muscle support and bulge into the vagina, causing conditions known as rectocele (from the rectum) and cystocele (from the bladder), which require surgical intervention somewhere along the line. Relaxation of the vagina can also lead to a loss of sexual sensation. This loss of sexual sensation is felt (or not felt) by both partners. The extremists of the "natural" movement ignore this problem and state that psychogenic stimulation outside the vagina compensates for this loss of vaginal sensation, which is exactly the same as saying smelling ice cream is as good as eating it (Gillespie, 1992:227).

Still other obstetricians such as Gideon Panter 'A.D., a diplomat of the

American Board of Obstetrics and Gynecology told expectant mothers in Parents

magazine that episiotomy benefited both the mother and her spouse sexually.

I explain to my patients that, for the most part, episiotomy is performed solely to help preserve the strength of their vaginal muscles, which can be a factor in maintaining a good sexual relationship in the future. Physical changes occur as men age, and considerably more direct stimulation is often needed if an older man is to maintain an erection...

An episiotomy, then, is better described as being done as much for the husband's sake in later life as it is for the wife's benefit (Panter, 1980:88).

During these same years, American obstetricians and medical students continued to be advised of the alleged benefits of episiotomy in successive editions of <u>Williams</u> <u>Obstetrics</u>, the most popular obstetrical text in the U.S.. The 15th- 17th editions of this textbook authoritatively stated the reasons for the popularity of the operation was that it "substitutes a straight, neat surgical incision for the ragged laceration that otherwise frequently results. It is easier to repair and heals better than a tear. With a mediolateral episiotomy, the likelihood of lacerations into the rectum is reduced" (Pritchard, Mac-Donald, and Gant, 1985:347-8). As has already been noted, the 16th and 17th editions of <u>Williams Obstetrics</u> respectively acknowledged the questioning of the advantages of episiotomy by Cogan and Edmunds (1977) and then by Thacker and Banta (1983). In both cases, however, this questioning was dismissed with only the observation that the frequency of gynecological problems have decreased since births have taken place in hospital with episiotomy. While continuing its support of the operation, the 18th edition of <u>Williams Obstetrics</u> (1989), is the first to seriously discuss the questioning of episiotomy which was talking place at the time<sup>10</sup>.

Further evidence of the strong consensus within obstetrics favouring the use of episiotomy and the overwhelming lack of obstetrical willingness to question the alleged advantages of the operation comes from a national survey of 249 certified obstetrics (Lake, 1976). The survey found that close to half the obstetricians reported "always" performing episiotomy and that practically all agreed episiotomy prevents perineal tearing. Three quarters said it also protects the infant's head from trauma and less than a quarter believed it enhanced sexual pleasure (3 in 10 male obstetricians in their thirties offered this reason for performing the operation). With respect to the challenging by women of the use of episiotomy, over half the respondents reported being unswayed by criticism from patients, and more than a third were more strongly in favor of episiotomy than they had been five years earlier.

With obstetrical controversy about the routine use of episiotomy failing to materialize and with obstetricians attending the vast majority of all deliveries in the U.S. (obstetricians deliver 80% of babies (Sisk, 1993:478)), it is hardly surprising the episiotomy rate in the United States has been so slow to decline. By comparing the questioning of episiotomy which took place in the U.S. with that which occurred in the U.K., a number of factors can be identified which help explain why the operation was so resistant to the questioning in the America. These factors relate to both who was doing the questioning and how they went about doing it.

First of all, it must be remembered that the sharp decline in the use of episiotomy in Britain resulted in large part from intense lay questioning of the operation which was spearheaded by one extremely prominent and influential childbirth educator and reformer (Sheila Kitzinger). Kitzinger, with assistance from the National Childbirth Trust and Association for the Improvement in Maternity Services organized and directed a campaign against routine episiotomy. This campaign raised women's and health care professional's consciousness about the unproven prophylactic benefits of episiotomy and the adverse effects associated with the operation. Although considerable lay questioning of episiotomy also took place in the U.S., no one person of Kitzinger's stature took it upon themselves to mount and lead a crusade against the operation. As one key informant remarked about Kitzinger, "who else is able to organize a demonstration of 10,000 people at the drop of a hat?"

The context in which the questioning of episiotomy came about was also different in the USA. In the U.K., Kitzinger (and other childbirth activists), mobilized opposition to the routine use of episiotomy by focusing specifically on the operation and drawing attention to it as a separate or single issue independent of other childbirth practices. In the U.S., the childbirth reform movement focused attention on the medicalization of the entire process of childbirth. Episiotomy was but one of many obstetrical procedures questioned. As Norma Swenson, an editor of <u>Our Bodies Ourselves</u> describes it,

...the feminist perspective was already challenging medical authority, challenging male dominance, challenging sexism that we found inherent in EVERY medical encounter. And then by extension beginning to question everything that was done, of which birthing was only part. So glancingly, I say, the episiotomy was included in that list but only so far as we were already questioning the positioning, we were questioning the anesthesia, analgesia, we were questioning the exclusion of midwifery knowledge, the exclusion of homebirth (interview, November 16, 1991).

At no time did the issue of routine episiotomy in America ever become an issue in and of itself as it had in Britain. With the exception of Kitzinger and Simkin's (1984; 1986) book in the mid 1980s, almost all of the lay questioning of episiotomy was embedded in critiques about childbirth in America. Differing from the U.K., no pressure groups like the NCT or AIMS took up the cause against routine episiotomy, no one surveyed women to elicit their experiences with the operation as Kitzinger had done, and there were no newspaper articles devoted solely to the issue of episiotomy. In other words, compared with what appeared to be a concerted and organized campaign against routine episiotomy in Britain, the questioning of episiotomy in America lacked leadership,specifically, direction and intensity. As one of my key informants remarked about why the episiotomy rate was so much slower to decline in

the U.S. than U.K.,

Key informant: Well, the United States doesn't have a Sheila Kitzinger or a Beverley Beech (Honorary Chair of AIMS). I mean, there isn't anybody in the United States with that kind of charisma. Sheila had a LOT to do with the drop in the episiotomy rate in Britain, Not she alone, but I mean, she and the women she mobilized.

Question: What about Doris Haire?

Key informant: Yes, of course, but, Doris does not carry the kind of weight that Sheila does. Sheila knows the media. I think there just isn't anybody in the United States like Sheila. Doris has been a lobbyist. I mean, Doris has her American Foundation for Maternal Child Health and she does have a lot of influence, she is a lobbyist in Washington. But as far as procedures go, she hasn't the clout that Sheila has. She's never captured public imagination.

Question: What about the Boston Women's Health Book Collective?

Key informant: Ah, there you've got Norma Swenson and her group. I think they carry a fair bit of weight. But once again I don't know how much. You've got David Stewart and the NAPSAC (National Association of Parents and Professionals for Alternatives in Childbirth), you've got the ICEA (International Childbirth Education Association), you've got ASPO (The American Society for Psychoprophylaxis in Obstetrics), none of them have really captured...and you've got all sorts of splinter organizations that don't speak with one voice. I mean, the only consumer organization in the childbirth field that I know of that REALLY caries some weight is the VBAC (Vaginal Birth After Cesarean Section) group.

An additional reason why lay questioning of episiotomy had had less of an effect

on American obstetricians has to do with the availability of alternative maternity

options. Women most strongly opposed to routine episiotomy have increasingly chosen

to avoid the operation by having their babies at home (Hazell, 1976; Maynard, 1977)

or in birth centers (Davis, 1976; Norwood, 1978) with the assistance of lay and nurse-

midwives. Instead of pursuing the issue about the use of episiotomy with obstetricians,

many of these women have essentially opted out of the mainstream of maternity care.

By voting with their feet, the opposition to episiotomy felt by American obstetricians

has been considerably less than what it could have been. In Britain, rather than opting

out, childbearing women adopted the strategy of trying to change the system by challenging midwives and physicians to justify their use of episiotomy.

Another important difference between the U.S. and U.K. has to do with the role of midwives in questioning of episiotomy. Although nurse-midwives in the U.S. and midwives in the U.K. were a major source of the published episiotomy critiques, their impact was very different. As British midwives attend 75% of births, their questioning of episiotomy was sufficient to cause physicians to take notice. Furthermore, as I've argued in chapter six, given the high percentage of maternity cases cared for by midwives in the U.K., a reduction in the use of episiotomy by even a small numbers of midwives would translate into an appreciable decline in the national episiotomy rate. In the U.S., nurse-midwives attend less than 3% of births (Adams, 1984:1267),; for this reason, their episiotomy critiques have been easily ignored by the obstetrical community, and their actions have had a negligible effect on the national episiotomy rate.

#### Summary and Discussion

This chapter explained why lay and professional questioning of episiotomy in America had significantly less impact on the use of the operation than similar efforts in Britain. I began the chapter by first describing the nurse-midwifery questioning of episiotomy. Between 1979 and 1990, the period for which data exist on the national episiotomy rate, the majority of nurse-midwifery critiques are evidence-based, usually taking the form of retrospective observational studies. These studies present data refuting the age-old obstetrical rationales for performing the operation or show that avoidance of episiotomy does not compromise the health of the infant or mother. During the same time period, the obstetrical questioning of episiotomy was slow to begin, although family physicians were among the first physicians to call for a reevaluation of the practice. By the mid-1980s, some obstetricians began questioning the value of episiotomy in the obstetrical literature. For the most part, the episiotomy critiques written by physicians are also evidence-based. The majority of these present data challenging the claim that episiotomy prevents perineal trauma. Next, I described the lay questioning of episiotomy and showed the extent to which this encouraged, and in some cases, stimulated the professional questioning of the operation.

The last part of the chapter contrasts the U.S. questioning of episiotomy with critiques from the Britain. I identified why these activities were so much less effective in reducing episiotomies in America than in the England. In the U.S., the routine use of episiotomy persisted primarily because American questioning of the procedure failed to produce sufficient controversy about the operation within the obstetrical community to produce a state of clinical equipoise regarding the operation. The chapter concludes by considering some of the lay and professional factors which contributed to episiotomy not becoming more controversial in the America.

The concluding chapter summarizes the results of this research. Differing from the substantive chapters, which are in chronological order, the final chapter examines the factors and forces which brought about the routinization of episiotomy as well as the eventual questioning of this practice. In this way I highlight the most salient aspects of the change process this research has identified.
#### **Footnotes**

1. Episiotomy rates by parity are not available.

2. In Britain, midwives are independent practitioners and have legally held this status since the Midwives Act was passed by the British parliament in 1902. Midwives in the U.S. are either nurse-midwives or lay midwives. Although nurse-midwives now have legal status and appear to be growing in popularity among American childbearing women, American physicians were almost successful in abolishing them shortly after the turn of the century. In 1982 there were a total of 2,086 nurse-midwives certified by the American College of Nurse-Midwives (Adams, 1984:1267). That year, nursemidwives attended about 1.8% of the deliveries taking place in the USA. Nursemidwives are permitted to perform and repair episiotomies.

3. All three letters were written by physicians. One supported the conclusions reached by Cogan and Edmunds and praised the journal for publishing this "heretical" article (Newton, 1977:13). The other two expressed dismay that the routine use of episiotomy was even being questioned (Hymans, 1977; Eichner, 1977). Without describing these letters, Cogan's reply to them provides an indication of their tone.

Simple enthusiasm, however genuine, cannot be sufficient evidence...for advocating a medical procedure...Surely it is time to review the almost universal use of the procedure in the U.S. and consider the objective evidence of the past half century. Perhaps it is doubly essential to review evidence for a procedure about which the intensity of belief makes it 'almost sacrilegious' to ask questions (Cogan, 1977:16).

4. While both Thacker and Banta are physicians, neither are obstetricians. At the time, Thacker was Director of the Division of Surveillance and Epidemiologic Studies at the Centers for Disease Control in Atlanta and Banta, Assistant Director of the Health and Life Sciences Division for the U.S. Office of Technology Assessment.

5. To dispute the allegation that episiotomy prevents pelvic relaxation, Haire drew on her international data to make cross-cultural comparisons. Haire observed that pelvic relaxation appeared to be decreasing throughout the world, even in countries where episiotomy is still comparatively rare. She also hypothesized that the incidence of pelvic relaxation might be strongly influenced by genetics. She had observed that pelvic relaxation was relatively rare in both Fiji and Kenya, but occurred more frequently among Indian than among black women in these countries despite the living habits and fertility rate of both groups of women being much the same.

As for the obstetrical claim that routine episiotomy reduced fetal neurological impairment, Haire cited a study of 17,000 children, born within one week in Britain. The study "indicates that a second stage lasting as long as two and a one-half hours does not increase the incidence of neurological impairment of the full-term, average-forgestational age infant who shows no signs of fetal distress." (Haire, 1976:20)

Haire also dismissed routine episiotomy's alleged benefit of improving sexual functioning. Pointing to those countries where routine episiotomy was not practiced, she reported that "interviews with both parents and professionals indicate that an intact perineum which is strengthened by postpartum exercises is more apt to result in both male and female sexual satisfaction than is a perineum that has been incised and reconstructed." (Haire, 1976:20) 6. Both Bean and Hazell were prominent in the childbirth movement. Bean co-founded the Boston Association for Childbirth Education and is a pioneer in family-centered maternity care. Hazell was a past co-president of the ICEA (she was succeeded by Doris Haire).

7. In August of 1975, Barbara Yunker, wrote a piece for <u>Good Housekeeping</u> entitled, "Delivery procedures that endanger a baby's life. Are doctors interfering too much with the natural process of giving birth?" Among the procedures discussed, Yunker took aim at episiotomy. Acknowledging that the procedure was done routinely in the USA and that it doesn't hurt the baby and may help the mother, Yunker nonetheless felt it, "is painful for the mother and usually unnecessary" (1975:58). Making a crosscultural comparison with the Netherlands, a country with a very low episiotomy rate, Yunker contested the claims that episiotomy prevents fetal brain injuries, prevents future pelvic relaxation problems and improves sexual functioning by arguing that there is no evidence that Dutch babies are born with brain damage, or that Dutch women have greater problems with pelvic prolapse or diminished sexual pleasure.

In Jan of 1976, routine episiotomy figured prominently in an article in <u>McCalls Magazine</u> (Lake, 1976). Interested in how obstetricians were responding to consumer dissatisfaction with obstetric practices and demands for changes in maternity care, McCalls surveyed a national sample of certified obstetricians. Referring to episiotomy as a "questionable routine" and wondering if it was "really necessary in every birth," Lake questioned the obstetricians about their reasons for performing the operation. In March of 1976, a <u>Woman's Day</u> article (Davis, 1976) on American childbirth practices also questioned the necessity of routine episiotomy. The article argued against the routine use of episiotomy by pointing to Europe where the operation was not routinely performed and observing that there was no evidence European mothers and babies suffered because of this.

8. Kitzinger also told me that she has been "in a close relationship with the Boston Women's Health Collective since it's beginning and have fed into them much of the childbirth stuff" (Sheila Kitzinger, interview October 20, 1989). This was more or less confirmed by Norma Swenson who said, "there has been an ongoing conversation that she (Kitzinger) and I have had for more than 20 years, 25 years..." (Norma Swenson, interview, November 16, 1991).

9. Clinical equipoise about the routine use of episiotomy was reached in one centre in Canada in the early 1980s. During time spent at the National Perinatal Epidemiology Unit (NPEU) in Oxford in 1979 and 1980, Murray Enkin, a prominent Canadian obstetrician-researcher designed an RCT to evaluate the benefits postulated for routine episiotomy. On his return to Canada, Enkin and his colleagues at McMaster University in Hamilton Ontario. conducted a pilot study to test the feasibility of conducting the trial. While the pilot study was a success, inability to obtain outside funding eventually prevented the RCT from being realized. Had it not been for an editorial Enkin wrote about the experience in the journal <u>Birth</u> (Enkin, Hunter and Snell, 1984), few physicians, or anyone else for that matter, would have known routine episiotomy was being questioned by some North American obstetricians.

In addition to attempting to mount this RCT in Hamilton. Enkin had considerable influence on subsequent episiotomy RCTs. At the suggestion of Iain Chalmers, Director of the NPEU, Enkin sent his RCT protocol to Michael House and then Michael Klein in the early 1980s. Both of whom later conducted episiotomy trials (House, 1986; Klein, 1992). Klein and colleagues' Montreal trial was the first North American trial of episiotomy. During my interview with House and Klein, neither attributed the original idea of an episiotomy RCT to the protocol Enkin shared with them so many years earlier.

10. The 18th edition of Williams Obstetrics states,

More recently, the advantages provided by episiotomy have been questioned by some individuals (Thacker and Banta, 1983). One commonly cited but unproven benefit of routine episiotomy is that it prevents pelvic relaxation- that is cystocele, rectocele, and urinary incontinence. Obviously, if the perineal incision is made at the time of maximal distension, then this benefit might be limited. Gass and colleagues (1986), as well as Thorp and co-workers (1987), recommend that routine episiotomy be reevaluated since it possibly was associated with an increased incidence of anal sphincter and rectal tears. Reynolds and Yudkin (1987) studied nearly 25,000 deliveries at the John Radcliffe Hospital in Oxford, and reported that the episiotomy rate in nulliparas decreased from 73 percent in 1980 to 45 percent in 1984. During this same time, the incidence of second-degree tears increased from 7 to 20 per 1,000, but the incidence of third-degree lacerations was unchanged at about 5 per 1,000 (Cunningham, MacDonald, Gant, 1989:323).

The most significant change in the position of <u>Williams Obstetrics</u> on the use of episiotomy appears in 1993. In the 19th edition of the textbook, the questioning of episiotomy in the obstetrical literature is again cited, but this time, it is followed by the admonition, "...episiotomy should not be performed routinely. The procedure should be applied selectively for appropriate indications,..." (Cunningham, MacDonald, Gant, Leveno and Gilstrap, 1993:389). After nearly half a century, <u>Williams Obstetrics</u> is once again rejecting the indiscriminate use of episiotomy. It would appear that the questioning of routine episiotomy which began in the 1970s is finally having an impact on obstetrical thinking.

#### <u>CHAPTER 8</u>

#### SUMMARY AND DISCUSSION

To increase understanding of the process of innovation in maternity care, this thesis has traced and analysed the evolution of episiotomy. I have described how changes in obstetrical and midwifery doctrine and use of episiotomy came about in both the United States and the United Kingdom. I have also offered explanations for these changes.

This chapter consists of three sections. In the first section, I summarize the major factors and forces implicated in the introduction of routine episiotomy into maternity care. I identify the agents responsible for change, the factors which encouraged the adoption of routine episiotomy, and finally the barriers which hampered the introduction of elective episiotomy. In the second section, I examine the challenges to prophylactic episiotomy which developed during the 1970s and 1980s. This section is identical, in structure, to the first. I first describe the agents of change, then the factors which encouraged or were barriers to the overturning of this practice. I end the chapter by discussing generalizations about the determinants of innovation and offering thoughts on studying this process.

# <u>Summary</u>

#### The Routinization of Episiotomy

### Agents Responsible for the Routinization of Episiotomy

I have demonstrated how identifiable individuals championing a particular cause (i.e. engaging in claims-making activities) can bring about innovation in maternity care. In North America, the routinization of episiotor can be traced to two groups of obstetrician/gynecologists who lobbied for the operation between 1915 and 1935. The first group consisted of a handful of leading American obstetrician/ gynecologists. Between 1915 and 1925, these prominent physicians lobbied their equally distinguished colleagues at national meetings of the two elite obstetric and gynecology societies to perform elective episiotomy. As part of their pleas for the prophylactic performance of episiotomy, they claimed that the operation prevented perineal lacerations, returned the perineum to its prepregnancy state, and shorte-led labour thereby reducing or preventing infant mortality and morbidity. They also emphasized their strong belief that if performed prophylactically, episiotomy would prevent future gynecological problems that develop decades after childbirth. These pleas received considerable exposure when they were later published in leading obstetrical journals.

Between 1925 and 1935, a somewhat larger group of American episiotomy protagonists echoed the same claims of earlier episiotomy enthusiasts but in addition declared that every, or nearly every, first-time mother would benefit from the operation. Although these episiotomy protagonists were specialists in obstetrics and gynecology, they were not among the elite of the profession. Reflecting their less prominent stature, they tended to make their pleas for the routine or indiscriminate use of episiotomy at local obstetrical association meetings and in national or local obstetric journals.

That there was an absence of scientific evidence for the claims being made underscores the effectiveness of the championing of routine episiotomy by particular obstetricians. None of the benefits claimed for episiotomy were evidence-based. Therefore the subsequent adoption of routine episiotomy by American physicians suggests the greater influence of the claims-makers and their claims than scientific research.

In the U.K., the routinization of episiotomy in the mid 1960s and 70s came about quite differently. There, the liberal use of episiotomy occurred without any overt lob-

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bying by particular obstetricians. This is not to say, however, that British consultant obstetricians did not in any way influence the greater use of episiotomy. While individual obstetricians may not have publicly campaigned for the greater use of episiotomy, collectively they exerted direct and indirect pressure on midwives and physicians working in their maternity units to use the operation more frequently.

### Factors Encouraging the Adoption of Routine Episiotomy

This research has identified three factors common to both the U.S. and U.K. which facilitated the routine use of episiotomy in these countries. These factors fall into 3 broad categories: changes in the dominant belief system within obstetrics; changes in maternity care practices; and changes taking place within the obstetric and midwifery professions.

In the United States, the acceptance of routine episiotemy had to do with a shift in the conceptualization of the nature of childbirth. As long as the obstetrical belief system held that childbirth was a normal process, physicians considered routine surgical intervention highly unnecessary and inappropriate. In the 1800s, the strong acceptance of the belief that childbirth and the functioning of the perineum was a normal physiological process discouraged acceptance of the pleas of the 19th century episiotomy enthusiasts. During the 20s and 30s childbirth was recast as a pathogenic and pathological process. Once the obstetrical belief system supported the view of childbirth as abnormal, prophylactic intervention believed to minimize or prevent this pathology became not only acceptable to physicians but desirable. In other words, the advocacy of routine episiotomy became compatible with the belief system within obstetrics.

The argument can also be made that changes in the British obstetrical belief system indirectly encouraged the liberal use of episiotomy during the 1970s. Although British obstetricians continued to believe that childbirth was largely a normal process most appropriately cared for by midwives, during the 1970s, the "active management of childbirth" became increasingly accepted. The philosophy behind this approach was that obstetrical intervention (induction) could effectively and safely improve upon the physiological process of childbirth. This new belief in the superiority of obstetrical intervention was compatible with, and smoothed the way for, a more liberal use of episiotomy.

Changes in maternity practices affected the use of episiotomy in several ways. In both the U.S. and U.K., the shifting of place of birth from home to hospital coincided with the increased use of episiotomy. As the proportion of women giving birth in hospital increased, practical impediments to performing the operation decreased. In contrast to the conditions found at homebirths, the use of episiotomy was facilitated in hospital by ready availability of the facilities and technology necessary to safely carry out the procedure. This included such things as aseptic operating room conditions, proper lighting, anesthesia and capable assistants. With the integration of British midwives into hospitals in the 1970s, their use of episiotomy was also encouraged because of the availability of medical practitioners found in the hospital. Because the law required episiotomies cut by British midwives to be repaired by a physician, midwives attending homebirths were reluctant to perform the operation because of the inconvenience of having to wait for a physician to arrive to suture the incision. In hospital, this barrier to the midwifery use of episiotomy was removed, or perceived by midwives to be removed.

The nearly 100% hospitalization of birthing women also encouraged the increased use of episiotomy for reasons of birth attendant convenience. Unlike a homebirth where there is only one labouring woman to attend at a time, in hospital physicians and midwives often find themselves caring for many labouring women simultaneously. Some of the increased use of episiotomy resulted from efforts to streamline the care of childbearing women in an attempt to deal with pressures generated by high patient volume found in hospitals. Birth attendants adopted the procedure because they believed that the operation shortened the second stage of labour, diminished the unpredictability of a perineal laceration, and was easier and quicker to repair than a spontaneous tear. From this perspective, pressures of the hospital environment coupled with birth attendants' perceptions that the operation expedited their work encouraged its use.

The phenomenon known as the cascade of intervention was also implicated in the initial increased use of episiotomy in both the U.S. and U.K. This phenomenon refers to the situation whereby one particular intervention necessitates or encourages further interventions to facilitate or counteract the effects of the initial action. In the U.S. the growing use of forceps and obstetrical anesthesia from the 1920s through the 1970s motivated the routine use of episiotomy. In Britain in the 1970s, the increasing use of induction, which was part of the package of maternity care referred to as the active management of labour, had a similar effect. The rising use of forceps and induction in both countries coincided with the hospitalization of childbirth. It is important to note that the role of the cascade of intervention effect in increasing the use of episiotomy was limited to the initial rise in episiotomy use. In both countries, the routine episiotomy persisted after the use of forceps in the U.S. and induction in the U.K. declined in the 1970s confirming that other factors were involved in maintaining the routine use of the operation.

The third category of factors common to the routinization of episiotomy in the U.S. and U.K. related to occupational transformations which occurred in American obstetrics during the 1920s through 1940s and in British midwifery during the 1970s. In the U.S., this period can be characterized as a time of professional establishment. During these years, the obstetric profession struggled with self-definition and boundary setting. It was at this time the obstetrical profession redefined itself and became the

"new obstetrics." Obstetrics and gynecology became formally united as one specialty, the nature of childbirth was recast from a normal or physiological process to a pathological one, and the approach of "watchful expectancy" was replaced by an interventionist or activist ideology. These changes which were part of the transformation of the American obstetrical profession during the first half of the 20th century supported the increased use of episiotomy. At a philosophical level, prophylactic episiotomy appealed to physicians because its use symbolized acceptance of the new surgical obstetrics and rejection of the "old" conservative or moderate school of obstetric thought. By performing prophylactic episiotomy the new obstetrician/gynecologists distinguished themselves from "old-fashioned midwifery." It allowed them to claim that their methods had more to offer than those of the generalists and midwives. At the same time, prophylactic episiotomy was also stimulated because it appealed to obstetrician/gynecologists' surgical aspirations. Surgical skill was now considered a defining characteristic of the profession.

Where the routinization of episiotomy in America resulted from efforts to elevate the status of the obstetric profession, it was reduction in the professional autonomy of midwives which prompted the increased use of episiotomy in the U.K. During the 1970s, British domiciliary midwives were incorporated into hospitals with the move to hospitalize all births. At homebirths, midwives accepted total responsibility for the women they attended and called for medical assistance when they deemed it necessary. In hospital, midwives came under the direct supervision of consultant obstetricians. This shift in place of birth resulted in a dramatic reduction in the freedom of midwives to exercise clinical judgement. Midwifery use of episiotomy increased as consultant obstetricians influenced midwifery practice by setting formal and informal maternity policies and protocols about when and under what conditions midwives were to perform the operation.

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## Barriers to the Routinization of Episiotomy

This research also identified a number of barriers to the routinization of episiotomy. In the U.S., many of these barriers may be attributed to the notion that the period was simply not ripe for the greater use of episiotomy. In time, these barriers actually became factors which facilitated the routinization of episiotomy. In the 1800s, episiotomy enthusiasts were unsuccessful at encouraging the greater use of episiotomy because there was no theoretical justification for what they were proposing. Their pleas for episiotomy ran counter to the then prevalent obstetrical belief system that birth was a normal process that should not be interfered with unnecessarily. While congruence between proposed innovation and the existing belief system may facilitate innovation as described above, incongruence may effectively impede it. Another factor which hindered the adoption of episiotomy in the 1800s but encouraged its use in the 20th century was the availability of the technology necessary to carry out the operation safely. At this time, nearly all births took place at home and limitations in medical technology such as the lack of aseptic technic, under-developed suturing technology, poor lighting, untrained assistants, and inadequate local anesthesia discouraged the use of episiotomy. This technology encourage the use of episiotomy when it became readily available in the 1920s and 30s.

The example of the efforts of the 19th century episiotomy enthusiasts also revealed that the prominence and reputations of those involved in claims-making activities can influence the innovation process. In this case, the 19th century episiotomy advocates lacked sufficiently prominent reputations to be able to neutralize the weighty pronouncements of the leading obstetrical authorities of the day who advised against using episiotomy. One other barrier to innovation identified by this example was consumer preference or perceived consumer preference. Nineteenth century physicians, probably because they still perceived their position in the maternity care market place to be quite tenuous, were reluctant to ignore women's preferences not to receive an episiotomy.

Restrictive use of episiotomy in the U.K. prior to the mid 1960s is also informative about barriers to innovation. In Britain, midwives attended the vast majority of births (many at home) and until 1967, were legally prohibited from performing the operation. In addition to the legal prohibition against the midwifery use of the operation, the liberal use of episiotomy was also discouraged by the obstetrical and midwifery belief system. Both midwives and physicians believed birth to be an essentially normal process with midwives being the appropriate birth attendants of normal births and obstetricians of abnormal births. This belief system discouraged the use of episiotomy as obstetricians saw no theoretical justification for allowing/encouraging midwives to surgically complicate a normal process.

### The Questioning and Overturning of Routine Episiotomy

## Agents Responsible for the Questioning of Episiotomy

In contrast to the routinization of episiotomy, agents challenging this practice were considerably more diverse. For example, in the U.K., pressure from outside the professions of medicine and midwifery was responsible for initiating a debate about the value and benefit of routine episiotomy. This pressure originated from an antiepisiotomy campaign launched in the early 1970s by Britain's most prominent and influential childbirth educator and activist (Sheila Kitzinger). The campaign was bolstered by support from two national childbirth organizations (the NCT and AIMS) and many childbearing women. The lay challenge of episiotomy involved disputing the medical claims about the prophylactic benefits of episiotomy. This was done by surveying women about their experiences of episiotomy or by presenting the experiences of particular women show the serious and sometimes debilitating side-effects from episiotomy. These data were then used to publicly challenge clinicians to either prove that episiotomy was beneficial or stop performing it. By questioning episiotomy in the media in this way, those campaigning against the operation effectively transformed episiotomy into a social issue which was difficult for professionals to ignore.

Largely in response to the anti-episiotomy campaign and the questions which were being raised about the benefits of episiotomy, a few midwives began producing critiques of the practice in the early 1980s. Very shortly thereafter, midwifery questioning of episiotomy was eclipsed by criticism of the operation in the medical community. The initial professional episiotomy critiques were largely non-evidence-based and involved questioning the rationale for performing the operation. The effect of these critiques however, was to generate uncertainty about the alleged benefits of the operation. Professional controversy about the operation intensified when episiotomy enthusiasts responded to critiques of the operation. By 1982, uncertainty about the value of episiotomy had become so great in the medical and midwifery communities that the mounting of randomized controlled trials became ethically justified and necessary to resolve the controversy. The RCTs revealed that the routine use of episiotomy was indefensible and formed the basis of strong evidence-based episiotomy critiques.

During the 1980s the English national episiotomy rate declined substantially. Since much of this decline occurred prior to the publication of the results of the episiotomy RCTs and other evidence-based critiques, the lay anti-episiotomy campaign must be credited with prompting the reduction.

In the U.S., the agents of change attempting to bring about a reduction in the use of episiotomy were quite similar to those found in the U.K.. However, the questioning of episiotomy persisted over a longer period of time and had less considerably impact on the national episiotomy rate. Again, pressure from outside of American medicine and nurse-midwifery precipitated the professional questioning of episiotomy. During the early and mid 1970s, prominent childbirth reformers and activists such as Doris Haire and Susanne Arms along with the women's health movement and childbearing women criticised routine episiotomy. This involved challenging the benefits claimed of episiotomy thereby introducing uncertainty about the obstetric rationale for performing the operation. This lay questioning of episiotomy generated sufficient uncertainty about the value of episiotomy that some sympathetic professionals felt justified to investigate these lay criticisms and produce critiques for their own professional colleagues.

Of the professionals, nurse-midwives were the first to respond to the lay questioning of episiotomy in the late 1970s. Differing from the British midwifery critics of episiotomy, the majority of American nurse-midwife critiques were evidencebased. Typically using data from retrospective observational studies, these nursemidwives refuted the medical rationale for performing the operation or demonstrated that the avoidance of episiotomy did not compromise the health of the mother or infant. American medical questioning of episiotomy in contrast to that in Britain, was very slow to develop and never became very intense. The first physicians to criticise episiotomy were family physicians in the early 1980s. Critiques of episiotomy by obstetricians did not appear until the mid 1980s. Most of the critiques written by American physicians were evidence-based, the majority presenting data challenging the belief episiotomy prevents perineal trauma. Despite the greater proportion of evidencebased critiques in the U.S., the questioning of episiotomy did not have a major impact on the medical community. In fact, unlike the U.K., the episiotomy critiques of the early 80's failed to produce sufficient uncertainty or clinical equipoise about the operation within the American medical community to encourage anyone to mount a RCT to conclusively evaluate the alleged benefits of episiotomy.

### Factors Encouraging the Ouestioning of Routine Episiotomy

An important factor which encouraged the questioning of episiotomy by professional critics had to do with resistance to obstetrical control and the staking out of turf or boundary setting. In both the U.K. and U.S., midwifery interest in questioning episiotomy and the receptivity of rank and file midwives to this questioning related to concerns about professional preservation. In the U.K., midwives seized on the episiotomy issue as a means of resisting obstetrical intrusion into midwifery practice and decision making. By the late 1970s and early 1980s, British midwives had come to the realization that by uncritically adopting some obstetric technologies such as routine episiotomy, they had surrendered to obstetricians much of their decision making autonomy as independent practitioners. They also realized that in performing routine episiotomy, the traditional and revered midwifery skill of managing the perineum so as to minimize perineal trauma was being lost, perhaps forever. Midwives used the questioning of episiotomy to reassert the professional independence of midwifery decision making and to reclaim one of the hallmark skills of midwifery, delivery over an intact perineum.

In the U.S., the questioning of episiotomy by nurse-midwives and family practitioners was strongly motivated by desires of these professional groups to secure their position in the delivery of maternity care. After being virtually abolished early in the century, the late 1970s was a time when American nurse-midwives were in the throws restoring their profession as a legitimate provider of maternity care. Nurse-midwives considered guarding the perineum as a hallmark of their profession, differentiating nurse-midwifery from obstetrical care. However, because of their tenuous position as a new profession they were extremely sensitive to exposing nurse-midwifery practices to medical criticism. To justify deviating from the obstetrical norm of routine episiotomy, nurse-midwives began developing a scientific body of nurse-midwifery knowledge to justify their non-interventionist practices. The evidence-based nurse-midwifery episiotomy critiques provided some of this empirical knowledge by showing it was not uusafe to avoid performing episiotomies as had been claimed by American obstetricians. Similar to nurse-midwifery, during the 1970s, the specialty of family practice was also struggling to establish itself as a legitimate provider of maternity care. For this new developing specialty group, the questioning of episiotomy was part of an effort to stake claim to low risk, non-interventionist, family centred maternity care. By using episiotomy critiques to undermine the obstetric rationale for routine episiotomy, family practitioners sought to justify their alternative form of maternity care.

### Barriers to Overturning Routine Episiotomy

By comparing and contrasting the questioning of episiotomy which took place in the U.K. with the U.S., I have identified several reasons for the differential decline in the use of the operation in these countries. Most of the difference can be explained by who was doing the questioning and how they went about doing it. In the United States, significant obstetrical interest in questioning the practice never developed as it had in the U.K.. Within the American obstetrical community, the obstetricians who questioned the practice were too few in number and lacked the prominence necessary to seriously shake the profession's taken-for-granted acceptance of episiotomy. In other words, the obstetrical critics of episiotomy were unable to generate controversy or a debate about the procedure to counteract the well-respected obstetricians who continued to promote episiotomy. In addition to the insufficient obstetrical questioning of episiotomy, lay questioning of episiotomy in the U.S. also fell short compared with the situation in the U.K..

While there was considerable lay criticism of episiotomy in the U.S., an antiepisiotomy campaign never fully developed. For the most part, the lay critiques of episiotomy were embedded in criticisms of the medicalization of childbirth, a much broader issue. Episiotomy was discussed in the context of obstetrical intervention in general and was never made a separate issue as it was in the U.K.. Perhaps most importantly, in the U.S., no one with the charisma and influence of a Sheila Kitzinger organized and led the crusade against episiotomy. Furthermore, the questioning of episiotomy in the U.S. was not supported by national childbirth pressure groups. Because the lay questioning of episiotomy in the U.S. lacked focus, leadership, and intensity it had less impact on American obstetricians.

### **Discussion**

What generalizations does this case study allow us to make about the process of innovation in health care professions? This research has identified a number of determinants of innovation. Some are common to both the introduction of routine episiotomy and the overturning of this practice. Others are specific to one or the other phase in episiotomy use. The factors and forces which explain the evolution of episiotomy are advocacy and claims-making activity of specific individuals, the belief system, professional concerns, and an assortment of situation specific factors. There is one other factor which deserves comment because of its negligible role in either the acceptance or rejection of episiotomy. This factor is scientific evidence.

### Advocacy and Claims-Making Activity

This case study demonstrates that the forceful championing of an idea or practice by an influential individual or individuals can produce innovation. The process of advocating change involves making claims about the particular change being proposed. For example, the advocates of routine episiotomy claimed that the operation prevented perineal lacerations, infant morbidity and mortality, and future gynecological problems. The anti-episiotomy advocates issued counter-claims disputing these alleged benefits of episiotomy.

Part of the success of this sort of advocacy results from the content of the claims being made. However, the success of claims-making activity is also strongly related to the stature and authority of those making claims. For example, the advocacy of episiotomy by the influential and authoritative Drs. DeLee, and Pomeroy is credited with increasing the use of episiotomy in the U.S. during the 1920s and 30s. The pronouncements of authorities against a proposed change can also inhibit innovation. The obstetrical authorities of the late 1800s who opposed the 19th century episiotomy enthusiasts discouraged the more frequent use of episiotomy. This example also suggests that authoritative change agents are more likely to be successful than change agents who lack prominent reputations. The importance of the individual in championing change was also evident in the questioning of episiotomy which took place in the 1970s and 80s. In Britain, advocacy against the liberal use of episiotomy by Sheila Kitzinger, the country's most influential childbirth activist resulted in the declining use of episiotomy during the 1980s. This is in contrast to the U.S. where no universally respected lay activist argued against episiotomy and the rate has shown less of a decline.

While claims-making activity by prominent individuals can be an important and effective source of innovation, this research also shows that claims-making is not the only means by which changes in practice occur. In some cases, innovation can  $c_{1}$  cur without the advocacy of identifiable individuals. In Britain during the 1970s, the liberal use of episiotomy developed without any overt lobbying for it.

# The Belief System

This research reveals that the prevailing belief system and accepted views of appropriate practice can greatly influence the acceptance of new ideas. For example, in the late 1800s, while American episiotomy enthusiasts issued pleas for the greater use of episiotomy, these pleas were rejected. The operation went against the prevailing theory that birth and the functioning of the perineum were usually physiological or normal processes not requiring surgical intervention. In the 1930s, the acceptance of routine episiotomy, was greatly facilitated by the prevailing belief system which now held that birth was pathogenic. Obstetrical intervention was now thought to be required to safely negotiate a pathological process.

## Professional Concerns

In both the U.S. and U.K. factors related to professional concerns influenced both the routinization and overturning of episiotomy. In the U.S., efforts to redefine the mission of obstetrics as a surgical specialty ensured that obstetricians were receptive to the concept of routine epis: 'omy. In the U.K., resistance to obstetrical intrusion into midwifery practice and the interests of midwives in preserving the profession's autonomy in clinical decision making encouraged the restrictive use of episiotomy. In the U.S., nurse-midwives' and family practitioners' questioning of routine episiotomy was encouraged by their concerns about establishing their roles in maternity care and their desire to justify the avoidance of performing the episiotomy routinely. These examples show that when innovation serves the vested interests of a professional group (in addition to the perceived interests of consumers or patients) such innovation may be more readily accepted.

### Situation Specific Factors

This research also identifies a number of factors which encouraged either the acceptance of routine episiotomy or its decline. Routine episiotomy in both the U.S. and U.K. was greatly facilitated when the technology necessary to safely carry out the procedure became widely available. Similarly, technological developments increased the use of episiotomy as a byproduct of other procedures. The increasing popularity of forceps and anesthesia in the U.S., and induction in the U.K. necessitated the increased use of episiotomy because of the cascade of intervention effect.

A force which was not involved in the routinization of episiotomy but was central to the questioning of the practice is consumer pressure. In both the U.K. and U.S., consumer critiques of episiotomy produced sufficient controversy to prompt some professionals to also question the practice. In some cases, childbirth activists personally influenced professionals to produce evidence-based critiques of routine episiotomy. From this example, consumer pressure can be an extremely effective means of bringing about change in health care.

## Scientific Evidence

A factor which was consistently absent in both the acceptance and rejection of episiotomy was evidence. The routinization of episiotomy in the U.S. in the 1930s and 40s and in the U.K. in the 1970s occurred without evidence that episiotomy was beneficial or safe. All of the claims made for episiotomy were unproven, yet the operation became widely accepted. As for the overturning of episiotomy, this too came about with minimal evidence that episiotomy was unnecessary. In the U.K. the results from RCTs showing that avoidance of episiotomy rate had declined substantially. This indicates that lay questioning of episiotomy and controversy about the operation were more important in bringing about change than any evidence showing it was unnecessary. While scientific evidence had little to do with the initial decline in the use of episiotomy, it was subsequently used by childbirth activists and professionals to justify the restricted use of episiotomy.

### Some Thoughts On Studying Innovation

The approach I adopted to study episiotomy blends aspects of the natural history, interactive and belief system approaches to study the process of innovation. The results of this thesis suggest that this integrative approach improves understanding of the determinants of innovation.

A major advantage of this model is that by focusing on the processual and unfolding nature of change, it directs attention toward both successful and unsuccessful innovation. This permits insights to be drawn from the cases of failed attempts to bring about change as well as from cases of successful change. Applying McKinlay's (1982) natural history model of the career of a medical innovation to episiotomy would have provided a distorted view of the innovation process. McKinlay's seven stage career model does not consider failed attempts at bringing about change. By examining the unsuccessful efforts of the 19th century episiotomy enthusiasts, the integrative model provides valuable clues about several of the determinants of innovation.

As suggested by the interactive model, innovation is a social activity and process. Thus, identifying the individuals and communities responsible for change as well as their ideas and interests is an effective strategy for maintaining a focus when tracing the evolution of innovation. Identifying claims-makers is a useful starting point. By constantly asking "what are they saying?", "who are they?", and "what is their interest in this?", the process of putting the pieces of the innovation puzzle together is made much easier. Another lesson this approach teaches is to be as inclusive as possible in the analysis and to search out all the communities involved in producing change. For example restricting attention to the professional literature would not have revealed the extent to which the overturning of episiotomy resulted from lay efforts.

One caveat, however, is that it is also important to keep in mind that some changes occur without overt lobbying efforts. This is why it is so essential to first trace and describe all changes or attempted changes chronologically rather than focusing exclusively on discrete points in time where lobbying activities were successful and therefore appear to predominate.

Lastly, considering the prevailing belief system and its compatibility with the change being proposed can help inform the innovation process being investigated. However, using only a belief system approach to analyze the process of innovation might cause other important factors in the innovation process to be overlooked. For instance, how a change relates to practical issues such as existing technology may have little or nothing to do with the belief system in place. This thesis is a contribution to the literature on innovation and change in health care. It differs from previous case studies in that the focus is on a maternity care practice which is a knowledge-based skill. To date, most studies of innovation have examined the development or use of medical technologies including as drugs (e.g. Bell,1986, 1898; Richards,1975) or medical equipment (e.g. Waitzkin,1979; 1980) which involve many diverse communities such as basic scientists, commerce and possibly the state. Studying how changes have come about in the use of episiotomy is important because of the magnitude of low technology practices used daily by clinicians. By understanding the process of innovation in health care practices, this thesis may inform those interested in more evidence-based medicine. What is needed at this point are additional case studies of knowledge-based practices from other specialties. Only by such comparative research will the natural history of the process of innovation in health care be fully understood.

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## <u>APPENDIX A</u>

### LIST OF KEY INFORMANTS

#### David Banta, MD, MPH, MS

Professor of Technology Assessment, Department of Health Economics, University of Limburg, Netherlands; Consultant, World Health Organization; formerly Director of the Office of Technology Assessment, U.S. Congress

#### Beverley Beech

Childbirth Activist; Honorary Chair, Association for the Improvements in Maternity Care Services; lay adviser to the National Perinatal Epidemiology Unit, Oxford; author of <u>Who's Having Your Baby? A Health Rights Handbook for Maternity Care</u> (1987)

Jean Campen, CCE (by correspondence) Statistics Columnist, International Journal of Childbirth Education

Iain Chalmers, MB,BS, MSc (Soc Med), DCH, FFCM, FRCOG Director of the National Perinatal Epidemiology Unit, Radcliffe Infirmary, Oxford; editor of <u>Effective Care in Pregnancy and Childbirth</u> (with Murray Enkin and Marc Keirse), (1989) and <u>A Guide to Effective Care in Pregnancy and Childbirth</u> (with Murray Enkin and Marc Keirse), (1989)

Diana Elbourne, BSc, MSc, PhD Social Statistician, National Perinatal Epidemiology Unit, Radcliffe Infirmary, Oxford

# Eleanor Enkin, BHSc

Former research assistant to Sheila Kitzinger; Honorary Research Assistant, National Perinatal Epidemiology Unit, Oxford

# Murray Enkin, MD, FRCS(C), FACOG

Professor Emeritus, Departments of Obstetrics and Gynaecology, Clinical Epidemiology and Biostatistics, McMaster University, Hamilton, Ontario; formerly, Board Member of the International Society of Psychosomatic Obstetrics and Gynecology, Vice President ICEA, Associate Editor, <u>Birth</u>; co-editor of <u>A Guide to Effective Care in</u> <u>Pregnancy and Childbirth</u> (with Iain Chalmers and Marc Keirse), (1989) and of <u>Effective Care in Pregnancy and Childbirth</u> (with Iain Chalmers and Marc Keirse), (1989)

## Caroline Flint, SRN, SCM, ADM

Consultant, Midwifery, Maternal and Child Health, Riverside Health Authority; Midwifery Researcher; author of <u>Sensitive Midwifery</u> (1986) and <u>The "Know Your Midwife" Report</u> (1987)

## Doris Haire, DMS

Childbirth Activist and Lobbiest; President of the American Foundation For Child Health;

Ex-President of the ICEA (1971-1972); author of <u>The Cultural Warping of Childbirth</u> (1972)

# Louise Hanvey, BN, MHA

Consultant. Women's and Children's Health, Chelsea, Quebec

Robert Harrison, MA, MD, FRCS (Ed), FRCOG, FRCP (Ir).m (by correspondence) Professor and Head of Department, Royal College of Surgeons in Ireland, Academic Department of Obstetrics and Gynaecology, Rotunda Hospital, Dublin

## Michael House, MD, FRCOG

Consultant Obstetrician Gynaecologist, West London Hospital, London

## Sally Inch, SRN, SCM

Midwife; Midwifery Researcher; NCT Antenatal Tutor; author of <u>Birthrights. What</u> <u>Every Parent Should Know About Childbirth in Hospital</u> (1982; 1984); editor of the Royal College of Midwives' publication <u>Successful Breastfeeding- A Practical Guide</u> for <u>Midwives</u> (1988); author of <u>Approaching Birth</u> (1989), and <u>Birthrights. A Parents'</u> <u>Guide to Modern Childbirth</u> (1989)

# Sally Jorgenson, MB, BS, FRCS(C)

Obstetrician Gynecologist, Jewish General Hospital, Montreal; Investigator, McGill University and University of Montreal Episiotomy Trial

### Sheila Kitzinger, BA, MLitt, MBE (1982)

Internationally recognized childbirth educator; social anthropologist; , National Childbirth Trust teacher and tutor; Panel of Advisers, National Childbirth Trust; Consultant, International Childbirth Education Association; author of The Experience of Childbirth (1962, 6th ed 1987), Giving Birth: The Parents' Emotions in Childbirth (1971, rev. 1987), Education and Counseling for Childbirth (1977), Women and Mothers (1978), The Place of Birth (ed with John Davis, 1978), Birth at Home (1979), The Good Birth Guide (1979), The Experience of Breastfeeding (1979, 2nd ed 1987), Pregnancy and Childbirth (1980, 12th printing 1988), Sheila Kitzinger's Birth Book (1981), Some Women's Experiences with Episiotomy (with Rhiannon Walters, 1981), Episiotomy: Physical and Emotional Aspects (1972; 1981), Birth Over Thirty (1982), The New Birth Guide (1983), Women's Experience of Sex (1983), Episiotomy and the Second Stage of Labor (ed. with Penny Simpkin, 1984, 2nd ed. 1986); Celebration of Birth (1987), Freedom and Choice in Childbirth (U.S. ed. Your Baby Your Way, 1987), Giving Birth: How It Really Feels (1987), Some Women's Experiences with Epidurals (1987), The Midwives Challenge (ed, 1987), The Crying Baby (1989), The New Preg-nancy and Childbirth (1989), Breastfeeding Your Baby (1989), Your Values Your Child (1989), Pregnancy Day by Day (with Vicky Bailey, 1990)

# Michael Klein, MD, CCFP, FCFP, ABFP, FAAP

Professor of Family Medicine; Chief and Director, The Herzl Family Practice Centre, McGill University Medical School; Principal Investigator, McGill University and University of Montreal Episiotomy Trial

Alison Macfarlane. BA, Dip Stats (by correspondence) Medical Statistician, National Perinatal Epidemiology Unit, Radcliffe Infirmary, Oxford; author of <u>Birth Counts. Statistics of Pregnancy and Childbirth</u> (with Miranda Mugford), (1984); <u>Where to be Born? The Debate and the Evidence</u> (with Rona Campbell) (1987)

# Mary Renfrew, BSc. RGN, SCM, PhD, RN (Canada)

Midwifery Researcher, National Perinatal Epidemiology Unit, Radcliffe Infirmary, Oxford; author of <u>Bestfeeding: Getting Breastfeeding Right for You</u> (with Chloe Fisher and Suzanne Arms), (1990) Catherine Kohler Riessman, PhD

Professor, Smith College, School of Social Work, Northampton, Mass.

# Jennifer Sleep, BA, SCM, ADM

District Research Co-ordinator, West Berkshire Health Authority; Principal Investigator, West Berkshire Perineal Management Trial

## Norma Swenson, MPH

Women's Health Activist; Ex-President of the ICEA (1966-68); Co-director, Women's Institute For Childbearing Policy; co-editor <u>Our Bodies Ourselves</u>, <u>The New Our</u> <u>Bodies Ourselves</u>, <u>Ourselves Growing Older</u>

Stephen Thacker, MD (by correspondence) Assistant Director for Science, Center for Environmental Health and Injury Control, Centers for Disease Control, Atlanta

Dawn Walker, Chief, Family and Child Health Unit, Health and Welfare Canada

**Dorothy Wertz**, PhD (by correspondence) Research Professor, Boston University School of Public Health; author of <u>Lying-In, A</u> <u>History of Childbirth in America</u> (with Richard Wertz) (1977; 1979; 1989)

## **Diony Young**

Editor of <u>Birth: Issues in Perinatal Care</u>; author of <u>Unnecessary Cesarean Sections</u> (with Charles Mahan) (1980); author of <u>Changing Childbirth</u>, <u>Family Birth in Hosptial</u> (1982); editor of <u>Obstetrical Intervention and Technology in the 1980s</u> (1982); coeditor of <u>The Birth Trap</u> (Yvonne Brackbill and June Rice) (1984).

#### Luke Zander, MB BChir, DCH, DobstRCOG, MRCGP

Senior Lecturer, Department of General Medicine, United Medical and Dental Schools of St. Guy's and St. Thomas'; President of the Royal Society of Medicine's Section on General Practice (1980).

#### <u>APPENDIX B</u>

#### PHYSICIAN BIOGRAPHIES

## Aldridge, Albert

1935- Obstetric Service of the Woman's Hospital, New York; 1951- Chief Surgeon, Woman's Hospital; Clinical Professor, Obstetrics and Gynecology, College of Physicians and Surgeons, Columbia University

Fellow of the American College of Surgeons; Fellow of the American Gynecological Society (1934); AGS Council (1940); Diplomat of the American Board of Obstetrics and Gynecology (automatic)

Sources: Aldridge and Watson (1935); American Medical Directory (1938); AGS (1952)

### Anspach, Brooke M.

1915-Associate in Gynecology, University of Pennsylvania; Gynecologist and Obstetrician to the Philadelphia and Stetson Hospitals; Assistant Gynecologist, University Hospital; Surgeon to the Gynecean Hospital; 1952- Professor Emeritus of Gynecology, Jefferson Medical College.

1915- Fellow of the American College of Surgeons; Fellow of the American Gynecological Society (elected 1909); Treasurer of the AGS (1916-1922); Vice-President of the AGS (1923); President of the AGS (1935); Life Fellow of the AGS (1935); AGS Council (1936-1939); Diplomat of the American Board of Obstetrics and Gynecology (automatic). In 1921, Anspach was nominated to represent the AGS on the Board of Governors of the American College of Surgeons (Trans AGS, 1921:46)

Sources: AGS (1915); Broun (1918); AGS (1952); AJOG (1931:296)

#### **Ballentyne**, John William

Lecturer on Midwifery and Gynaecology, School of Medicine of the Royal Colleges, Surgeons' Hall, Edinburgh; Examiner in Midwifery in the University of Edinburgh.

Fellow of the Royal College of Physicians (Edin); Fellow of the Royal Society (Edin); Honorary Fellow of the American Association of Obstetricians and Gynecologists (1899); Former President of the Edinburgh Obstetrical Society; Honorary Fellow of the Glasgow Obstetrical and Gynaecological Society; considered the so-called 'founding father' of British antenatal care (Oakley, 1986:20).

#### Sources: AAOGAS (1942)

#### **Barker**, Fordyce

Professor of Clinical Midwifery and Diseases of Women, Bellevue Hospital Medical College, New York; Surgeon to the Woman's Hospital, New York; Consulting Physician, Bellevue Hospital, New York.

Founder of the AGS (1876); first President of the AGS (1876 and 1877); Council (1883); President of the Connecticut Medical Society and the New York Academy of Medicine; Member of the County and State Societies; Honorary Fellow of London,

Edinburgh Medical Associations; LL.D. Columbia College, Bowdoin College, Universities of Edinburgh, Glasgow and Bologna (AGS, 1900:18). Barker is reported to have been at the time he was practicing obstetrics, "the ... leading obstetrical practitioner of New York City" (Frankel, 1927:1217).

Sources: Barker (1874); AGS (1885); Chadwick, Dickinson and Edgar (1901)

## Belvins, W.J.

1929- Obstetrician, member of the AMA Source: American Medical Directory (1929)

## Berlind, Melvyn

-1929 no memberships Source: American Medical Directory (1929)

# Blacker, George

1910- Fellow of the University College, London; Teacher of Practical Midwifery, University College Hospital Medical School; Examiner in Obstetric Medicine to the Royal Colleges of Physicians and Surgeons; Obstetrician Physician to University College Hospital and Great Northern Central Hospital.

Fellow of the Royal College of Surgeons (Edin); Fellow of the Royal College of Physicians (Lond); co-author of the textbook: <u>The Practice of Midwifery</u>, 1910.

Source: Galabin and Blacker (1910)

### Broomall, Anna

1878- Resident Physician, Woman's Hospital Philadelphia; licensed 1881. Sources: Broomali (1878), American Medical Directory (1906:820)

#### Cameron, J. Chalmers (1903)

1903- Professor of Obstetrics and of Diseases of Infancy, McGill University, Montreal; Consulting Physician, Montreal General Hospital, Physician Accoucheur to the Montreal Maternity.

Member of the Royal College of Physicians (Lond); Honorary Fellow of the AGS (1910); appointed chair of Obstetrics at McGill University in 1886 and held this professorship for 26 years. According the AGS, Cameron "became widely known" not only as a "practitioner and educator ... but also as a contributor to various textbooks on medicine. His treatise were written in English, French and German" (Broun, 1918;92)

In 1903, Cameron authored a chapter in <u>The American Text-book of Obstetrics</u>. He along with the other chapter authors were selected by the textbook's editors because they were believed to be "prominent American obstetricians... possessing experience as teachers of obstetrics in several of the leading medical schools and hospitals in America" (Norris and Dickinson, 1903:7)

# Sources: Cameron (1903); Broun (1918)

#### Child, Charles G.

1915- Professor of Gynecology, New York Polyclinic Medical School; Consulting Gynecologist, St. Faith's Home; Attending Gynecologist, City Hospital; Junior Surgeon, Woman's Hospital; 1917- Professor of Gynecology, New York Polyclinic Medical School; Attending Gynecologist, Polyclinic Hospital, City Hospital; Consulting Gynecologist, Mount Vernon Hospital, St. Faith's Hospital, Attending Gynecologists, City Hospital, Assistant Surgeon Woman's Hospital.

1917- Fellow of the American Gynecological Society (1913); resigned from the AGS (1929); 1918- member of the AMA; New York Obstetrical Society

Sources: AGS (1915); Broun (1918); American Medical Directory (1918)

### Cooke, Willard

1937- Professor of Obstetrics and Gynecology, University of Texas; Obstetrician and Gynecologist-in-Chief, John Sealy Hospital, 1951- Professor of Obstetrics and Head of the Department of Obstetrics and Gynecology, University of Texas; Obstetrician and Gynecologist-in-Chief, John Sealy Hospital. Member and Director of the American Board of Obstetrics and Gynecology.

Fellow of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons (1927); Vice-President AAOGAS (1936-7); President AAOGAS (1942-43); Fellow of the AGS (1936); Diplomat of the American College of Obstetricians and Gynecologists; Member of the AMA, Chicago Orthopedic Club; 1941- Fellow of the Central Association of Obstetricians and Gynecologists; Member of the Southern Gynecologic Society, Texas Association of Obstetricians and Gynecologists, and Texas Surgical Society; 1951- Member and Director of the American Board of Obstetrics and Gynecology.

Sources: Cooke (1937); American Medical Directory (1938); AAOGAS (1942); AGS (1952)

#### Credé, Carl Siegmund Franz

Professor of Obstetrics and Gynecology, Leipsic, held the position for 32 years (1856-1887).

Founder and editor of <u>Archiv für Gynäkologie</u>, 1870-1892. "'Crede's method of expressing the placenta' (removing the placenta by external manual expression) and 'Crede's prophylaxis of ophthalmia neonatorum' (eye drops of 2% silver nitrate) are procedures well known to the obstetrical world. The man whose name has become thus memorialized well deserves such recognition, for he was one of the illustrious leaders in obstetrics and gynecology of his century... His most noted contribution is undoubtedly that of the prophylaxis of opthalmia neonatorum which, since its universal adoption, has unquestionably prevented blindness in many thousands of newborn" (Thoms, 1935:70, 71).

Source: Thoms (1935)

## Danforth, David N.

1982- Professor of Obstetrics and Gynecology, Northwestern University Medical School

Life Fellow AGS; Fellow AGS (1955); Vice-President and President AGS (1974)

Source: AGS (1982)

## DeLee, Joseph, Bolivar

1920- Professor of Obstetrics, Northwestern University Medical School; Obstetrician, Chicago Lying-in Hospital and Dispensary; Attending Obstetrician, Mercy Hospital; Consulting Obstetrician, Provident and Evanston Hospitals; subsequently, Chairman, Department of Obstetrics and Gynecology, University of Chicago (1929-1932); Professor, Obstetrics and Gynecology, University of Chicago (1932-34); Professor Emeritus of Obstetrics and Gynecology, University of Chicago;

1920- Fellow of the American College of Surgeons; elected to the AGS (1918); Vice-President of the AGS (1930); Secretary, Chicago Medical Society (1899); President, Chicago Gynecological Society (1908); Member of the AMA; Honorary Fellow, Edinburgh Obstetrical Society; Diplomat of the American Board of Obstetrics (automatic); author of <u>Principles and Practice of Obstetrics</u>, (first edition 1913, 9th edition 1947; the 10th edition was taken over by Greenhill (1951); the 10th-13th editions were published under the title, <u>Obstetrics</u>, (Greenhill, 1951; 1955; 1961;1965); Greenhill and Friedman (1974) republished the text as <u>Biological Principles and Modern</u> <u>Practice of Obstetrics</u>); author of <u>Obstetrics for Nurses</u> (first edition 1904, 13th edition 1944; following his death the title was changed to <u>DeLee's Obstetrics for Nurses</u> and another four editions issued); editor of <u>Yearbook of Obstetrics</u> (1904-1942).

DeLee "organized and established the Chicago Lying-in Dispensary in 1895, which finally became the Chicago Lying-in Hospital through his continuous efforts. He was professor of obstetrics at Northwestern University for many years, and when Chicago Lying-in Hospital became part of the University of Chicago, he became Chairman of obstetrics and gynecology at its School of Medicine until 1932, when he founded the Chicago Maternity Center" (Everett and Taylor, 1976:915). According to Everett and Taylor, (1976:915), DeLee's "greatest contribution among many to the practice of obstetrics was his advocacy of outlet forceps operation and episiotomy and repair in 1920 as part of the management of normal delivery." In his In Memoriam to DeLee, Adair (1943:368) writes,

He was a star of the first magnitude in the obstetric heavens and only death has dimmed the brilliancy which will continue to illumine the atmosphere of his profession.

... This man dies but his influence marches on through decades by his person contacts, writings, and visual education.

Sources: American Medical Directory (1921); Schwartz (1938); AJOG (1931:297); Adair (1943) (Speert, 1980)

# Deutschman, David

1925- Member of the AMA, listed as Obstetrician/Gynecologist Source: American Medical Directory (1925)

## Diethelm, Martin

1938- Fellow of the American College of Surgeons; Diplomat of the American Board of Obstetrics, Member AMA

Source: American Medical Directory (1938)

## Duncan, James

1930- Clinical Professor of Obstetrics and Gynecology, McGill University; Obstetrician and Gynecologist to the Royal Victoria Hospital, Montreal.

1930- Member of the Royal College of Surgeons (Canada), American College of Surgeons, Royal Society of Medicine (England) and Canadian Medical Association; 1952- Fellow of the American College of Surgeons; Fellow of the Royal College of Surgeons (Canada); Fellow of the Royal College of Obstetricians and Gynecologists; elected to the AGS (1929); AGS Council (1935); Vice-President of the AGS (1941) Sources: American Medical Directory (1929); (Keene, 1930); AGS (1952)

#### Eastman, Nicholson J.

1936- Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-Chief, Johns Hopkins Hospital

1952- Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-Chief, Johns Hopkins Hospital

Fellow of the AAOGAS (1936); Fellow of the American College of Surgeons, Fellow of the AGS (1937); Diplomat of the American Board of Obstetrics and Gynecology; Founder and editor of <u>Obstetrical and Gynecological Survey</u>; author of <u>Williams Obstetrics</u> 10th-13th editions (1950-1966)

Sources: AAOGAS (1936), AGS (1952)

## **Eden, Thomas Watts**

1911- Examiner in Midwifery and Diseases of Women to the University of Oxford and the Royal Army Medical College; Obstetrician Physician with charge of out-patients and Lecturer on Practical Midwifery and Gynecology, Charing Cross Hospital.

Fellow of the Royal College of Physicians (Lond); Fellow of the Royal College of Surgeons (Edin); Honorary Fellow of the AGS (1920); author of <u>A Manual of Midwifery</u>, 1911 (1st edition), 1948, (9th edition); <u>The New System of Gynaecology</u>, 1917; <u>Gynaecology</u> for Students and Practitioners, 1920

Sources: Eden (1911); AGS

Edgar, James Clifton (1903 1st edition, 1913 4th edition),

Professor of Obstetrics and Clinical Midwifery, Cornell Medical College; Attending Obstetrician to the New York Maternity Hospital; Obstetric Surgeon to the Mothers' and Babies' Hospital; Obstetrician to the Emergency Lying-in Hospital

Elected to the AGS in 1893, Vice-President AGS (1907); Member of the New York Obstetrical Society; American Academy of Medicine; New York Academy of Medicine; New York Clinical Society; author of <u>The Practice of Obstetrics</u> considered by Speert (1980:128) to be one of the major American obstetrics texts first part of twentieth century.

Sources: Edgar (1903); Chadwick, Dickinson and Edgar (1901) Broun (1918); AGS (1904)

## Galabin, Alfred

Late Fellow of Trinity College, Cambridge; Consulting Physician to Guy's Hospital; Late Examiner in Obstetric Medicine to the Universities of Oxford, Cambridge, London and New Zealand, and to the Royal Colleges of Physicians and Surgeons (Galabin and Blacker, 1910). Fellow of the Royal College of Physicians (Lond); Late President of the Obstetrical Society of London; co-author of the textbook: <u>The Practice of Midwifery</u>.

Source: Galabin and Blacker (1910)

## Galloway, Charles

Obstetrician Gynecologist, Evanston Hospital,; Assistant Professor of Obstetrics and Gynecology, North Western University

Fellow of the American College of Surgeons; Diplomat of the American Board of Obstetrics and Gynecology (automatic); member of the AMA; Chicago Orthopedic Club; Sources: Galloway (1935); American Medical Directory (1)38)

#### Garrigues, Henry (1880)

Obstetric Surgeon to the New York Maternity Hospital; Physician to the Gynecological Department of the German Dispensary of the City of New York; subsequently Visiting Obstetrician to the New York Infant Asylum; Gynecologist to the German Hospital; Professor of Obstetrics in Postgraduate Medical Schools and Hospital, New York.

Elected to the AGS 1877; AGS Council (1882,1898); Vice-President AGS (1897); Honorary Fellow of the AGS (1901); Fellow of the New York Academy of Medicine; Member of the New York County Medical Society, Society of Medical Progress, Eastern Medical Society; Ex-President of the German Medical Society; Honorary fellow of the Obstetrical Society of Edinburgh (1902); according to the AGS (1918:190), Garrigues was a voluminous author. His best-known works were: <u>The Diagnosis of Ovarian Cysts</u>, 1882; <u>Practical Guide to</u> <u>Antiseptic Midwifery</u>, 1886; <u>Text-book of Diseases of Women</u>, 1894-1897-1900; <u>Text-book of</u> <u>Obstetrics</u>, 1902.

In 1903, Garrigues authored a chapter in <u>The American Text-book of Obstetrics</u>. He along with the other chapter authors were selected by the textbook's editors because they were believed to be "prominent American obstetricians... possessing experience as teachers of obstetrics in several of the leading medical schools and hospitals in America" (Norris and Dickinson, 1903:7)

Sources: AGS (1885); Chadwick, Dickinson and Edgar (1901): Broun (1918).

### Gillis, R.A.D.

1929- Obstetrician, Mercy Hospital;

Fellow of the AAOGAS (1929); AMA; Diplomat of American Board of Obstetrics and Gynecology (automatic)

Sources: American Medical Directory (1929), AJOG (1931:297), AAOGAS (1942)

## Goodell, William

1871- Clinical Lecturer on Diseases of Women and Children, University of Pennsylvania; Physician-in-Charge of the Preston Retreat, Philadelphia; subsequently: 1874-1894-Clinical Professor of the Diseases of Women and Children, University of Pennsylvania

Founder and President of the Philadelphia Medical Society (1872, 1873); Founder of the AGS (1876); AGS Council (1876,1877,1880,1889); Vice President of the AGS (1878); 1900-Honorary Fellow of the Edinburgh Obstetrical Society and of the Imperial Medical Society of Constantinople; Corresponding Fellow of the London Obstetrical Society, Fellow of the College of Physicians of Philadelphia; Sources: Chadwick, Dickinson and Edgar (1900:124); Eroun (1918:202)

### Gross, Samuel D.

1884- Emeritus Professor of Surgery, Jefferson Medical College, Philadelphia.

Founder of the Philadelphia Academy of Surgery; Founder of the American Surgical Association; President of the American Surgical Association (1879); Founder of the Pathological Society of Philadelphia. Sources: Gross (1884); Lund (1930); Stevens (1971:53)

#### Gusman, Harry

Obstetrician, Mt. Sinai Hospital, Cleveland Member of the AMA Sources:Gusman (1932), American Medical Directory (1929)

## Hannah, Calvin R.

1922-1935- Chief of Staff, Parkland Hospital; Obstetrician-in-Chief, Baylor and Parkland Hospitals; Professor of Obstetrics, Baylor University College of Medicine

Fellow of the AAOG (1910); Vice-President of the AAOGAS (1922); FACS; Diplomat of the American Board of Obstetrics and Gynecology (automatic); President of the Dallas County Medical Society (1914); President of the State Medical Association (1938); first President of the Texas Association of Obstetricians and Gynecologists; Member, Dallas County Medical Society, the North Texas Medical Association, the Dallas Southern Clinical Society, the Texas State Medical Association, the AMA.

In 1930 he was appointed a member of the White House Conference on Health and Prenatal and Maternal Care by President Herbert Hover.

Sources: AAOG (1919); American Medical Directory (1929), AJOG (1931:297), Johnson (1942:217)

#### Harrar, James A.

1919- Attending Surgeon, Lying-in Hospital, New York; 1941- Associate Professor of Obstetrics and Gynecology, Cornell University; Attending Obstetrician and Gynecologist, New York Hospital; Consulting Obstetrician, Margaret Hague Maternity Hospital, Jersey City.

1919- Fellow of the American College of Surgeons; Fellow of the American Association of Obstetricians and Gynecologists (1910); Vice-President AAOGAS (1922): Honorary Fellow AAOGAS; 1942- Diplomat of the American Board of Obstetricians and Gynecologists; Member of the New York Obstetrical Society.

Sources: AAOG (1920); American Medical Directory (1921); AAOGAS (1942)

## Hirst, Barton Cooke (1902)

Professor of Obstetrics, University of Pennsylvania; Gynecologist to the Howard, the Orthopedic and the Philadelphia Hospital

Elected AGS (1891); Vice-President AGS (1922) President AGS (1924); Associate foreign member of the Obstetric Society of Paris; College of Physicians of Philadelphia; Philadelphia Obstetrical Society; author of <u>A Text-book of Obstetrics</u> considered by Speert (1980:128) to be one of the major American obstetrics texts of the first part of twentieth century.

In 1903, Hirst authored a chapter in <u>The American Text-book of Obstetrics</u>. He along with the other chapter authors were selected by the textbook's editors because they were believed to be "prominent American obstetricians... possessing experience as teachers of obstetrics in several of the leading medical schools and hospitals in America" (Norris and Dickinson, 1903:7)

Sources: Hirst (1902); Chadwick, Dickinson and Edgar (1901) Broun (1918); Speert (1980)

### Holland, Eardley (1937)

Obstetric and Gynaecological Surgeon and Lecturer on Obstetrics and Gynaecology, The London Hospital; Consulting Surgeon, The City of London Maternity Hospital.

Fellow of the Royal College of Physicians (Londond); Fellow of the Royal College of Surgeons (England); Fellow of the Royal College of Obstetricians and Gynaecologists; late Examiner in Midwifery and Diseases of Women at the Universities of Cambridge, London and Durham.

## Jellett, Henry

Gynaecologist and Obstetrician to Dr. Stevens' Hospital, Dublin; Extern Examiner in Midwifery, Royal University of Ireland; Examiner in Midwifery, Royal College of Physicians; Ex-Assistant Master, Rotunda Hospital; Ex-University Examiner in Midwifery and Gynaecology, Dublin University; subsequently, Master of the Rotunda Hospital (1910-14, 1917-19).

Fellow of the Royal College of Physicians (Ireland); author of <u>A Manual of Midwifery</u> for <u>Students and Practitioners</u>, 1905.

Sources: Jellett (1905), Munro Kerr (1954)

## Jewett, Chas

Professor of Obstetrics and Diseases of Children, Long Island College Hospital (1880-1899); Obstetrician to Long Island Hospital; subsequently, Professor of Obstetrics and Gynecology, Long Island College Hospital; Gynecologist to Long Island Hospital; Consulting Obstetrician to King's County Hospital; Surgeon-in-Chief to the Gynecological Department of Brooklyn Throat Hospital

Elected to the AGS in 1885, AGS Council (1895); First Vice-President of the AGS (1901); Member of the Medical Society of the County of Kings, President (1878-80), Trustee (1894); Brooklyn Pathological Society; Brooklyn Gynecological Society, President (1893); New York Obstetrical Society, President (1894); New York Academy of Medicine; Medical Society of State of New York; American Academy of Medicine; Congress Periodique International d'Obstétrique et de Gynécologie; Honorary Member of British Gynecological Society and Detroit Gynecological Society; Honorary President of Obstetrical Section of Pan-American Medical Congress (1893); editor of <u>The Practice of Obstetrics by American Authors</u>; author of <u>Childbed Nursing</u>, <u>Outlines of Obstetrics and Essentials of Obstetrics</u>.

Sources: Jewett (1892); Chadwick, Dickinson and Edgar (1901:174); Broun (1918:266),

Johnstone, Robert (1913)

Assistant to the Professor of Midwifery, University of Edinburgh; Clinical Tutor in Gynecology, Royal Infirmary; subsequently Professor of Midwifery and Diseases of Women in the University of Edinburgh (Johnstone, 1913)

Fellow of the Royal College of Surgeons (Edin); Member of the Royal College of Surgeons (Edin); Honorary Fellow of the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons (1919); Fellow of the Royal College of Obstetricians and Gynaecologists; Commander of the Order of British Empire (1954); author of <u>A Textbook</u> of <u>Midwifery</u>.

Sources: Johnstone (1913); AAOGAS (1942)

# Kelly, Robert

1929- Obstetrician/Gynecologists; Fellow of the American College of Surgeons; Member of the AMA;

Source: American Medical Directory (1929)

#### Lusk, William (1884, 1885, 1890)

Professor of Obstetrics and Diseases of Women and Children and of Clinical Midwifery at Bellevue Hospital and Medical College, New York; Physician to Bellvue Hospital, New York; Obstetric Surgeon to the Maternity Hospital, New York; Visiting Physician to the Emergency Lying-in Hospital.

Founder of the AGS (1876); Vice-President of the AGS (1889); President of the AGS (1894); Corresponding Fellow of the Obstetrical Societies of London and Edinburgh, subsequently Honorary Fellow of the Obstetrical Societies of London and Edinburgh; Co-editor of the New York Medical Journal (1871-2); Honorary President of the obstetrical section of the Berlin Medical Congress; author of <u>The Science and Art of Midwifery</u> considered by Speert (1980:128) to be one of the major American obstetrics textbooks of the later part of the 19th century.

Sources: Lusk (1884); AGS (1885); Chadwick, Dickinson and Edgar (1901); AGS (1952); Speert (1980)

#### Madden, Thomas More

Examiner in Midwifery and Diseases of Women and Children, Queen's University, Ireland; Ex-Assistant Physician at the Rotunda Lying-in Hospital Dublin.

Member of the Royal College of Surgeons (Ireland)

Source: Madden (1872)

#### Manton, Walter P.

1880-81- House surgeon to the Free Hospital for Women, Boston; 1881-84- studied abroad under von Winckel in Dresden, Credé in Leipzig, Holl in Insbruck, Spaeth, Pawlik, and others in Vienna; 1894- Professor of Clinical Gynecology and Lecturer on Obstetrics, Detroit College of Medicine; 1899- Professor of Clinical Gynecology and Adjunct Professor of Obstetrics, Detroit College of Medicine; Gynecologist to Harper Hospital, the Eastern and Northern Michigan Asylum for the Insane, and the St. Joseph's Retreat, Detroit; 1917- Professor and Head of the Department Obstetrics and Clinical Gynecology, Detroit College of Medicine and Surgery; Gynecologist to Harper Hospital and to the Pontiac and the Northern State Hospitals for the Insane. 1894- Fellow of the Royal Microscopical Society; American Microscopical Society; British Zoological Society; Elected AGS (1901); Vice-president of the AGS (1922); Fellow of the American College of Surgeons; President Wayne County Medical Society (1908-09); Chairman, Section on Obstetrics, Diseases of Women and Abdominal Surgery, AMA (1908-9); Fellow of the Royal Society of Medicine (England); President, Detroit Gynecology Society (1891); Academy of Medicine (1892-95); author of <u>Taxidermy Without a Teacher</u>, 1882; <u>Syllabus of Lectures on Human Embriology</u>, 1894.

Sources: Jewett (1899), Broun (1918:320)

## MaCausland, Alfred

1938-listed as specialist in obstetrics and gynecology Source: American Medical Directory (1938)

# Nugent, Fred

Obstetrician Gynecologist, Philadelphia Lying-in Hospital

Member of the Obstetrical Society of Philadelphia; AMA Sources: Nugent (1935); American Medical Directory (1938)

#### Pallen, Montrose (1876:469),

Professor of Gynecology, Medical Department of the University of New York, Surgeon to Charity Hospital, New York. Pallen was one of ten full professors holding chairs in gynecology in America in 1872- St. Louis College of Physicians and Surgeons (Speert, 1980:69)

Sources: Pallen (1876); Speert (1980:69)

#### **Parvin, Theophilis** (1882:150-1; 1890:434; 1895:),

Professor of Obstetrics and Diseases of Women and Children in the College of Physicians and Surgeons, Indianapolis. Parvin was one of ten full professors holding chairs in gynecology in America in 1872- University of Louisville (Speert, 1980:69).

Founder AGS (1276); AGS Council (1876-77); Vice-President of the AGS (1883, 1886); President of the AGS (1893); President of the State Medical Society of Indiana, American Academy of Medicine. Philadelphia Obstetrical Society; Member of the American Medical Journalists' Association; American Medical Association; Chairman of the AMA's Section on Obstetrics and Diseases of Women and Children (1874); Honorary Member: Washington Obstetrical and Gynecological Society, and the State Medical Societies of Virginia and Delaware; Honorary President, obstetrical section of the International Medical Congress, Berlin (1890); Brussels (1892); Honorary Fellow, Edinburgh and Berlin Obstetrical Society; Coeditor of, Cincinnati Journal of Medicine, 1866-1867; Editor of Western Journal of Medicine, 1867-1869; Co-editor, American Practitioner, 1969-1883; author of the textbook: <u>Science and</u> <u>Art of Obstetrics</u> which was "widely adopted" according the AGS (1918:370).

Sources: Chadwick, Dickinson and Edgar (1901); Broun (1918); AGS (1952); Speert (1980)

#### Pomeroy, Ralph

1918-Associate Professor of Gynecology and Obstetrics, Long Island College Hospital (since 1912); Consulting Obstetrician, Kings County Hospital; Senior Obstetrician, Methodist Episcopal Hospital; Visiting Gynecologist and Obstetrician, Brooklyn Hospital; Consulting Obstetrician, St. John's Hospital; Founder and Attending Staff, Williamsburg Hospital. 1918- Fellow of the American College of Surgeons (1914); Fellow of the American Gynecological Society (1917); Fellow of the Brooklyn Gynecological Society (1900); New York Obstetrical Society (1908); President of the Medical Society of Kings County (1916); member of the AMA.

Only Fellow of the New York Obstestrical Society to be twice elected President (Speert, 1980:228). According to Speert (1980), Pomeroy devised one of the most popular methods of tubal ligation and his name is also associated with a technique for rotating the fetal head from a posterior position by manipulating of the anterior shoulder.

Sources: Pomeroy (1918); Broun (1918); American Medical Directory (1918)

## Pratt, J.P.

1941-Chief, Department of Obstetrics and Gynecology, Henry Ford Hospital, Detroit

Fellow of the AAOGAS (1938); Diplomat of the American Board of Obstetrics

## Sources: AAOGAS (1942)

#### Reamy, Thad

1871-1888- Professor of Obstetrics, Clinical Midwifery, and Diseases of Women and Children, Medical College of Ohio; Professor of Gynecology, Medical College of Ohio; Obstetrician and Surgeon to the Good Samaritan Hospital; Obstetrician and Gynecologist to the Cincinnati Hospital.

Elected to the AGS in 1877; Vice-President of the AGS (1881); AGS Council (1883); President of the AGS (1886); Honorary Fellow AGS (1907); Co-founder Cincinnati Obstetrical Society (1876), President of the Cincinnati Obstetrical Society (1880), ex-president of the Cincinnati

Sources: AGS (1885; 1952); Keene (1930); Speert (1980:117)

## Sanders, John T.

1929-Obstetrician/Gynecology; AMA Source: American Medical Directory (1929)

## Sellars, Thomas

1929- Assistant Professor of Clinical Gynecology; Obstetrician/Gynecologist

Fellow of the American College of Surgeons; AMA; AAOGAS (1934), Vice-President of the AAOGAS (1950) Source: American Medical Directory (1929)

## Simpson, Sir James Young

In 1839, at the age of 28, Simpson was appointed Chair of Midwifery at University of Edinburgh; in 1847 he and two associates discovered the anesthetic properties of chloroform; the same year, he was appointed one of Queen Victoria's physicians in Scotland; in 1866 he received a baronetcy (the first given to a practicing physician in Scotland). Although best-known for his discovery and use of anesthesia, "some biographers claim him (Simpson) as the

chief individual concerned in laying the foundation of Gynecology as a separate branch of medicine" (Thoms, 1935:29-30)

Sources: Thoms (1935:29-30); Graham (1960:256);

Skeel, R. E. President of the AAOGAS (1921). Source: AAOGAS (1942)

Stahl, Frank 1906- AMA Source: American Medical Directory(1906)

## **Taylor, Edward Stewart**

1980- Professor of Obstetrics and Gynecology, University of Colorado School of Medicine; Editor-in-Chief, <u>Obstetrical and Gynecological Survey</u>.

Life Fellow of the American Association of Obstetricians and Gynecologists; Fellow of the American Association of Obstetricians and Gynecologists (1950); Fellow of the American Gynecological Society (1953); Assistant Secretary AAOG (1954-56); Secretary AAOG (1957-59); President AAOG (1971); Vice-President AGS (1975)

Source: AGS (1982)

## Taylor, Howard

1938- Associate Professor of Obstetrics and Gynecology, New York University College of Medicine; Associate Attending Obstetrician and Gynecologist, Bellevue Hospital; 1952-Professor of Gynecology and Obstetrics, College Of Physicians and Surgeons, Columbia University; Director Sloane Hospital for Women, Columbia Presbyterian Medical Center; Visiting Gynecologist, The Francis Delafield Hospital; Consultant Gynecologist, The Roosevelt Hospital

Fellow of the American College of Surgeons; Fellow of the American Gynecological Society (1936); AGS Secretary (1941-1946); Diplomat of the American Board of Obstetrics and Gynecology; member of the AMA

Sources: American Medical Directory (1938), Taylor (1938), AGS (1952)

## Tritsch, John

1929- Associate Professor of Gynecology and Obstetrics, New York Homeopathic Medical College; 1938- Associate Professor of Gynecology and Obstetrics, New York Homeopathic Medical College and Flower Hospital; Associate Attending Obstetrician and Gynecologist, Flower Fifth Avenue Hospital; Attending Obstetrician and Gynecologist, Metropolitan Hospital

1938-AMA, Fellow of the American College of Surgeons, New York State Medical Society

Sources: American Medical Directory (1929); Schwartz (1938)

### Van de Warker, Elly

1904- Surgeon to the Central New York Hospital for Women; Surgeon to the Syracuse Woman's and Children's Hospital.

Founder of the AGS; AGS Council (1885, 1889, 1896); Vice-President of the AGS (1889); President of the AGS (1901); Chairman AMA Section on Obstetrics and Diseases of Women (1888).

Source: AGS (1904);

## Webster, J. Clarence (1903:231),

Professor of Obstetrics and Gynecology, Rush Medical College, University of Chicago; Medical Director, Chicago Lying-in Hospital and Dispensary; Obstetrician and Gynecologist to the Presbyterian Hospital

Fellow of the Royal College of Physicians (Edin) (1893); Fellow of the Royal Society of Edinburgh; Honorary Fellow of the AGS (1898); Fellow of the Royal Academy of Edinburgh; Corresponding Member of the Royal Academy of Medical Science, Palermo, Italy; Italian Obstetrical and Gynecological Society; Member of the British Medical Association; Edinburgh Obstetrical Society; Chicago Gynecological Society; author of <u>A Text-book of Obstetrics</u>.

In 1903, Webster authored a chapter in <u>The American Text-book of Obstetrics</u>. He along with the other chapter authors were selected by the textbook's editors because they were believed to be "prominent American obstetricians... possessing experience as teachers of obstetrics in several of the leading medical schools and hospitals in America" (Norris and Dickinson, 1903:7)

Sources: Chadwick, Dickinson and Edgar (1901:340), AGS (1904); Webster (1903)

#### Wilcox, Reynold

1894- Professor of Clinical Medicine and Therapeutics at New York Postgraduate Medical School and Hospital; Visiting Physician to St Mark's Hospital; Assistant Visiting Physician to Bellevue Hospital; 1909- Professor of Medicine at the New York Postgraduate Medical School and Hospital; Consulting Physician to the Nassau Hospital; Visiting Physician St Mark's Hospital

1894- Fellow of the American and New York Academy of Medicine; editor of <u>Materia</u> <u>Medica Pharmacy. Pharmacology and Therapeutics</u>, 1894; 1906- member of the AMA; 1909-Ex-president of the American Therapeutic Society, Fellow of the American Academy of Medicine; Vice chair of the Revision Committee of the U.S. Pharmacopaeia; author of <u>A Manual of</u> <u>Fever Nursing</u>, 1909

Sources: American Medical Directory (1906:655); Wilcox (1894;1909)

### Williams, John T.

1915- Fellow in Gynecology, Harvard University; Third Assistant Visiting Surgeon for Diseases of Women, Boston City Hospital; Assistant Surgeon, Gynecological Department, Boston Dispensary; subsequently, Surgeon-in-Chief, Obstetrics and Gynecology, Boston City Hospital; Obstetrician-in-Chief, Whidden Memorial Hospital, Everett, Chelsea Memorial Hospital, Winthrop Hospital

Fellow of the American College of Surgeons; Fellow: AMA; Mass. Med. Soc.; President, Obstecric Society of Boston (1936)

Sources: Williams (1915), Schwartz (1938)

## Williams, John Whitridge

1918- Professor of Obstetrics, Johns Hopkins University (1889-1931); Obstetrician-in-Chief, Johns Hopkins Hospital; Dean of Johns Hopkins Medical School (1911-1923)

Fellow of the American College of Surgeons; Fellow of the American Gynecological Society (1892); Vice-President of the AGS (1904); President of the AGS (1914); President of the Medical and Chirurgical Faculty of Maryland (1915-1916); President of the American Association for the Prevention of Infantile Mortality (1914); Diplomat of the American Board of Obstetrics and Gynecology (automatic); 1931- Honorary Fellow of the Obstetrical Society at Edinburgh, Glasgow, and Paris; Honorary President Glasgow Obstetrical Society (1911,1912); Honorary Fellow, British College of Obstetricians and Gynecologists; possessed Honorary degrees from Trinity College, Dublin, the University of Maryland, and the University of Pittsburgh:

Source: Broun (1918); Little (1933)

Source: AJOG (1931)

Willson, J. Robert

1981- Professor of Obstetrics and Gynecology, University of Michigan

Life Fellow AGS; Fellow AGS (1951); Fellow AAOG (1957); Second Vice-President AGS (1962); President AGS (1980)

Source: AGS (1982)

Zinke, E.G.

President AAOG (1907); Secretary of the AAOG (1911-1920)

Source: AAOGAS (1942)