FIRST TIME FATHERS AND THEIR PERCEPTION OF PARTICIPATION IN LABOUR AND DELIVERY

CENTRE FOR NEWFOUNDLAND STUDIES

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BEVERLEY ROCKWELL

FIRST TIME FATHERS

AND

THEIR PERCEPTION OF

PARTICIPATION IN LABOUR AND DELIVERY

BY

© Beverley Rockwell, R.N., B.N.

A thesis submitted to the School of Graduate Studies in partial fulfillment of the requirements for the degree of

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ABSTRACT

The purposes of this research were to obtain an overview of factors thought to predispose a man to participate in the childbearing cycle, changes occurring in men at this time, their perceptions of their participation and to test for the presence of these factors in a sample of Newfoundland men. The study base was obtained from a review of available literature on expectant fathers. Implications of their participation were obtained from writings which pertained to the changing roles of fathers. A conceptual model developed from Role Theory served as a guide for identification and categorization of paternal behaviours described in the literature. Selected variables related to men's backgrounds, physical and/or emotional changes, concerns and their preparation for fatherhood. Immediate post-partum reactions to participation in labour and delivery were explored. Reviewed literature suggested that the needs of fathers are not being met by health professionals, mainly due to lack of empirical knowledge of what these needs are.

The subjects consisted of 36 first-time fathers who were present during labour and/or delivery. Data collection was by subject interview in early labour and post-delivery questionnaire. Frequencies and means of data were obtained in order to describe the population in relation to the variables being investigated. Factor analysis was

performed on the fathers' perceptions of their participation. Tests of significance were performed using identified principal components as the dependent variables. In this manner differences of perceptions of prepared/unprepared fathers and birth attenders/ non-attenders were obtained.

Results revealed the majority of these fathers had experienced psychosocial changes and concerns during their wives' pregnancies. A minority reported physical changes. Prenatal classes had been attended by most of the men and a variety of activities to augment their ability to support their wives during labour were reported. Preparation for the fatherhood role was suggested in the findings. Reported activities were informal and self-motivated. Analysis of activities supported the suggestion that there were, in fact, two operations occurring; preparation to provide support to the wife and preparation to be father to the child, but that health care professionals provided anticipatory guidance almost exclusively on the support functions of expectant fathers. Factor analysis of the post delivery questionnaire identified seven principal components which accounted for 66% of overall variance. The subjects' perceptions of their participation was, on the whole, positive. The exception was in regards to knowledge of how to help their wives. Two tailed T tests performed on subgroups of this population showed two areas

of statistical significance ($p. = < 0.02$). Perceptions of the processes of labour and delivery was more positive both in prepared fathers than unprepared and in men who had attended delivery than those who had not.

The findings of this study suggest an evaluation of prenatal course content, inclusion of fathers psychosocial needs in the antenatal assessment of each pregnancy and the development of a tool which would assess each participating father's desires and abilities to carry out support functions during labour and delivery. However, the results of this study are descriptive in nature and further research is recommended.

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CHAPTER I.

INTRODUCTION

Most cultures have specific roles for fathers throughout pregnancy, labour and delivery (Newton and Newton, 1971). From the 1940's through to the early 1980's this role has become vague for North American men (Henderson, 1980, Part 1; LeMasters, pp.120-122, 1977). This is thought to be related to the changing functions of family roles in a society undergoing dramatic economic and technologic development (Hoffman, 1977; Lopata and Norr, 1980). Social scientists have attributed major changes to industrialization which has resulted in urbanization, a high degree of family mobility, an increase in the number of women pursuing higher education, higher employment rates for women, smaller family size and longer life expectancy (Hoffman, 1977; Lopata and Norr, 1980; Jimenez and Newton, 1979). Impetus has been given to studies of all aspects of family life by the rapidly rising statistics in divorce rates and family violence.

As a family member, the fathers' perceptions of his role are influenced by what society considers his role to be, what he has learned as a child about his role and what family members expect of him.

The father's specialized role in the family was better defined a century ago, because the roles of the female and the male were more clearly delineated. Only recently has fatherhood taken on new meaning regarding role enactment and his influence in psychosocial matters is now being examined by scientists interested in family life.

The capacity for fatherhood is primarily biologic, resting chiefly on the efficacy of reproductive functioning. The full impact of fatherhood, however, transcends a purely physical capacity and includes a range of activities that make 'father' what he is. The development of fathering behaviours is not static. It is a process that spans the life of each individual who has the potential to become a father (Kiernan and Scoloveno, 1977).

This study dealt with men at the time of inception of the fatherhood role. It was undertaken to gather descriptive information about a group of men who participated in the labour and delivery of their child. The study focussed on factors that appear to influence preparation for fatherhood and on paternal perception of his participation in the birth process and his immediate introduction to his newborn. It was felt that a study such as this would be of interest to those caregivers and policy makers who are concerned with the health of families during pregnancy and birthing.

In order to place the study of expectant fathers in the context of promotion of family health, the literature review will include brief historical overviews of changes in the father's role in North American families and in paternal participation in childbearing during the last half century.

Rationale for Studying Paternal Participation in Childbearing

As literature on father involvement in childbirth began to appear, it placed much emphasis on the effect of his participation on the mother. Other studies focussed on the father-infant relationship and his participation in nurturing activities. An area that is receiving current attention, but is still underinvestigated, involves the man's personal experiences with pregnancy, labour, delivery and the early puerperium. Knowledge of the interrelationship of these factors is considered by many to be extremely important in assessing and promoting healthy family life styles. An overview of the findings of these various areas of study illustrate the need for further study of all the family roles fathers now play in our culture.

Mounting evidence indicates that a woman who is well supported by her male partner during pregnancy and birth experiences a shorter and less complicated labour and delivery, is likely to require less analgesia and may have an easier adjustment during the post-partum period (Bennett, 1981; Chiota, Goolkasian and Ladewig, 1976; Enkin, Dermer and Emmett, 1971; Fischer, Hüttel, Mitchell and Meyer, 1972; Henneborn and Cogan, 1975; Kaplan and Blackman, 1969; Moore, 1977; Sherefsky and Yarrow, 1973; Thoms and Weidenbach, 1959).

Studies of father-infant relationships suggested that fathers participate in caretaking activities and carry out such functions as well as the mother, but that the mother is still the primary caretaker (Boettcher, 1979; Cordell, Parke and Sawin, 1980; Manion, 1977; Parke and Sawin, 1976, 1979; Peterson, Mehl and Leiderman, 1979; Rendina and Dickerschied, 1976). The majority of the father-infant interaction time was reported to be spent in physically stimulating and unconventional games (Lamb and Stevenson, 1978). Psychoanalytic reviewers of the fathering role, Benedek (1970, p.76); Lamb and Lamb, (1976) and O'Donogue (1978) concluded that paternal participation in infancy contributed to providing a reality base for the child and relief from the stresses inherant in mother/child separation and individuation. Of particular interest to this study were the findings of Cordell et.al. (1980),

Manion (1977) and Peterson et.al. (1979). All concluded that the father's participation in the birth and his attitude toward it constituted a very important variable in predicting a father's involvement with his newborn. On the basis of findings such as these, Antle (1978) hypothesized that there may be a relationship between a man's reaction to a pregnancy and the beginning development of his identity as a father.

Literature related to the father himself had a variety of foci. A number of authors outlined instances when, on the basis of early life experiences, some fathers should not attend the labour and delivery. The reasons given varied. Coley Jr. and James (1976), Jessner, Weigart and Foy, (1970) and Lacoursiere, (1972) cited examples of psychological problems in some men. They felt these manifestations were instigated by deeply rooted characteristics which surfaced during the labour and delivery process. The noted British childbirth educator and author Sheila Kitzinger (1977, pp.22-23) suggested that cultural conditioning precluding demonstrative nurturing behaviours may cause role dissonance in some men. Blankfield (1971) and Tanzer and Block (1972, pp.184-188) described instances in which the husband clearly should not attend as the wife did not wish his presence. Most documentation of negative responses to attending childbirth

was based on small numbers of subjects in total, but must be considered in the growing tide of fathers participating in the childbearing process.

The majority of data regarding men's responses to their participation in labour and delivery was, on the whole, very positive, and the encouragement of all expectant fathers to be active participants appears to be increasing. This would seem to be premature in light of the relatively few studies conducted and the findings of untoward responses in some. May (1982a) commented on the assumptions now being made by many health professionals that all fathers want to and should be active participants in the processes. She cautioned:

> "...I discovered health professionals sometimes had an image of who fathers should be. Those men with detached styles were found wanting. This raises the question as to whether these value judgements can lead to potentially inappropriate care" (p.322).

Another indication for the need to study fathers during the childbearing cycle was suggested by the findings of Gray, Cutler, Dean and Kempe (1979). Using criteria based on characteristics commonly found in child abusers, they claimed to have successfully identified a group considered to be at high risk for abnormal parenting practices. Labour and delivery observations, together with interviews and observations of the nursery staff were

considered by these researchers to have provided the most accurate predictive information. They urged that assessment of attitudes and feelings about childbearing of both parents be incorporated in all phases of obstetrical care, especially labour and delivery and immediate post-partum. For appropriate screening for this complex problem, more must be known about fathers and they must be included in evaluation of the overall health status of the family.

In summary, there are increasing numbers of fathers who are now participating in the childbearing phase of family life, but there is insufficient and, in some cases, contradictory, evidence that universal participation would benefit all. It is known that there is now a higher degree of father involvement in nurturing activities than was the previous social norm. The suggestion has also been made that there may be a relationship between involvement in pregnancy and later participation in these activities. However, little is actually known of patterns of paternal attitudes and behaviours making needs assessments intuitive, incomplete and haphazard. Appropriate anticipatory guidance and therapeutic intervention can only be provided to couples when health professionals can recognize the needs of the father as well as the mother.

The primary purpose of this study was to obtain an overview of those factors thought to predispose a man to participate in the childbearing cycle and to relate those factors to his reactions to his perception of his participation. To achieve this, it was felt that the literature review might begin to identify a characteristic pattern of men's responses to childbearing from the body of studies carried out on expectant fathers. Those variables identified as being commonly present could be tested in the Newfoundland population, and paternal perception of participation in labour and delivery by Newfoundland men could be examined. The specific research objectives were as follows:

1. to describe the general demographic characteristics of first time fathers who participated in their wives labours and the delivery of their newborns.
2. to explore the degree to which these men participated in the pregnancy, including how they prepared for labour and delivery.
3. to explore differences in perceptions of participation in labour and delivery of prepared and unprepared fathers.
4. to explore differences in perception of participation in labour and delivery of fathers who attended delivery and those who did not.

The following literature review extracted a broad spectrum of information from nursing, medicine, psychology and sociology. A conceptual model developed from Role Theory served as a guide for identification and categorization of paternal behaviours in an overall schema.

Conceptual Framework

The conceptual basis of this study is Role Theory. Taylor defined any one role as 'a pattern which can be regarded as the consistant behaviour of a single type of actor' (in Nye, 1976, p.5). From observed patterns of behaviour the actor learns the norms of the role. Hardy (1978, p.75) stressed that behaviour is not simply compliance with such norms, but is strongly influenced by the internalization of same. This can result in either positive or negative sanctioning which can be internally or externally imposed, actual or symbolic. The interactional approach to Role Theory as propounded by George Mead in 1934, stressed a reciprocal interrelationship of roles in which each actor regulates behaviour and reactions to what is expected from the other individual. (Nye and Gecas in Nye, 1976, p.1; Burr, Leigh, Day and Constantine, 1979; Lambert and Lambert, 1981). Thus the interactional approach to Role Theory implies learning, reciprocal interaction, change and growth.

In his paper "Individual Adjustment to Age and Sex Roles", Cottrell (1942) introduced the concept of 'role transition'. He defined this as:

> "...the process of moving in and out of roles in a social system. It may involve the addition or termination of a role without any change in other roles; or it could be the termination of one or more roles and the concommitant beginning of another" (in Burr, 1972, p.407).

In the case of becoming a father for the first time, there is the addition of a role without, it is assumed, any change in other roles.

Cottrell attempted to identify factors that influence role transition. He proposed that experiences such as "emotionally intimate contact which allows identification with persons functioning in the role, and imaginal or incipient rehearsal and practice" facilitate role adjustment. Merton elaborated on this proposition and termed the process 'anticipatory socialization' which was defined as:

> "...the process of learning the norms of a role before being in a social situation where it is appropriate to actually behave in the role. Anticipatory socialization can be viewed as a continuous variable that varies in amount from being absent to having relatively high amounts of training" (in Burr, 1972, p.408).

Thornton and Nardi (1975) explained that the developmental process of anticipatory socialization allows the examination of variations in the acquisition of different types of roles and of the same type of role by different persons. This approach pays little attention to reward-cost factors. It assumes that the values are assigned in the course of the interaction and are constantly changing and tentative. Such values are actor-imposed and may serve more as a basis for self-evaluation than as independent determiners of action (Burr et.al., 1979, p.49). These propositions suggest to this writer that a father's perception of his acquisition of the father role will be highly influenced by his anticipatory socialization for the role.

Behavioural scientists have applied aspects of Role Theory to many studies of parenthood, but the majority have been based on events after acquisition of the role. Anticipatory socialization of men for fatherhood has received little consistant empirical attention until the

last decade. As there did not appear to be a specific model on which to base this study, common characteristics reported to be observed in expectant fathers in available studies, were categorized according to those factors proposed by Cottrell (1942) as being influential in role transition. The resulting schemata that provided the operational model for this study is illustrated in Figure I.

FIGURE I.

IDENTIFICATION WITH THE FATHERHOOD ROLE

1. Motivation for fatherhood
   - culturally/married/family centered
   - self centered
2. Influence of his own father
   - time spent with father
   - relationship with father
3. Mate's influence
   - discussion of desired family size

REHEARSAL AND PRACTICE FOR THE FATHERHOOD ROLE

1. Emotional changes
2. Physical changes
   - Couvade Syndrome
3. Concerns
   - provider role
   - health of wife and baby
   - labour and delivery
   - impending fatherhood
4. Preparation activities
   - planning of pregnancy
   - his role in planning
   - support role
   - fatherhood role

PERCEPTION OF

Labour & Delivery	His Participation	His Newborn
1. Positive/ Negative Processes	1. Involvement level	1. Baby as a separate human being
2. Expectations vs Reality	2. Knowledge level	2. Himself as a father

Factors Influencing a Man's Perception of Transition to Fatherhood.

CHAPTER II.

LITERATURE REVIEW

There is little literature on the specific topic of Canadian fathers during the childbearing cycle. Most of the information reported in this review is derived from American books and journals. However, since the primary purpose of this literature review is to provide a basis for identifying practices and perceptions of men entering fatherhood, it would seem reasonable to use U.S. literature as both countries share similar lifestyles and are influenced by common media systems. It is recognized that the cost of health care services to consumers, and thus, the availability of health care services, in the two countries is very different, and that this difference may be reflected in some of the findings. Most published data were obtained from fathers attending prenatal classes. The findings, therefore, may be a reflection of traits of men who choose some degree of active involvement.

The Changing Role of Father

Traditional Role

The major image of fatherhood in the traditional perspective is the aloof and distant father. The following description exemplified how the father role was viewed.

"Traditionally, father has been looked on as the breadwinner. In times past so much of his time and energy was used in this role that, at home, he was thought of as taciturn and stern, albeit kind. He was respected but feared by his children who never learned to know him very well. He accepted the fact that he earned the money and mother cared for the home and raised the children.".

(English, 1954 in Hines, 1971, pp.179-180)

It is worth observing that psychoanalysts saw no direct caring role for fathers with infants and young children. Men, while symbolically important to children as close-to-home models of power and authority, were supposed to have little to do with the actual parenting of their young. (Benson, 1968, p.65; Bowlby, 1951 in Fein, 1978; Benedek, 1970, p.177; Howells, 1972, p.128).

In sociology, Parsons and Bales (1955) defined the role of men in families as 'instrumental'. In this, men were seen as responsible for the family's relationships with the outside world. Women, on the other hand, filled the 'expressive' role and were the primary givers of love and care at home (in Fein, 1978, p.123).

This view of fathering generally conformed to social ideals and realities of the late 1940's and the 1950's. Relatively few women were in the paid labour force on a regular basis and of those who were, only a small

percentage were mothers with small children. The husband-breadwinner/wife-homemaker nuclear family was the norm, both in the statistical sense and in the social values of the times (Fein, 1978, p.124).

Contemporary Role

The coupled effect of urbanization and social change induced by World War II resulted in a new definition of sex roles. Gollober (1976) defined the new male role as nontraditional or individual. This role is one in which the male figure relinquished some of his authoritarian qualities to the female figure, thus causing the female to adapt her role to incorporate so-called masculine characteristics. In turn, the paternal role took on those qualities of love, warmth and compassion which are now included in the term 'fatherliness'.

Although Biller, (1975) Kaufman (1970, pp.12-19) and Rypma (1976) attempted to rationalize the presence of a biological instinct for paternity, their conclusions were reached by inferance and the state of fatherhood has been looked on as a social obligation with no biological or instinctive roots. Bowlby (1969) observed that the father was "of no direct importance to the young child" but was "of indirect value as an economic support and in his emotional support of the mother" (in Gollober, 1976, p.18).

Josselyn (1956) was one of the first to recognize the nurturant potential in men. She claimed that 'fatherliness' had the same emotional componants as 'motherliness' but that cultural obstacles restricted the development of caring capacities in men. Hines (1971) stated that it was not culturally acceptable for a man to be openly affectionate and loving, that he must show physical courage, toughness, aggression and competitiveness, exclude emotional expression and that he was expected to assume a strong provider role.

Much of the early documentation of changes in implementation of roles within the family focussed on women. Hoffman (1977) and Lopata and Norr (1980) described the shift primarily as that of the mother role occupying less and the wage-earner role occupying more of a woman's adult life. In the United States, the percentage of mothers with school-aged children and husbands present who are employed outside the home passed the 50% mark in 1972. Employment rates for mothers of preschoolers almost tripled between 1948 and 1972. (Hoffman, 1977; Jimenez and Newton, 1979). Not only are mothers of young children employed, but the study by Jimenez and Newton (1979) suggested that many women maintain full working duties until the onset of labour and resume all activities within a few weeks postnatally.

These changes, in turn, affected the traditional breadwinner/protector roles of the father. Men appeared to be assisting in the nurturing activities in childrearing formerly considered the domain of the woman (Hoffman, 1977) but the types of activities in which they engaged or their attitudes toward them has only recently come under study.

One of the most prolific early authors on fathering behaviours, Henry Biller, suggested that many fathers avoided becoming involved with their young children due to their insecurities in carrying out expressive functions (Biller, 1974, p.163).

After a comprehensive literature review on fathers, Hamilton (1977, pp. 143-55) contended that, as opposed to being uninvolved, father's nurturant activities in the family were underestimated and underinvestigated. Several other authors commented on the lack of empirical data on fathers. LeMasters (1977, p.121) cited four major studies on 'parents' in which hundreds of mothers were interviewed but not one father. The study entitled 'Father Participation in Infancy' by Pederson and Robson (1969) actually acknowledged the researchers' embarrassment at having obtained all of their data from mothers. Benson (1968, p.3), Lamb and Frodi (1980) and Russell (1980) also reported this 'mother bias' in family studies. It would appear then that the problem may not be lack of paternal involvement, but lack of investigation of the actual

nature of father involvement. Also, little research has been carried out on the implications of varying degrees of paternal participation to the family as a whole and to the individual members in the family (Howells, 1970; 1972).

In an effort to examine the activities of American men in their paternal duties, Mackey and Day (1978) conducted an extensive cross-cultural observational study between 1974 and 1977. Although they placed no qualitative standards on the men's behaviours, they concluded that American men seemed to be providing contact experience with their children comparable to men from Ireland, Spain, Japan and Mexico. Of special interest were the findings that American men associated with children in large numbers when the societal norms allowed them access to the children and that American men interacted with children at levels consonant with adult female and child dyads. Based on their findings, Mackey and Day challenged the idea that American children are particularly deprived of nurturing behaviours from their fathers.

Studies reported by O'Leary and Donoghue (1978) and Eversoll (1979) indicated that positive values are placed on the male nurturing role by contemporary men and women. Both studies were conducted on college students and could be considered an indication of the views of the current generation of fathers. However, it must also be considered that the findings may merely reflect the attitudes of a select population, i.e. those attending college.

The mounting numbers of divorced fathers seeking custody of their own children, however, suggests the acceptance of an expanded conception of the masculine role to include expressive as well as instrumental functions. (Entwistle and Doering, 1981, p.19).

Paternal Participation in Childbearing: Selected Trends in Obstetrical Care

Up to the early part of the twentieth century most North American women delivered their babies at home attended by midwives. Father was usually around to assist and to share in the parental welcome to the newborn member of the family (Jackson, 1955). Prior to 1920, medical supervision of pregnancy had hardly begun. With rare exception, obstetrical care began with the onset of labour and ended a few days later (Ziegel and Von Blarcom, 1972, p.798). It could be assumed, therefore, that the father was an involved participant during the childbearing cycle.

With improvement of aseptic technique, accompanied by the subsequent decrease in mortality rates of hospitalized births, there was a great move from home deliveries to hospitalized deliveries. Concurrently, the value of ongoing antenatal care of women had been recognized. After 1930 the acceptance of the medical specialist and the enormous surge of medical knowledge produced a movement

which placed great emphasis on the scientific nature of medicine. As is frequently the case in scientific discovery, the technical aspects of childbirth were emphasized and maternity care was developed with the chief intention being the reduction of perinatal morbidity and mortality (Jensen & Bobak, 1984, p.529).

The importation of "twilight sleep" from Europe about 1920 promoted the idea of comfortable birth. The method did not do away with the pain of labour and birth but produced a light sleeplike state in the mother and rendered her passive. As a result, women had no memory of pain in labour or at birth. The increased use of this method, coupled with the development and use of new anaesthetic agents changed childbirth from a physiologic and social event occurring in the familiar environment of the home, to a medical-surgical situation in the context of major surgery. Most of the obstetrical units in use today were created to provide care for women receiving anaesthesia for birth, with a design based on the surgical system. Hospitals actively fostered the idea that they were pleasant, safe and comfortable places in which to give birth (Jensen & Bobak, 1984, p.529-30).

Social factors also influenced the shift to hospitalized births. Urbanization had separated families so that there were fewer networks of women relatives and friends to help (Phillips & Anzalone, 1978, pp.3-5). The

doctor's right to insist on hospitalized births became acceptable, based on the evidence that morbidity and mortality rates were decreasing as the number of hospital confinements increased (Jackson, 1955). Home deliveries continued to decline and by the 1960's, 94.6% of all deliveries in Canada took place in hospitals (Royal Commission on Health Services, 1964, p.76).

Childbirth was no longer an experience shared by parents. Hospital rules insisted on the isolation of maternity patients to prevent and control infections. Thus parents were separated during labour and delivery, and mothers and infants were separated at birth. Infants were placed in newborn nurseries where routine care was provided by nurses. Fathers were not permitted close contact with their babies until discharge from the hospital (Clifford and Davison, 1954).

Major criticisms of this rigid system of maternity care appeared in the early forties, primarily in protest of the "impersonal, inappropriate and inconsiderate" management of mothers, babies and fathers during the postpartum period (O'Connell, 1969). Some authorities maintained that the strict hospital regimen was actually "conducive to stress and tended to thwart natural family relationships and feelings of parental authority" (Jackson, 1955, p.586).

Concurrently, an approach to management of labour and delivery which repudiated the use of anaesthesia was becoming known. An English physician, Dr. Grantley Dick-Read, theorized that pain in childbirth was socially conditioned and caused by a fear-tension-pain cycle. The 1944 publication of his classic book 'Childbirth Without Fear' described techniques to break this cycle, allowing the mother to be an active participant in the birth process through prenatal preparation (in Horowitz and Horowitz, 1967, p.196).

Promotion of this 'natural' approach to childbirth became widespread (Atlee, 1963; Buxton, 1963; Doering and Entwisle, 1975; Morris, 1960; Thoms and Weidenbach, 1954). Several types of educational programmes developed, all of which required that the mother be constantly coached and supported by an attendant. Many began to see the father as the logical person to fill this role, if he and his wife so desired. (Bradley, 1962; Engel, 1963; Goetsch, 1966; Horowitz and Horowitz, 1967; Miller, 1966).

Throughout the 1950's and 1960's groups of health care professionals and interested consumers formed organizations to promote prepared childbirth. They increased the public's knowledge of the benefits of natural birthing techniques and fostered the acceptance of birth as a normal, rather than pathologic event. Expectant parents were encouraged to become more knowledgeable about and

accountable for their participation (Jensen & Bobak, 1984, p.531). These groups also acted as a lobbying force to pressure hospitals and policy makers at all levels of health care to change the traditional practices of obstetrical care to what was considered and termed a 'family-centered approach'. They advocated father's attendance during labour and delivery, infants rooming in with mothers, more active promotion of and support for breastfeeding mothers and sibling visitation during the mother's post-partum hospitalization (Claman, 1964; Coombe, 1969; Engel, 1963; Finbarr, 1967; Goetsch, 1966; Hilliard, 1967; Miller, 1966, Sister Marie Stella, 1960).

All of these changes are considered to be important in the promotion of psychological health of beginning families. However, as this study is focused on father's participation in childbearing, subsequent trends will address findings related only to paternal involvement.

No widespread opposition to the father's presence in the labour rooms could be found. Engel (1963) reported that the husbands were considered a "nuisance" (p.261) until it was realized that the support they were giving their wives decreased the amount of analgesia and anaesthesia given to the labouring mothers, resulting in fewer narcotized neonates. Open resistance to allowing fathers in the delivery rooms, however, continued throughout the 1960's. Increased risk of infections,

malpractice suits, getting in the way and fainting were frequently cited as reasons why fathers should be kept out. Data from thousands of births at which fathers were present were compiled, and all refuted such objections (Bradley, 1962; Ernst, 1976, p.10; Morton, 1966; Philips and Anzalone, 1978, p.11-12).

In 1973 the International Childbirth Education Association conducted a survey of all hospitals in the United States with a maternity department. They polled these agencies on father participation in their area. The results indicated that hospitals were beginning to allow fathers in the delivery room and were not experiencing any of the problems forecasted by objectors (Ernst, 1976, p.4-5). Most of the 'family-centered' hospitals reported policies requiring consent forms be signed by the mother, father, physician and prenatal class instructor before the father was allowed in the delivery room (Ernst, 1976, pp.12-20).

In Canada, hospitals appear to have adopted a less formal approach. This writer could find no reference to established criteria to be met to allow a father's attendance during labour or delivery beyond a policy allowing his presence, the stated desire of each of the couple and permission of the attending physician. There was no evidence of written release forms and men were not required to have attended prenatal classes (Dockery, 1971; Jordan, 1973).

Since these beginnings of paternal participation in hospitalized childbirth, thousands of men have been joining their wives in the labour and delivery suites to participate in the births of their children.

Transition to Fatherhood

This section will deal with factors found in the literature which were thought to be associated with transition to the fatherhood role. It is recognized by the author that there is an integration and interrelationship among all factors influencing this transition, but an attempt has been made to categorize findings according to the conceptual model presented. The major areas to be examined are as follows: identification with persons functioning in the role and imaginal or incipient rehearsal for the role, including practice.

Identification With Persons Functioning in the Role

Soule, Standley and Copans (1979) stated that how a man thinks of himself as a father is a reflection of the emotional capacity and readiness for parenting in the prospective father and is the foundation of the father-child relationship to come. They term this 'father identity' (p.256). The behavioural manifestations of father identity are a result of life experiences which have formed the basis of what fatherhood means to a man and his

perception of how the role should be enacted. The literature indicated three major areas which influence a man's perception of persons functioning in the father role. They are the social environment of the individual, the major role model in the person of a man's own father and the influence of the man's partner.

Social Environment.

The social climate in which one exists has much to do with the value one places on any role. The milieu in which a man lives continually and subtly shapes his attitudes toward being a father. Considering the large number of studies on various facets of family life carried out in the last three decades and the relative few which included the father, there is an implication that this role was not highly valued in North American society. A composite of reasons given on why people wish to become parents was found primarily in general sociological writings reviewed, supplemented by some attention to fathers in studies specifically focussed on them. The motivations to become a parent cited were:

1) validation of adult status and social identity.- (Briggs, 1979, p.71,72; Entwistle and Doering, 1981, p.14; Leibenberg, 1973, p.104; Rapaport, Rapaport, Strelitz and Kew, 1977, p.137).

2) Expansion of self for perpetuation and a measure of immortality. (Entwistle and Doering, 1981, p.14; Rapaport, et al., 1977, p.139).

3) Achievement of moral values by fulfilling societal or religious expectations and giving care responsibly (Rapaport, et al., 1977, p.140).

4) Stimulation, novelty and fun. (LeMasters, 1977, p.20; Rapaport, et al., 1977, p.140).

5) Increasing the strength of the primary group of husband and wife (LeMasters, 1977, p.23,25; Rapaport, et al., 1977, p.140).

6) Achievement and creativity; proof of virility (Briggs, 1979 , p.72; Leibenberg, 1973, p.103; LeMasters, 1977, p.25).

7) Power and influence: an infant is more under one's control than any other person could be (LeMasters, 1977, p.24; Rapaport, et al., 1977, p.140).

8) Social comparison and competition. Through one's baby one compares oneself with others (Briggs, 1979, p.72; Rapaport, et al., 1977, p.140).

9) Economic ultility; to later assist in the home, on the farm, in the family business, in one's old age; to obtain subsidized housing and/or allowances (Rapaport, et al., 1977, p.140,141).

10) Provide the wife with fulfillment and companionship (Briggs, 1979, p.72; Entwistle and Doering, 1981, p.46).

The writings of Colman and Colman (1971), DeGarmo and Davidson (1978) and Roehner (1976) generally indicated that some of these reasons may be operant, but no study reviewed included comprehensive information on men's perception of why a person wishes to become a parent.

The Major Role Model.

The most salient model of fathering a man could have must be his own father (Benson, 1968, p.169). Several authors stressed the importance of expectant fathers recalling and resolving conflicts about their own father (Benson, 1968, p.50; Biller, 1974, p.18; Bowlby, 1977, p.206; and Colman and Colman, 1971, p.111). Benedek (1970, pp.173-176) stated that the father's identification with his own father is one of two sources of motivation in the emotional relationship of the father with his own child. She attributed the well documented preference of men for sons to this influence and described how men use their relationship with their own father as a basis for their own approach to enactment of the fatherhood role.

In an exploratory study of 53 first-time expectant fathers Hangsblen (1983) wrote that subjects reporting a greater number of activities with their own father tended to report that a father was equally or more important in

the care of the baby than the mother. Based on overall findings, though, Hangsblen concluded that many other factors impacted collectively to predict father's involvement.

Soule, Standley and Copans (1979) reported that "...men who have high father identity scores tended to report either very negative or very positive early relationships with their own fathers". They concluded that men at these extremes seemed to be rebelling against or being inspired by the past (p.261). Eversoll (1979) conducted a study of attitudes toward role dimensions of the father position with 221 sets of young adult men and their fathers. The findings indicated a tendency of the younger generation to place more value on nurturing and social functions for fathers than the senior men in the study group. The prospective fathers in the study conducted by Grossman et. al. (1980, p 151) indicated that their own fathers had not provided them with an acceptable model of fatherhood . Wapner (1976) reported that 56% of the 128 subjects in his study of the attitudes and feelings of expectant fathers stated no increased feelings of closeness with their own fathers during the pregnancy period.

These findings suggest a fundamental shift in the perception of fathering behaviour by some of today's new fathers, but that these men use the fathering they received as a basis of judgement.

Influence of the Wife.

A man's identification with the fatherhood role also seems to be highly influenced by his partner. Evidence suggested that, to some extent, the wife controlled the man's involvement in childbearing. Reiber (1976) and Weaver and Cranley (1983) concluded that if, during the pregnancy, women anticipated their spouses being actively involved in child care activities, the men were likely to hold the same expectation. If women wanted to keep these activities to themselves, the men expected to be less involved in child care. Fein's (1976b) conclusions of his study of pre/post-birth involvement of fathers in nurturing activities stated that "women's pre-birth expectations predicted men's actual involvement even more strongly than did men's expectations" (p.346).

In a more recent study, Fishbein (1984) not only acknowledged the strong influence of the wife on the father's projected perception of his new role, but made conclusions regarding what it could mean to the father. She stated that:

"similarity and consistancy of attitudes and expectations between mother and father appears to be important in facilitating the socialization of the man for the new role of the father. In particular, the assumption of the new paternal role is capable of causing significant levels of anxiety for the father, which clearly appears to be influenced by expectations held by the mother regarding his behaviour" (p.328).

Imaginal or Incipient Rehearsal and Practice for the Role

This variable will include observations noted in reviewed literature which have been associated with expectant fathers. Jessner, Weigart and Foy (1970, p.232) felt that pregnancy required three facets of change in the father: a change in self-concept, a change in relationship with his wife and a change in his relationship with the social world. Studies reporting on expectant fathers reflect a working through of these processes in varying degrees by describing how groups of men have reacted emotionally, physically and behaviourally during their wives' pregnancies. Cited authors attributed these changes to conscious and/or unconscious manifestations of a man's anticipation of becoming a father.

The impact of impending fatherhood has been reported to have had a negative influence on the mental health of some men. While a specific type of mental illness has not been associated with adjustment to fatherhood, a wide range of mild to severe symptoms have been reported (Asch and Rubin, 1974; Coley Jr. and James, 1976; Gineth, 1974; Lacoursiere, 1972; Wainwright, 1968; Zilboorg, 1931). This review will not include atypical cases but will discuss observations reported in studies of normal fathers.

Emotional Reactions

Many studies on men and pregnancy present only data collected in the last weeks of pregnancy, with little information on the early phases of expectant fatherhood. The term "father involvement" appeared frequently but has been shown to mean either behavioural involvement, such as attendance at prenatal classes and the birth, or how emotionally invested the man feels in the pregnancy. May (1978) and Wapner (1976) showed that these two factors may not always be related. Some men participated on the insistance of their wives or social groups, while they themselves felt emotionally distant from the events (May, 1982a). Conversely, some who did not outwardly appear to be participating in the pregnancy reported a high level of emotional involvement (May, 1982a; Wapner, 1976).

There is some evidence to support the presence of an emotional developmental process in preparing for fatherhood similar to the operations identified by Rubin in the process of maternal role attainment (Obruzut, 1976). Based on data collected over a two-year period by interviewing 100 expectant fathers at various stages of their wives' pregnancy, May (1982b) identified and described three emotional phases of men during pregnancy.

1. Announcement: the period during which the pregnancy was first suspected and then confirmed. The phase varied in length from a few hours to a few weeks. It was characterized by great joy and excitement if the pregnancy was desired, pain and shock, if not. Entwisle and Doering (1981, p. 60) reported that planning of the pregnancy was strongly related to the husband's initial reaction . The length of the phase depended on how soon both partners suspected pregnancy, what initial impact that suspicion had on the father and how soon the pregnancy was confirmed to the father. The man's active involvement in the pregnancy remained of little concern for the couple for the next several weeks, as the woman had not yet begun to believe that she was pregnant. After that the pregnancy began to have a noticeable impact on the woman but the man's awareness lagged behind at this stage.

2. The Moratorium: the phase when, adjusting to the reality of the pregnancy, many men put conscious thought about the coming baby aside for a time. The length of the phase for subjects in May's (1982b) study was individual and ranged from a few days following the announcement to several months, with most men being reported as remaining in 'moratorium' from the twelfth week of pregnancy until the twenty-fifth week. The main characteristic of this phase was described as emotional distance from the pregnancy. May reported many men as regarding this ambivalence as normal, as they concentrated on other life concerns and sometimes forgot for days at a time that they were expecting a child. Similar findings that appear to substantiate the presence of early to mid-pregnancy ambivalence in expectant fathers have been reported by Colman and Colman (1971, p.115), Dodendorf (1981), Grossman, et al. (1980, p.159), Marquart (1976), Obruzut (1976) and Roehner (1976).

May suggested that the emotional distance of the Moratorium allows the man to work through the ambivalence he feels about the pregnancy and posturlated that the lack of social supports for the emotional impact of impending fatherhood contributed to the prolonged time required by many men to pass through this phase, if indeed they do at all. Because of the wife's high degree of emotional involvement in the pregnancy at this time, marital tension

and disrupted communication patterns were reported by May to be frequent during this phase. The length of time a man spent in this adjustment period was reported to be dependent on his readiness for preghancy. This readiness was defined by the men in May's study in terms of three major areas: (a) a sense of relative financial security; (b) stability in the couple relationship; and (c) a sense of closure to the childless period in a couple relationship. She reported that men who perceived a problem in any one of these areas tended to describe themselves as "somewhat unready" for pregnancy and required a longer period of emotional distance to adjust. A few seemingly rare cases had great difficulty accepting a pregnancy and remained emotionally distant throughout. A large part of this phase corresponds to the period during which the man cannot see much evidence of pregnancy. As his partner becomes more visibly pregnant, the Moratorium usually ends. This observation appeared to be confirmed by others. Colman and Colman (1971, p.124) and DeGarmo and Davison (1978) stated that an important event for many fathers in their studies was quickening, with many recalling the date that it occurred. Quickening is the first solid evidence to the man that his wife is pregnant and

"...for most men, feeling the child move against their hands is both exciting and disquieting" (Colman and Colman, 1971, p.124).

For those fathers who resolved their ambivalence, May considered the Moratorium ended, marked by a feeling of involvement in the pregnancy.

3. Focusing Phase: this usually began around the twenty-fifth to thirtieth week and extended until the onset of labour. May (1982b) hypothesized that two separate but interrelated processes occurred at this time. The man focused on his own experience of pregnancy and felt more in tune with his wife. Concurrently, he began to redefine himself as a father and the world around him in terms of his future fatherhood. The manifestations of this phase are described in the subsequent review of other changes of expectant fathers.

Dodendorf (1981) had previously published the results of a study on 83 men at various stages of their wives' pregnancies. Her conclusions were generally consistent with May's descriptions and gave support to the presence of an emotional 'getting ready' process for parenthood in men as well as women.

Physical Changes

Trethowan and Conlan (1965) compared the presence of physical symptoms occuring in 327 expectant fathers with those of 220 married men of similar backgrounds, whose

wives were not pregnant at the time of the study. Significantly more of the expectant fathers reported having suffered from symptoms than the control group. The highest incidence came during the third month of the wives' pregnancies and included loss of appetite, toothaches and nausea. Appearance of such symptoms has been termed the Couvade Syndrome (Trethowan, 1972). Leibenberg (1972, p.106) reported similar symptoms in 65% of the 62 fathers in her study sample as well as unusual fatigue in the first trimester, backaches, headaches, peptic ulcers and, in some men, a weight gain of ten to twenty pounds which was lost shortly after the birth of the child. From 30 to 35 percent of subjects in other studies acknowledged the presence of one or more physical symptoms, with tiredness and insomnia most frequently cited (Wapner, 1976; Weaver and Cranley, 1983).

In an attempt to identify expectant fathers who would seek medical care for Couvade symptoms, Lamb and Lipkin Jr. (1982) reviewed the medical records of 267 expectant fathers. Sixty of the study group had sought professional care for such symptoms (23%). These men tended to have less education and less fatherhood experience than those who had not sought care from their physicians during their wives' pregnancies.

Theories proposed to explain Couvade symptoms include unconscious expression of the father's emotional state in

pregnancy (Antle, 1975; May, 1978); envy of pregnancy (Liebenberg, 1969); and stress during pregnancy (LeMasters, 1971; McNall, 1976; Wapner, 1976). It has been postulated that these physical reactions reflect the emotional strain of the pregnancy and are a socially acceptable way of expressing identification with the pregnancy and the unborn child (Wapner, 1976, p.8).

None of the studies cited gave any indication whether or not the affected men linked the appearance of physical symptoms with their wives' pregnancy. The authors suggested that an awareness of these characteristics may enable care providers to identify these men and prepare them for a period of change through anticipatory guidance.

Concerns of Expectant Fathers

Entwistle and Doering (1981, pp.41-57), in their study of 60 couples during pregnancy, reported that both husbands and wives admitted worrying a little more than usual during pregnancy, but that the men worried more. Their conclusions stated:

> "There thus appears to be a work of worrying phenomenon for husbands. They are more worried about specific childbirth events than their wives, the increase in their worries is sharper and those who worry most are those who are least anxious about other things." (p.41)

The major concerns of expectant fathers reported in selected literature appeared to center around four main themes:

1. The traditional provider role.

This has been reported by Entwistle and Doering (1981, p.57), Marquart (1976), Obruzut (1976), Roehner (1976) and Wapner (1976) as being the major concern of subjects in their studies of expectant fathers. Wapner (1976) suggested that this could reflect the cultural expectation of father as 'provider' and not necessarily perceived financial need. He stated that:

> "...all but twelve (of 128) reported feeling that they had enough income to meet the financial needs of a young family. The actual amount of income is not the issue; these men are expressing concerns about their own ability to feel comfortable with the added responsibility." (p.7)

May (1978) and McNall (1976) reported financial responsibilities being of some concern to their subjects, but that it was not a major worry.

2. Health of the wife and baby.

Entwistle and Doering (1981, p.57), Roehner (1976) and Wapner (1976) reported that expectant fathers expressed much concern about their pregnant wives and developing babies. This concern also ranked very high in McNall's (1976) study. She stated:

> "In regard to their wives' physical health a majority of the fathers expressed concern mostly, it seemed, out of a fear that something might happen either to their wives or to the expected child. Specific concerns regarding the need for rest, exercise, proper diet, possible or actual anemia, the effect of drugs or alcoholic beverages on the developing fetus, the Rh factor, the effect of pregnancy on a heart condition, the physical burden or strain of pregnancy, and the possibility of a miscarriage were all described by various fathers. As a result of these concerns, several fathers indicated that they not only became somewhat demanding, but also needed more information from their wives' physicians." (p.168)

McNall (1976) also reported that the majority of fathers in her study group expressed some frustration, irritation or both, in trying to deal with their wives' changing moods, physical discomforts and emotional support needs. This made the fathers themselves irritable, short-tempered, impatient, demanding and/or depressed. In Roehner's (1976) study of 26 expectant fathers, 22 stated that their most important function during pregnancy was to help the mother deal with her physical and emotional problems. She suggested:

"so much emphasis is placed on the physical and emotional needs of the expectant mother that the father feels he must concentrate on her needs and ignore his own preparation for fatherhood" (p.17).

3. Concerns regarding labour and delivery.

Specific concerns related to parturition were delineated in several studies. Getting to the hospital on time, helping his wife in labour and the baby being of the preferred sex were rated as being of most concern by the fathers polled (Entwistle and Doering, 1981, p.57; Leibenberg, 1973, p.109; McNall, 1976). Worry regarding the wife's pain in labour, complications or safety of wife and baby and having sufficient knowledge or being kept informed about what was going on in labour were also cited as being of concern during the pregnancy (Entwistle and Doering, 1981, p.57; Fein, 1976a; Leibenberg, 1973; McNall, 1976). This category received the greatest number of ratings designated as being of most concern in McNall's (1976) study.

4. Concerns regarding the impending fatherhood role.

Results of studies reviewed offered definitive support that men give serious thought to their anticipated role as fathers. Most indicated an overwhelming acceptance and confidence in becoming fathers, but some concerns were documented. As was previously mentioned, the responsibility of providing for the child was considered to

be of considerable importance to some. Other reported concerns related to the man's ability to assume activities of infant caretaking and their general ability to be a good father (Fein, 1976a; McNall, 1976; Obruzut, 1976; Wapner, 1976). Almost all of the 128 subjects in Wapner's (1976) study strongly agreed that the fatherhood role was difficult to anticipate.

Preparation Activities of Expectant Fathers

Unlike preparation for other roles in his life, a man is restricted in acquiring skills for fatherhood. Typically, there is no social training for this role. During a boy's childhood there is scarcely any emphasis on learning father functions beyond that of provider. Boys are infrequent babysitters and rarely participate in family life courses in school (Biller, 1974, p.162; Wente and Crockenberg, 1976). This suggests that many men may not have given serious consideration to being a father until shortly before they assume the role, as compared to most women who played 'Mommy' to their dolls from early childhood. There is no actual rehearsal time; the role must be adopted abruptly and completely. One day they are a couple, albeit pregnant, and within hours the couple become parents. They then have the responsibility for the total care of this small, dependent being on whom our culture has placed such high value. Another time limitation is the definite span of less than nine months to

prepare for the actuality of parenthood, once the pregnancy has been confirmed.

The literature indicated there are actually two levels of preparation going on; that of providing support in labour and delivery and that of becoming father to the child. It appears that men prepare for each task in differing ways.

Prenatal courses generally consist of 4 to 6 classes of 2 hours each, usually taught by registered nurses and taken in the last trimester of pregnancy. The content contains information on maternal personal care during pregnancy, infant feeding, human reproduction with detailed descriptions of the labour and delivery processes, controlled relaxation and specific techniques to be used in response to the phases of labour. Classes on breastfeeding and LaMaze breathing techniques may be included and most courses provide a tour of the obstetrical area of a hospital. The paternal focus is on his role as coach during labour and delivery (Dooher, 1980; Elsharif, McGrath and Smyrski, 1979; Moore, 1983; Whitley, 1979; Wonnell, 1971). With recognition of the special needs of fathers during pregnancy, several authors now advocate at least one class for the fathers alone, but there is little evidence of this occurring (Antle, 1975; 1978; Barnhill, Rubenstein and Rocklin, 1979; Elsharif, et al., 1979; Tudiver, 1981; Wonnell, 1971).

Other activities reported in preparation for the support role in childbirth included practicing coaching the wife at home, obtaining information from male friends who were already fathers and reading about childbirth (Entwistle and Doering, 1981, p.68; Obruzut, 1976; Wapner, 1976). It is the men who have carried out these types of activities who were considered 'prepared fathers' in the literature.

The most frequently cited activity of men in preparation for the fatherhood role was planning his involvement with his spouse, which constituted a change in the marital relationship. Virtually all subjects in relevant studies reviewed felt that their relationships with their wives had altered, with most feeling that they were closer or more interdependent as a couple (Marquart, 1976; McNall, 1976; Roehner, 1976; Wapner, 1976). Fein (1976a) indicated that expectant fathers consciously prepared for changes in their relationship with their wives, either by spending more time together, paying more attention to their wives needs, or by talking with them about their future roles together. This interaction was considered to be vital in the father's adaptation to his new role (Broom, 1984; Fein, 1976b; Fishbein, 1984; Griffeth, 1976; Leonard, 1976; Weaver and Cranley, 1983). Specific activities included preparing the home for the baby's arrival, fantasizing about and planning activities

they would carry out with the baby, talking to and watching their baby move in utero (Entwistle and Doering, 1981; May, 1978; Obruzut, 1976; Wapner, 1976; Weaver and Cranley, 1983).

Other reported indicators of preparation for fathering included more interest in socializing with expectant or actual fathers, increased awareness of babies, watching other fathers with their babies and reading about fathering. A few men mentioned babysitting and practicing infant-care activities as part of their preparation. Associated with this process were reports of increased work efforts and the desire to accomplish more (Broom, 1983; Entwistle and Doering, 1981, p.68; Fein, 1976a; Jones, 1984; Leibenberg, 1973, p.107; Marquart, 1976; McNall, 1976; Roehner, 1976; Wapner, 1976; Weaver and Cranley, 1983).

Moore (1977) suggested that the degree of participation in these activities appeared to be a function of individual motivation and communication patterns in the marriage. The desire of expectant fathers to receive increased social supports from all sectors in which they interacted was expressed in several studies (Jordon, part 3, 1973; Moore, 1977; Marquart, 1976 and others).

A potential source of anticipatory guidance that could assist fathers in the formulation of both roles is the wife's antenatal care giver. In Canada this is usually a

physician. As far back as 1931, Zilboorg encouraged physicians to involve fathers in the pregnancy. Other psychiatrists advised the same in assessment of the emotional health of the whole family (Coley Jr. and James, 1976; Horsley, 1972; Wainwright, 1979). Paediatricians have emphasised the importance of including the father in perinatal care (Brazelton,,1976; Gray, et al, 1979; Wolfson and Bass, 1979). Proponants of family centered childbirth encouraged it on the basis of promoting good communications between the physician and both parents (Kitzinger, 1977, p.202; Tanzer and Block, 1972, p.212).

Williamson and English (1981) reported a pilot study that examined support received by 9 expectant couples from their family doctor. While pregnancy related concerns and need for support were recognized by all physicians in the study, general stresses and sources of emotional support were infrequently known. Significantly more was known about the women than their husbands, but, when recognized, attempts were made to reduce the stress. The authors acknowledged the study itself as an intervention. The fathers in the study group rated their physicians highly as a source of support and the authors reported that including the father in the prenatal visits took no more time than usual.

There is little documentation that men actually use the physician as a source of information. Wapner (1976)

reported that 62% of the subjects in his study group had never talked to doctors attending their wives. Although no statistics were cited, Jordan (1973; part 3) reported:

> "...the majority of husbands had not seen or talked to their wives doctor prior to her admission. Many stated they would like to discuss matters related to pregnancy, the hospital and the postpartum period." (pp.16-17)

However, in a more recent study of 100 men, 66% had talked to their wives doctors during the pregnancy (Cranley and Weaver, 1983). This might indicate more acknowledgement of fathers' needs by both the physicians and the fathers themselves.

Responses to Participation in Labour and Delivery

Post-birth studies on differences in men's adaptation to fatherhood in relation to preparation activities have primarily compared men who have attended prenatal courses to those who have not. The taking of such a course was the criteria in all studies for 'prepared' fathers. Reviewed studies compared these men in relation to father involvement in several sectors.

Biller (1974, p.163) and Tanzer and Block (1976) reported that prepared childbirth enhanced both parents' feelings of self-esteem and the husband's participation

strengthened the marital relationship, prepared couples had more positive attitudes toward the childbirth experience than unprepared parents, and prepared childbirth may have psychological benefits for the baby and the family as a whole. Other studies, however, found no significant difference between fathers with formal prenatal education and those without in any of these outcomes, if the father had actually attended the delivery (Bowan and Miller, 1980; Fein, 1976a; Gabel, 1982; MacLaughlin and Taubenheim, 1983).

Presence at delivery was also considered to be the signficant variable in father-infant attachment behaviours, regardless of preparation level (Bowan and Miller, 1980; Cronenwett and Newmark, 1974; Dooher, 1980; Fein, 1976a; Gabel, 1982; Greenberg and Morris, 1974; Manion, 1977; Wente and Crockenburg, 1976). All of these authors lauded the value of prenatal courses, but concluded that those men who did not attend classes should not be considered uninvolved.

It has also been suggested that men who take prenatal courses participate more in infant-caretaking activities (Boettcher, 1979; Jones, 1984) but this notion has not been supported (Lamb and Frodi, 1980, p.39). It may be, as Manion (1977) hypothesized:

> "The fathers in this study with high scores in participation in the birth also had significantly higher scores in participation in infant-caretaking activities. It is possible that these fathers simply had a participative character from the beginning, which would increase their attendance at prenatal classes, participation in the birth and in infant care." (p.179)

Gabel (1982) and MacLaughlin and Taubenheim (1983) conducted comparative studies on the childbirth experiences of prepared and unprepared fathers. The major differences reported were the education level, age and socioeconomic levels. The unprepared fathers were generally younger, few had completed college and most were employed in technical occupations. The majority of prepared fathers had some college or higher education and held professional jobs. Although the unprepared fathers in Gabel's (1982) study were reported to have had negative prebirth expectations, MacLaughlin and Taubenheim (1983) reported the expectations and needs of both groups to be very similar. Each of these studies concluded that both groups of men derived feelings of achievement and pride from helping their wives, were comfortable in the hospital setting and wanted warm, supportive care from birth attendants. Prepared fathers wanted more information and explanations from care givers. The suggestion was made that perhaps preparation gave these

men more insight into what might be necessary for them to carry out this role optimally. The differences in education, however, may explain why prepared fathers sought more depth of knowledge (MacLaughlin and Taubenheim, 1983).

Summary

A number of studies regarding a man's transition to the fatherhood role have been discussed which illustrate that a number of factors impinge on how a man acquires the role. Some of these factors are influential from a very early period in the man's life and are dependent on personal characteristics as well as environmental factors.

Relatively recent social changes in the traditional male and female functions in many families and the promotion of the family unit during childbearing have resulted in increasing numbers of men taking on an active role during pregnancy and childbirth. Patterns of male behaviour during the partner's pregnancy have received recent attention but findings are still considered tentative.

Research supports the conclusion that pregnancy for most men is an emotional experience, often accompanied by physical symptoms (Trethowan, 1972). There is also evidence to support the existance of an emotional developmental process during pregnancy which is widespread and sex specific (Dodendorf, 1981; May, 1982b). May (1978) and Wapner (1976) concluded that two separate operations are occurring in expectant fathers: preparing to be father to the coming child and learning to provide support to his wife during pregnancy, labour and delivery.

May (1978) reported that the fathers most involved with the preparations for parenthood were usually able to discuss the nurturant feelings that pregnancy elicited in them. She hypothesized that there is a relationship between the capacity to feel pregnant and the capacity to feel fatherly in the early weeks of parenthood. As Klaus and Kennell (1977, p.13) have stated, a woman's ability to picture herself as a mother has been recognized as an important factor in attaining a maternal role. The importance of this construction of a future identity as a father to the attainment of a paternal role has not yet been determined. Research did suggest, however, that it may be especially crucial. The importance of his roles in support of the mother and separation/individuation of mother and child indicate a need for his involvement (Henderson, 1980, part II). If he remains detached from the pregnancy, he may have difficulty establishing himself as a significant participant with the mother-child dyad. Fein (1976b) noted further that the development of a coherant pattern of expectation and activities was important to a man's postpartum adjustment.

The paternal role is vaguely defined and highly variable in our culture. It is also likely that the man has had little exposure to a clear role model and little formal preparation for parenting (LeMasters, 1977). He is not biologically involved with the pregnancy and

childbirth, and if a paternal instinct exists, as Rypma (1976) and others suggested, it is more likely to operate after the child is born when bonding can be reinforced by the infant's physical characteristics and social responses. It may be that for a man to become actively involved in pregnancy and early parenting, he must first acknowledge and accept the emotional impact of pregnancy and, by sharing these emotions, construct with his partner, a vision of himself as a father who will participate in childbearing and childrearing activities (Fein, 1976b, Antle, 1978; Weaver and Cranley, 1985).

Activities indicative of preparation for fatherhood reported in reviewed literature included discussion with the partner, visualizing himself in the role, observing and talking to other fathers and children, especially babies, and reading about fatherhood. A small number sought out child care activities (Obruzut, 1976 and others). Many men reported concerns about their ability to provide for the child and to be a good father, expressing a desire for more available support in this area (Wapner, 1976 and others).

The support role of men during pregnancy has received considerably more empirical attention and appears to be of considerable benefit to the wife (Henneborn and Cogan, 1975 and others). Men's perception of this as their most important function during pregnancy was reported (Roehner, 1976).

The major support activity reported was attendance at prenatal classes. Others included reading about childbirth and obtaining information from male friends (Obruzut, 1976 and others). A number of authors illustrated that attendance at prenatal classes should not be construed as a totally positive attitude towards participation in the childbirth events (May, 1982 and others). Conversely, others have indicated that men who had not sought out participatory activities were not uninvolved (May, 1982a; Gabel, 1982; MacLaughlin and Taubenheim, 1983).

The data which formed the bases of these findings was collected almost exclusively from men taking prenatal classes. By their presence, this group had declared a desire for some degree of active involvement in the pregnancy. Little is known about the manner in which other men prepare for fatherhood, or their reactions and feelings regarding the coming child.

CHAPTER III.

METHODOLOGY

Design

This is primarily a descriptive study designed to explore the backgrounds of some first time fathers attending their wives' labour and their perceptions of the event. Specific factors were to be explored in the following categories:

1. identification with the fatherhood role
2. imaginal or incipient rehearsal for the role and practice for participation in the role
3. perceptions of labour and delivery
4. perceptions of his participation in labour and delivery
5. perceptions of his newborn

Demographic characteristics such as each subject's age, occupation, childhood home and size of family of origin were obtained in order to describe the backgrounds of the population participating in the study.

In an effort to determine if there were any differences in perceptions of the above categories by subgroups of this population, tests of significance were performed on responses comparing:

1. prepared and unprepared fathers
2. fathers who had attended delivery and those who had not.

Population

The subjects in this study were fathers present during all or part of their wives' labour during specified times arranged by the investigator with those agencies cooperating with the study. Criteria for eligibility for the complete study were as follows:

1. first time, married fathers
2. at least 2 hours of active labour experienced by the wife
3. uncomplicated pregnancy
4. delivery within twelve hours of admission to the Case Room (to preclude exhaustion as a confounding variable)
5. delivery of a normal neonate with a five minute Apgar score of seven to ten and a birth weight greater than three thousand grams
6. both husband and wife voluntarily agreed to his participation in the study.

Ethical Considerations

Using human beings as subjects in research, as was the case in this investigation, requires that certain ethical considerations be carried out in order to protect the rights of the subjects. Accordingly, the following ethical protocol was followed for this study. The research proposal and proposed study tools were submitted to the Human Investigation Committee of the Medical School of

Memorial University of Newfoundland. They suggested revisions regarding format and when their suggestions were incorporated, approved the project. The Ethics Committees of both hospitals approached for implementation of the study considered the proposal and each gave its approval. Each potential participating couple was informed in writing and verbally about the study (see Appendix A). All subjects were assured of confidentiality and to secure privacy, each agency provided a room in which to conduct the interviews. All attending physicians were informed of the purposes of the study and all gave permission for the attendance of the researcher.

Setting

The two agencies utilized for this study were the major obstetrical centers in this province. They served as referral centers for high-risk pregnancies and normal pregnancies within the urban region of St. John's and the small communities of the Avalon Peninsula.

Both settings promoted the concept of family centered maternity care, welcoming fathers to accompany their wives during labour. Of all of the attending physicians of both institutions, only one refused to allow fathers to be present during normal delivery. Neither of the hospitals required the men to have formal preparation for attendance nor were there any release forms to be signed.

Each case room was equipped with four to six fetal monitors, mechanical pumps to regulate intravenous infusion and all other necessities for normal labour and delivery, as well as any emergency situation which may develop. As many labours were induced by oxytocin and all such cases were routinely accompanied by mechanical (as well as human) ongoing assessment and regulations, many couples were surrounded by large pieces of machinery with which they may or may not have been familiar.

Each case room had separate labour and delivery areas. The mother laboured in a single or two-bed room and was transferred to the delivery room via stretcher when delivery was imminent.

In each institution, all fathers generally participated in differing degrees. Some were actively involved as the coach and main supporter of the mother, some participated in coaching when guided by the nursing personnel, while others took an observational role. At the time of transfer of the mother to the delivery room, the father was directed to change from his street clothes to a hospital scrub suit, after which he joined his wife in the delivery room. There the father was directed to sit or stand at the head of the table to encourage and support his wife. Most fathers became very involved with holding their wife in a semisitting position during her contractions and providing verbal encouragement. At the time of delivery

most stood to view the baby as it emerged. From that vantage point, little could be seen of the 'blood and gore' so many men express fear of viewing (Gabel, 1982).

Not all fathers who were present in the labour room attended the delivery. Generally, those fathers who actively participated in the labour continued to do so in the delivery room while the 'observational' fathers preferred to wait in the father's waiting room. The decision primarily rested with the couple if the labour progressed normally.

After delivery, and when respiration had been established in the infant, both parents were encouraged to begin their acquaintanceship with their baby. If the father was not in the delivery room , he spent time with the mother and child in the recovery room before the baby was transferred to the nursery.

No fathers attended the delivery if the mother had a general anaesthetic for any reason (Caesarian birth or forceps delivery). Most paediatricians did, however, attempt to show those babies to the fathers shortly after birth. Some encouraged the fathers to hold the baby.

No written guidelines were given to fathers. Guidance and information was provided by the nursing staff.

Definitions

As stated in the beginning of this chapter, five main constructs were used to explore factors theoretically considered important to transition to the fatherhood role. While the constructs could not be measured directly, the variables thought to be indicators of the constructs were measured. The constructs (theoretical definitions) and the variables (operational definitions) were defined.

Identification With the Fatherhood Role

Theoretical definition: Factors reported in descriptive studies thought to influence a man's attitude towards how he will enact the fatherhood role.

Operational definition:

1. Attitudes of the man towards becoming a father as measured by:
   a) reasons why he thinks having children is important as being marriage/family, child or culturally centered
   b) his agreement/disagreement with reasons cited in reviewed literature regarding motivation to become a parent.

2. His relationship with the man's father as measured by:
   a) how much time he spent with his father
   b) how well he got along with his father.
3. The influence of the man's wife in taking on the fatherhood role as measured by whether or not they had discussed desired family size.

Rehearsal and Practice for the Fatherhoood Role

Theoretical definition: Those changes, concerns and activities of an educational or psychosocial nature reported in descriptive studies in association with expectant fathers.

Operational definition:

1. Emotional changes noted including:
   a) participation and initial reaction on being informed
   b) emotional changes noted or acknowledged during the pregnancy
2. Somatic symptoms noted which are known to be part of the Couvade syndrome.
3. Major concerns noted or acknowledged related to impending fatherhood.

4. Preparation for the support role in labour and delivery as measured by:
   a) attendance at prenatal classes,
   b) home practice of learned techniques,
   c) supplementary reading on labour and delivery,
   d) other sources of information,
   e) intention to attend delivery,
   f) concerns about attendance at delivery.
5. Preparation for the fatherhood role as measured by:
   a) discussion of the coming baby with wife, parents, and male friends
   b) participation in name selection
   c) preferences for sex of the baby
   d) any change in his awareness of children
   e) the amount of contact with infants within the last three years
   f) activities performed with them.

Perception of the Labour and Delivery Processes

Theoretical definition: Post-delivery perceptions of the processes of labour and delivery as positive or negative events and in relation to preconceived ideas of the events.

Operational definition:

1. The construct was measured by eliciting the subjects' responses to:
   a) viewing the experience as terrific
   b) the time in the delivery room as an ordeal
   c) whether he would return in subsequent pregnancies
   d) his understanding why some fathers don't attend.

2. The reality of the processes in terms of his expectations was measured by eliciting responses to whether or not each phase was as he had expected it was going to be.

Perception of Participation in Labour and Delivery

Theoretical definition: Post-delivery perceptions of the father in terms of his degree of involvement and his knowledge level.

Operational definition:

1. The construct of perception of involvement was measured by eliciting the subjects' responses to:
   a) whether or not he had been a source of strength to his wife,
   b) he had coped with the labour to his satisfaction,
   c) he was the one who had helped his wife the most

d) whether his wife would have had a harder time without him

e) labour and delivery being woman's work

f) helping his wife to be more comfortable

g) whether his presence was more important to his wife than staff members

h) that he helped his wife the most.

2. Items used to measure his perception of his knowledge level were responses to:

a) his nervousness with the machinery

b) remembering what he was supposed to do

c) whether he had wished he had known more about how to help his wife during labour/delivery.

Perception of the Neonate

Theoretical definition: Immediate post-delivery perceptions of the father of his newborn as a separate being and himself as a father.

Operational definition:

1. Variables used to measure the man's perception of his neonate as a separate being were responses to:

a) his baby's appearance as beautiful

b) his baby looking better after a bath

c) his baby looking like all other new babies

d) his baby seeming to have his/her own personality

e) whether or not new babies can do very much.

2. The man's perception of himself as a father was measured by eliciting responses to:

a) whether or not he was afraid to touch the baby

b) thought he might drop the baby

c) whether or not he felt like a father yet.

Research Instruments

Data were collected using two separate instruments.

Interview Schedule

A review of the literature did not disclose a tested instrument that could be used to collect the necessary data, but provided the basis for development of a tool collecting information thought to be important to transition to the fatherhood role. A 30 item interview schedule was developed to yield the desired information for this study. The schedule contained a combination of fixed-alternative and open-ended questions (see Appendix B) and was standardized in that the questions, their sequence and their wording were fixed to keep the data collecting as consistent as possible.

Post-Delivery Questionnaire

The tool developed by Cronenwett and Newmark (1974) in their California study of father's responses to childbirth was modified for the purposes of this study. The questionnaire utilized was a Likert-type scale which included 29 statements that reflected paternal perception of the labour and delivery, his participation in the events and his initial perception of his newborn. Simple statements related to these factors were given, to which the father could respond in one of five graduations from 'strongly agree' to 'strongly disagree'. The statements were phrased in both positive and negative terms and were stated in both mild and extreme tones in an attempt to evoke a variety of responses. The sequence of the sentences carefully mixed the content being responded to in an attempt to prevent habituation.

Data Collection

Data collection took place over a period of three months. The procedure for obtaining subjects was as follows: the head nurse of each Case Room was contacted to see if there were any fathers fitting the criteria for inclusion in the study. If the wife was in the latent phase of labour or early in the induction process, the couple was approached by the researcher. No overtures were

made once active labour was established. It was felt that the fathers may be very involved with their support functions on a continuous basis during active labour and would not want to leave the bedside of their wife to participate. They may even have resented the intrusion of being approached. Even in the early phase of labour a certain amount of anxiety and/or excitement could be assumed to be present. This, however, was not expected to be a major source of measurement error, as all subjects were in similar circumstances and the degree of influence would become evident by the couple's agreement to participate in the study.

A letter explaining the study was then given to the husband and wife, reinforced with verbal explanation (Appendix A). If both were in agreement to his participation, the man was led to a separate room for the interview for privacy and comfort. Anonymity was assured and the subject was shown his number on the interview schedule in an effort to minimize responses made on a basis of social desirability (Appendix B). The interview took about 20 minutes, but often extended to 30 minutes, with the father taking advantage of the opportunity to ventilate his feelings. The schedule was completely scripted and coding values had been pre-assigned to minimize administrative variations and maximize instrument clarity (Polit and Hungler, 1983, p.384). All interviews were

conducted by this researcher in order to keep the data collection as consistant as possible. Although it is recognized that one interviewer does not eliminate interviewer bias, it helps to keep it at a minimum and unidirectional (Wechsler, 1979, p.102).

The post-delivery questionnaire was self-administered by the fathers with the researcher in attendance (Appendix B). Shortly before the wife's transfer from the Case Room to the post-partum units, the fathers were shown to a desk and chair in the recovery room. The researcher maintained proximity by conversing with the wife while the questionnaire was completed. This fulfilled a number of purposes:

1. the researcher was readily available to the father to answer any questions he might have
2. the researcher did not appear to be hovering, which might make the father self conscious
3. conversation between the researcher and the father was not encouraged, making the man's responses unbiased by any remarks made by the researcher
4. it decreased the possibility of the wife feeling ignored; and
5. the amount of time each subject wanted to complete the questionnaire was self-determined.

Statistical Analysis

All data were coded for computer entry. Analyses were conducted using the Statistical Packages for the Social Sciences (1983). Frequencies and means were obtained for the data in order to describe the population with respect to the variables being investigated. Major independent variables which had been operationalized and scored by several characteristics were combined to obtain individual scores for the continuous variable of 'anticipatory socialization'.

Principal components were identified by factor analysis and alpha scores obtained on those items which loaded according to preset criteria for inclusion.

Chi-square tests were run on two subsets of the subjects based on the variables with alpha levels greater than .75.

A Varimax (orthoganal) factor rotation was performed to determine the least number of factors producing the most variance.

Reliability and Validity

Two major criteria for assessing the quality of adequacy of any research instruments are reliability and validity (Polit and Hungler, 1983, p.385, 394; Waltz and

Bausell, 1981, p.60). Reliability is the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure (Polit and Hungler, 1983, p.621).

Waltz and Bausell (1981, p.60) listed factors that may affect this consistency. These factors and measures taken to maximize consistency are:

1. the manner in which the measure is scored. The interview schedule and post delivery questionnaire were coded prior to administration.
2. the physical and emotional state of the individual at measurement time:
   a) the husband and wife were included in soliciting participation of the father
   b) agreement from both was obtained to preclude any suggestion that the mother might resent his absence during the time taken for the interview
   c) the interview was conducted during early labour when the wife was not in need of constant support
   d) the degree of anxiety and/or excitement being experienced would be self-determined by the subject with his agreement to participate providing tacit evidence of this not being a limiting factor

e) time limit in relation to the length of labour for administration of the post-delivery questionnaire to preclude exhaustion as a confounding variable.

3. properties of the situation in which the measure is administered:

a) each interview was privately conducted in a separate room with comfortable seating for the subject and the interviewer.

b) anonymity was assured

c) all interviews were conducted by this researcher to minimize interviewer bias

d) privacy but proximity of the researcher during administration of post-delivery questionnaire for the reasons previously described.

4. characteristics of the measure itself.

a) scripting of the entire interview schedule

b) mixing of responses in the post-delivery questionnaire to prevent habitul set

c) assured anonymity to minimize responses based on social acceptance

d) internal consistency of the post-delivery questionnaire was evaluated by obtaining alpha coefficients of principal components identified by factor analysis.

These findings will be discussed in the results section.

Validity refers to the degree to which an instrument measures what it is supposed to be measuring (Polit and Hungler, 1983, p.624). Two types of validity were tested in this study. Content validity is determined by having individuals who are knowledgeable about the particular content make judgements concerning the adequacy of the instrument in measuring that content in a representative manner. Such judgements require subject matter expertise. (Waltz and Bausell, 1981, p.70,71). To establish content validity, the conceptual model and proposed data collection tools were submitted to four content experts. They were an obstetrician, a neonatologist, a sociologist and a nurse who all had a knowledge and interest in the area under investigation. Both the conceptual model and the tools were modified in accordance with the suggestions of this group. Face validity, part of content validity, refers to whether the instrument appears to the layman to measure what the test constructor claims it measures (Waltz and Bausell, 1981, p.71). The modified interview schedule and questionnaire were administered to six subjects who met the study criteria. The men reported that they could not suggest any aspect of their experiences as expectant fathers that had not been included in the study. In addition, all six expressed that they were very pleased that the topic was being investigated and thanked the researcher for the opportunity to discuss how they felt.

Construct validity tests the adequacy of an instrument in measuring the abstract construct of interest (Polit and Hungler, 1983, p.406). The post-delivery questionnaire was subjected to factor analysis to test whether or not the statements to which the subjects responded actually reflected the three areas of perception under study. The findings will be presented in the results section.

CHAPTER IV

RESULTS AND DISCUSSION

The presentation of the findings from this study is divided into two major sections. The first part will include all findings which describe the subjects' responses to the study content. The second part contains the results of statistical tests performed on the data.

Descriptive Findings

Characteristics of the Population

In total, 42 first-time fathers were interviewed. Five infants were delivered by Caesarian births with no labour experienced by the wife, excluding them from the study. In one instance, the interviewer was unavailable at time of delivery, thus this subject did not complete the questionnaire. Thirty-six subjects completed the study. All subjects were Caucasian and, at the time of the study, resided in or near the metropolitan area where the hospitals were situated. The ages of the men ranged from 20 to 37 years with a mean age of 28 years. The educational spectrum varied from less than eighth grade (8%) to completion of at least one university degree (22%). Slightly more than half of the subjects (55%) had pursued some form of post-secondary education. There was an almost

even distribution of types of occupations. Ten men held jobs that could be classified as labour (28%), 13 blue-collar (36%) and 13 (36%) held professional/managerial positions. More than half of the subjects were brought up in communities with a population of less than 5,000 people (20 out of 36). The majority (89%) grew up with both parents and came from large families, with 44% having more than 6 siblings. The characteristics of the population are summarized in Table 1. These findings are suggestive only of a reasonable cross section of demographic characteristics of Newfoundland men in the expected age group for beginning childbearing. The large percentage brought up in small towns and from large families may be attributed to provincial norms when these men were growing up. The province has few communities with a population over 5,000 people and large families in previous generations were very common.

TABLE 1
Characteristics of the Population
(N = 36)

Characteristics	n	Frequency (%)
Age		
20 to 25 years	10	27.8
26 to 31 years	19	52.8
32 to 37 years	7	19.4
Education		
< 8 grade	3	8.3
9th - 10th grade	4	11.1
Completed high school	9	25.0
Vocational courses	2	5.6
Vocational diploma	3	8.4
University courses	7	19.4
University degree/higher	8	22.2
Occupation		
Unskilled labour	4	11.1
Skilled labour	6	16.7
Clerical, sales	7	19.4
Craftsman, technical	6	16.7
Management	6	16.7
Professional	7	19.4
Size of home of origin		
< 1000	8	22.2
1 - 5,000	12	33.3
5 - 10,000	3	8.3
10 - 20,000	2	5.6
> 20,000	11	30.6
Grew up with parents		
Neither	1	2.8
Mother Only	3	8.3
Both	32	88.9
Number of Siblings		
0	1	2.8
1 - 3	12	33.3
4 - 5	7	19.5
> 6	16	44.4
Ordinal Position		
Youngest	4	11.1
Middle	21	58.3
Oldest	11	30.6

Responses to Factors Thought to be Associated with Identification with the Fatherhood Role

When the subjects were asked the open-ended question of why having children is important, one-half gave a reason which was classified as marriage or family centered. These respondants referred to the sharing of the experience, strengthening the marriage bond and the completion of family life. Seven of these men indicated that having children was what "marriage was for". Eight fathers gave child-centered reasons suggestive of the child adding an extra dimension to their own lives. Enjoying children, bringing them up healthy, having the child do things they hadn't done and having someone to love, play with, teach and talk to were the bases for parenthood given by these men. The culturally centered reasons given by 6 fathers were philosophical in nature. Expressions such as 'life-fulfilling', 'the test of one's capacity as a human', 'someone to look back to', 'the continuity of man', 'does upbringing change one for good or bad', and 'with every child there's hope for the world' were used. The responses to agreement with specific reasons given as to why people have children had a different pattern. The highest level of agreement was to statements regarding the parental role with 80 to 97% agreeing that they thought they would make good parents, would enjoy caring for and raising children and that it will be fun to have children. Marriage

centered reasons elicited mild to moderate agreement. Only 10 fathers felt that marriage is lonely without children (28%) and 19 agreed that children would strengthen the marriage (53%). Six agreed with the statement 'because my wife wants children'. Carrying on the family name was important to 19 of the subjects and 25 felt that children are a comfort in one's old age. There was virtually no agreement that children help economically later on (3%) or that having children proves adulthood (6%).

The superficial overview obtained on the subjects relationships with their own fathers revealed that only 10 reported having spent a lot of time with him (28%) but 23 stated that they got along well with their fathers (64%).

The prior discussion with their wives of desired family size suggested that 30 of the respondents had been considering parenthood for some time and that they shared this consideration with their mates.

Table 2 is a summary of the responses to factors thought to influence a man's identification with the fatherhood role.

TABLE 2

Responses of Fathers to Factors Associated with the Fatherhood Role

(N = 36)

Influencing factor	n	Frequency (%)
Self-reported motivation for parenthood		
Not sure	4	11.1
Culturally centered	6	16.7
Marriage/family centered	18	50.0
Fatherhood centered	8	22.2
Agreement with published motivations [a]		
1. Marriage is lonely without children	10	27.8
2. My wife wants children	6	16.8
3. Children will make my marriage stronger	19	52.8
4. Someone to carry on my family name	19	52.8
5. To help economically later on	1	2.8
6. It will be fun to have children	30	83.3
7. Children are a comfort in one's old age	25	69.4
8. I will enjoy caring for and raising children	35	97.2
9. Having children will prove I'm an adult	2	5.6
10. I think I will make a good parent	29	80.6

a. All subjects responded to each of these. Only the number who agreed with the statement is given. The remainder disagreed.

TABLE 2 (continued)

Influencing factor	n	Frequency (%)
Time spent with own father		
N/A	4	11.1
None	1	2.8
Hardly any	1	2.8
Not too much	13	36.1
Some	7	19.4
A lot	10	27.8
Got along with own father		
N/A	4	11.1
Not well	1	2.8
Fairly well	8	22.2
Well	23	63.9
Previous discussion of desired family size with wife		
No	6	16.7
Yes	30	83.3

Factors Thought to be Associated with Rehearsal for Fatherhood

Emotional Changes.

With the 36 pregnancies involved with this study, 23 were reported to be planned. In 15 of the planned pregnancies, the couple had mutually decided to have a child at that time. In 5 of the cases, the husband initiated the idea and with 3 of the couples it had been the wife who had proposed this idea. Further discussion on the planning of the pregnancy will be incorporated with other relevant factors in this section.

The initial reaction to the pregnancy was reported to be positive by 19 of the men, 18 of whom had planned pregnancies. However, 23 subjects had reported their wives' pregnancy as being planned. This suggests that not all planned pregnancies are immediately welcomed when the idea becomes a reality. Degrees of positivity were expressed ranging from "O.K. The time is good" to the phrases "On the moon", "Proud as a peacock" and "I went nuts". Only the news of one of the unplanned pregnancies was received with unequivocal delight. Six subjects recalled feeling ambivalent. They combined terms such as 'happy' with 'apprehensive', 'anxious' and afraid of the responsibility. Four of these pregnancies were planned, 2 unplanned. The 2 subjects expressing neutral feelings in early pregnancy both reported that the pregnancies had been

planned and that the idea to have a baby had been mutual decisions with their wives. The 9 men with negative feelings had felt shocked and scared. One reported that he had felt "weak, anxious and scared". Seven of these pregnancies were unplanned. These findings appear to be consistent with the report of Entwisle and Doering (1981, p.60) that planning was strongly related to the father's initial reaction.

Twenty respondants had noted changes in themselves during the pregnancy (56%). Those most recognized were in relation to their feeling toward their wives. Ten reported increased feelings of tolerance, caring and protectiveness (28%). Becoming more serious and settling down were reported by 5 subjects, while 10 acknowledged mood changes in themselves. One man stated that he sometimes begrudged doing things his wife used to do and another said he had been "trying to psych myself into being a father". A summary of emotional changes reported is found in Table 3.

Social Changes.

In response to direct questions regarding changes in social patterns, all of the men acknowledged that changes had occurred. More than 90% realized that their awareness of children had increased and 25 of the men reported spending more time with their wives (70%). Only 1 man stated that he was spending less time with her. The majority of the other 10 men said that they had always

TABLE 3

Summary of Responses Regarding Emotional Changes

Factor	n	Frequency (%)
Pregnancy planned		
No	13	36.1
Yes	23	63.9
Whose idea was it		
N/A	13	36.1
Wife	3	8.3
Couple	15	41.7
Husband	5	13.9
Emotional Changes		
Initial reaction to pregnancy		
Negative	9	25.0
Neutral	2	5.6
Ambivalent	6	16.7
Positive	19	52.8
Emotional changes reported [a]		
More tolerant, caring of wife	10	27.8
Irritable, frustrated, moody	7	19.4
More serious, settled down	5	13.8
Nervous, anxious	3	8.3

a. Some subjects gave multiple responses to this question.

spent a lot of time with their wives. One half of the men had spent more time with their parents since the onset of pregnancy, while 2 had spent less them with them. Work patterns altered for 12 of the men. Six reported working harder while 6 said they were working less. No change in work habits was reported by 24 of the subjects. A summary of social changes reported is found in Table 4.

Physical Changes.

Physical changes were reported by 10 men. This 28% is fairly consistent with the 30 to 35% of presence of Couvade symptoms reported by Wapner (1976) and Weaver and Cranley (1983). Weight change was the most frequently reported, with 4 men having gained weight and 1 had had a weight loss. The other reported changes are listed in Table 5.

Concerns.

Two thirds of the subjects immediately acknowledged concerns during the pregnancy. This increased to 83% on specific questioning. Thirty men were worried about the health of their baby. One father was afraid of mental retardation in the child. Another stated that he was an asthmatic and was worried about the baby, while another reported genetic illness (unspecified) in both families, causing concern. Of the 29 men expressing concern for the health of their wives, 2 based their worry on previous miscarriages. Thirteen men had concerns regarding

TABLE 4

Summary of Responses Regarding Social Changes

Factor	n	Frequency (%)
Social Changes		
Noted changes in pregnancy		
No	16	44.4
Yes	20	55.6
Relationship with parents		
Decrease	2	5.6
Neutral	16	44.4
Increase	18	50.0
Awareness of children		
Neutral	3	8.3
Increase	33	91.7
Work patterns		
Decrease	6	16.7
Neutral	24	66.6
Increase	6	16.7
Time spent with wife		
Decrease	1	2.8
Neutral	10	27.8
Increase	25	69.0

TABLE 5

Summary of Reported Physical Changes in Pregnancy

	n	Frequency (%)
Physical changes noted		
No	26	72.2
Yes	10	27.8
Physical changes reported [a]		
Weight gain	4	11.1
Back/side pains	3	8.3
More tiredness	2	5.6
Morning nausea	1	2.8
Weight loss	1	2.8
Tension headaches	1	2.8
Loss of appetite	1	2.8

a. Some subjects gave multiple responses.

impending parenthood and 12 reported financial concerns. No other specific bases for concerns were reported. A summary of reported concerns is shown on Table 6.

Subjects were not asked to try to recall at what stage in the pregnancy changes and concerns occurred, therefore, their reports could not be related to the emotional developmental process proposed by May (1982). They do, however, indicate that changes and concerns did occur in this population and that some of the subjects had not recognized changes in themselves until given specific cues. Overall emotional investment will be discussed as a continuous variable after findings of other 'rehearsal' behaviours have been described.

Preparation for the Support Role.

The idea to attend the labour was initiated by the man himself or in conjunction with his wife in 26 of the cases (72%). The wife instigated his presence in 7 instances (19%) and, with the others, one came at the suggestion of the prenatal class instructor and another by a friend. One father stated that it had just happened, and hadn't been planned.

In regards to preparation to provide support during labour and delivery the term 'prepared' will refer to fathers who had attended more than 50% of a course of prenatal classes. 'Unprepared' will be indicative of those

TABLE 6

Summary of Reported Concerns of Expectant Fathers

Concerns	n	Frequency (%)
Concerns perceived		
No	12	33.3
Yes	24	66.7
Responsibility of parenthood		
No	23	63.9
Yes	13	36.1
Wife's health		
No	7	19.4
Yes	29	80.6
Child's health		
No	6	16.7
Yes	30	83.3
Financial concerns		
No	24	66.7
Yes	12	33.3

who had not attended. Twenty-seven of these subjects had attended more than 50% of such classes. The other 9 men had not attended any. There was attendance at all classes by 10 of the fathers while 17 attended more than 50%, but not all. The mean age of prepared fathers was 29 years, slightly higher than the 26 years mean of unprepared fathers. Only 3 of the unprepared fathers had post-secondary education and this was in the vocational field. All of the 13 subjects in the study who reported attending university were prepared, although all 3 men with less than eighth grade were also in the prepared group. This tendency of higher age and education levels to be found in men who participate in prenatal education is generally consistant with the findings reported by Gabel (1982) and MacLaughlin and Taubenheim (1983).

Other preparation activities included supplementary readings on labour and delivery by 16 of the men. These ranged from the reading of prenatal class pamphlets by 1 father who had not attended classes, to the reading of more than 10 books by one man. The latter held several university degrees. This example illustrates an observation made by MacLaughlin and Taubenheim (1983) that men with higher levels of education sought more depth of knowledge. Ten men had read 2 or 3 books. Eleven of the prepared couples practiced the breathing exercises at home on a regular basis, while 9 practiced occasionally. The

other 7 prepared fathers did not practice. Four fathers had accompanied their wives to their prenatal checks several times, and 4 had gone once. Twenty-four (67%) of this study group had not met the attending physician up to the time of the interview. This finding is similar to the reports of Wapner (1976) and Jordan (1973) and much lower than the more recent report of Cranley and Weaver (1983) in which 66% of their 100 subjects had attended 1 or more prenatal visits to the physician.

Another reported activity was the discussion of measures to assist their wives in labour with others. This was done by 12 of the subjects (33%). Nine had sought advice from friends or relatives while 3 had talked to nurses. This suggested that health care professionals were not utilized as a primary source of information. Whether or not this was due to lack of accessability or lack of perceived need by these men can be mere speculation.

In the group of prepared fathers, no subject had carried out all of the "other" activities to supplement prenatal classes. Only 1 man had attended classes only. Nineteen of the prepared fathers had carried out 2 or 3 supplementary activities. In the unprepared group, 3 men had carried out some activity to prepare to provide support. One had read all the literature from prenatal classes, had coached his wife a few times in breathing exercises and had discussed how to help his wife with his

uncle. Another subject reported reading 2 books on labour and delivery and had discussed helping measures with his brother. The third man reported discussing helping measures with friends but added it was 'no help'. A summary of all activities reported in preparation for supporting their wives in labour is given on Table 7.

Thirty-three of the men in the study group intended to accompany their wives from the labour area to the delivery room. Twenty-six were prepared fathers. When asked whether or not they had any concerns about attending the birth, 14 said 'no'. Twelve were prepared and 2 unprepared. Eleven subjects expressed concerns regarding the health of their wives and/or babies. Eight men stated that they were worried about their own performance. Specific concerns of the subjects are included in Table 8. Of the 19 men who reported having concerns about the delivery experience, 14 had attended prenatal classes. Two of these fathers stated they didn't know what to expect and 3 referred to the 'blood and gore' they expected to see. These statements have implications for prenatal class instructors.

Of the 3 men who did not intend to go into the delivery room, 2 gave reasons related to self and 1 stated his wife didn't want him there. Two were unprepared and one had attended prenatal classes.

One of the subsets of comparison in this study is prepared and unprepared fathers. Further discussion of this factor will be presented with the anticipatory socialization profiles and tests of significance.

Preparation For the Fatherhood Role.

Thirty-two of the men reported that they had had contact with a baby under 6 months of age within the last 3 years (89%), suggesting that most might be reasonably comfortable with a newborn. Only half of these men, however, had been in frequent contact with small babies (44%). Six reported 'sometimes' while 10 stated that this experience had been on rare occasions. The type of activities differed as well, the most frequent being of a social nature with marked decreases in the numbers who carried out custodial functions with the babies. Details are presented in Table 9.

The well documented preference of fathers to have a son was borne out by this study (Benedek, 1970, pp.173-176), with 50% reporting this wish. Five of the men were hoping for a girl (14%) while 13 men had no preference (36%). All but one of the subjects reported that names had either been chosen or discussed but not decided upon. Most of the men told the researcher the names during this part of the interview. All of the subjects had discussed the coming baby with their wives, with most (86%) saying this had occurred often. Discussion of the coming baby with

TABLE 7

Summary of Reported Activities in Preparation for Support Role

Activity	n	Frequency (%)
Whose idea to attend labour		
His own/couple	27	75.0
Wife	7	19.4
Prenatal class	1	2.8
Other (friend)	1	2.8
Perceived as prepared		
Yes	27	75.0
No	9	25.0
Prenatal class attendance		
Yes	27	75.0
No	9	25.0
Read books on labour/delivery		
None	20	55.6
1 - 2	8	22.2
More than 2	8	22.2
Coached wife on exercises		
Never	16	44.4
Occasionally	9	25.0
Regularly	11	30.6
Accompanied wife to M.D.		
No	27	75.0
Once	5	13.9
Several times	4	11.1
Discussed measures to assist wife with others		
No	24	66.7
Other	9	25.0
Health professional	3	8.3
Intended to attend delivery		
No	3	8.3
Yes	33	91.7

TABLE 8

Summary of Reported Concerns Regarding Support Role

	n
Concerns re attendance of prepared fathers (N = 14)	
'Hope everything will be O.K.'	1
'Health of my wife and baby'	1
'Both going to be exhausted'	1
'I don't know if I'll be able to stand my wife's pain'	2
'I hope I can help her when she really needs it'	1
'I'm just anxious'	1
'I don't know what to expect'	2
'Nervous about the blood'	4
Concerns re attendance of unprepared father (N = 5)	
'I can't stand my wife's pain'	2
'Just hope the baby will be O.K.'	1
'I don't know what's going to happen'	1
'I don't want to faint or make a fool of myself'	1
Reasons for non-attendance (N = 3)	
'I can't take that stuff'	1
'Tradition. No one else does it and I'm not keen on the sight of blood'	1
'She doesn't want me and I haven't got the nerve'	1

TABLE 9

Summary of Reported Activities in Preparation for Fatherhood Role

Activity	n	Frequency (%)
Contact with small babies within last 3 years		
No	4	11.1
Yes	32	88.9
Amount of contact with small babies within the last 3 years		
None	4	11
Little	10	27.8
Some	6	16.7
Frequent	16	44.4
Activities with babies		
Held	30	83.0
Fed	12	33.3
Changed diaper	6	16.7
Comforted	28	77.8
Played with	30	83.3
Preference for sex of child		
Boy	18	50.0
Girl	5	13.9
No preference	13	36.1
Names chosen for child		
No	1	2.8
Yes/discussed	35	97.2
Discussed baby with wife		
Sometimes	5	13.9
Often	31	86.1
Discussed baby with parents		
Never	4	11.1
Occasionally	14	38.9
Sometimes	15	41.7
Often	3	8.3
Discussed baby with male friends		
Never	6	16.7
Occasionally	9	25.0
Sometimes	13	36.1
Often	8	22.2

parents and male friends was reported in differing degrees. Only 3 of the men reported that this had occurred often with their parents (8%) while 8 had discussed the baby often with their male friends (22%).

These findings indicate that the majority of these men had had some fairly recent experience with small babies but, with more than half, the contact was infrequent, so it cannot be suggested that these men would be comfortable with their own newborn. The indication that all of the subjects had been considering their fatherhood role is definitely present. Contemplation of having a son or a daughter and a lot of discussion about the baby with their wives was reported by all. More discussion of the coming baby occurred with male friends than with the men's parents but this was reported to have taken place to a markedly less degree than with partners. More specific information regarding the nature of these discussions would be necessary before any conclusions could be drawn as to whether or not real role construction was occurring.

Anticipatory Socialization

In order to further examine differences in prepared and unprepared fathers regarding anticipatory socialization for fatherhood, the components of the variable named 'rehearsal and practice for the fatherhood role' in the

conceptual model were treated as three continuous variables, as proposed by Merton (in Burr, 1972, p.408). Emotional involvement was considered to be those psychosocial changes and concerns identified. Support activities were all that had been reported to be carried out in preparation to support the wife during labour and delivery. Fatherhood activities were considered reported indicators by which men prepared to be father to the child. Because the rating scales of items within each of these variables had different ranges, a total score for each variable was calculated for each subject. This was then expressed as a percentage of a subject's total based on the maximum possible for each variable. The results are presented on Tables 10a and 10b. Analysis of these data indicated:

1. there was a wide range of scores of emotional involvement in both prepared and unprepared fathers.
2. four fathers in the prepared group (15%) had low degrees of involvement and five men who were unprepared (56%) indicated a moderate or high degree of emotional involvement.
3. there was a range from 40% to 86% in participation in support activities of prepared fathers.*

4. one "unprepared" father had carried out a higher percentage of support activities than 5 fathers in the prepared group.
5. there were wide ranges of participation in preparatory activities for the fatherhood role in both groups of subjects.
6. there were a number of cases within the prepared group in which there was a discrepancy of > 20 between the support scores and the fatherhood scores.**

* See Prepared Fathers Comparison Numbers 1,2,3,6,13,18,22,24.

** Unprepared fathers were not included in this comparison due to their necessarily low scores in support activities.

TABLE 10a

Within Subjects Comparison of Anticipatory Socialization

A. Prepared Fathers (N = 27)

Comparison Number	Emotional Involvement (%)	Fatherhood Activities (%)	Support Activities (%)
1	94.7	86.3	66.6
2	89.5	72.7	53.3
3	78.9	86.3	66.6
4	78.9	68.0	80.0
5	78.9	59.0	53.0
6	78.9	40.9	73.3
7	73.7	59.1	60.0
8	73.7	54.5	66.6
9	68.4	68.1	60.0
10	68.4	63.6	66.6
11	68.4	63.6	60.0
12	68.4	50.0	60.0
13	63.2	86.3	66.0
14	63.2	72.7	86.6
15	63.2	72.7	80.0
16	63.2	77.0	60.0
17	63.2	63.6	66.6
18	63.2	68.0	46.0
19	63.2	50.0	60.0
20	57.9	72.7	66.6
21	57.9	59.0	53.0
22	52.6	86.3	60.0
23	52.6	81.8	66.7
24	42.1	36.3	66.7
25	42.1	31.8	40.0
26	36.8	59.1	60.0
27	36.8	59.0	66.6
Group Mean	64.52	65.2	62.94

TABLE 10b

Within Subjects Comparison of Anticipatory Socialization

B. Unprepared Fathers (N = 9)

Comparison Number	Emotional Involvement (%)	Fatherhood Activities (%)	Support Activities (%)
1	73.7	81.8	33.3
2	68.4	72.7	20.0
3	63.2	31.8	20.0
4	57.9	72.7	86.6
5	52.6	90.9	60.0[a]
6	47.4	45.0	20.0
7	42.1	77.0	26.6
8	36.8	63.6	20.0
9	36.8	45.0	20.0
Group Mean	53.2	64.5	27.4

a. This subject reported that he was prevented from attending prenatal classes by his work schedule. He added that he read literature and followed recommendations of prenatal instructor as communicated to him by his wife.

Labour and Delivery Experiences

The length of the labours in which these subjects participated fell within the criteria for inclusion in the study. The majority (83.3%) of the pregnancies terminated in the vaginal delivery of a healthy baby. The other 6 required Caesarian birth. These babies were also healthy. Twenty-seven of the fathers attended the delivery of their babies. The 6 husbands of women requiring Caesarian births had intended to be present from birth but were unable to do so due to the necessary surgery. Attending paediatricians showed the fathers their babies and each man held his child for at least 5 minutes prior to the infant's transfer to the nursery. The 3 fathers who had not planned to attend waited in the father's room and joined their wives and babies in the recovery room.

Twenty-seven (75%) of the labours were induced or augmented by an intravenous infusion of pitocin and twenty-two (61%) were monitored electronically. These interventions meant that the majority of the couples were surrounded by technological devices. Delivery of the baby was completed by the application of forceps in 17 cases with the father present in 15 of these cases. Of the 23 men who had stated a preference for the sex of the child, 11 of the babies were of the preferred sex. A complete summary of the experience in on Table 11.

TABLE 11

Summary of Labour and Delivery Experiences

Experience	n	Frequency (%)
Length of labour		
2 to 8 hours	30	83.3
9 to 12 hours	6	16.7
Method of delivery		
Caesarian birth	6	16.7
Vaginal	30	83.3
Attendance at delivery		
No	3	8.3
Not advisable	6	16.7
Yes	27	75.0
Preferred sex of child		
No	12	33.3
Yes	11	30.6
No preference	13	36.1
Interventions [a]		
Induction/stimulation of labour	27	75.0
Electronic monitoring	22	61.1
Forceps delivery	17	47.2
Regional anaesthesia	3	8.3
General anaesthesia	6	16.7

a. Several possible.

Reliability Results

It has been stated that the reliability of an instrument is not a property of the instrument, but rather of the instrument when administered to a certain sample under certain conditions (Polit and Hungler, 1983, p.386). Because the tool used to test the dependent variables had been a modified version of one used in a California study (Cronenwett and Newmark, 1974) and because Polit and Hungler (1983, p.386) strongly recommend a routine reliability check whenever data are collected related to personal or situational factors, the results of the indicators of the dependent variables were subjected to factor analysis to identify the principal components. The factor loadings indicated combinations of the measures which corresponded to the three areas of perception proposed in the conceptual model. A reliability analysis resulted in:

1. six variables related to perception of labour and delivery with an alpha coefficient of .7650;
2. six variables related to perception of participation with an alpha level of .7511;
3. two variables related to perception of knowledge with an alpha level of .8213;
4. two variables related to perception of the neonate with an alpha level of .7661.

These coefficients are considered to be suggestive of a more than moderate degree of internal consistency. Polit and Hungler (1983, p.393) stated that these levels are more than sufficiently acceptable if an investigation is only interested in making group-level comparisons. The complete item list for each variable is shown in Appendix D.

It is noteworthy that only 16 of the 29 measures used showed moderate degrees of reliability. The reliability of an instrument is related in part to the heterogeneity of the group to which it is administered. The more homogenous the sample, the less the variance in the scores, thus increasing the difficulty for the instrument to reliably discriminate among those who possess varying degrees of the attribute being measured (Polit and Hungler, 1983, p.394). The very presence of the subjects in this study and their willingness to participate in their wives' labour and/or delivery suggests some degree of homogeneity and may have accounted for lack of variance in some items.

Factor Analysis of Perceptions

Factor analysis refers to a variety of statistical techniques whose common objective is to represent a set of variables in terms of a smaller number of hypothetical variables (Kim and Mueller, 1978, p.9). The first phase of factor analysis was used to identify the principal

components of each of the dependent variables from the data matrix presented. This was described in the reliability results. In keeping with the principle of parsimony and to ascertain the number of factors that could account for the major amount of covariance, these data were subjected to Varimax (orthoganal) factor rotation.

Waltz and Bausell (1983) advise researchers not to allow the subjectivity of predispositions to colour the interpretation of factor analyses. They provided three guidelines to follow in factor analysis as follows:

"a) choose a minimum loading to interpret probably no less than 0.30, perhaps as high as 0.50, before the analysis is attempted.

b) in naming a factor, consider the relevant items in descending order with respect to the magnitude of their loadings.

c) never ignore an item meeting a predetermined loading criterion simply because it does not "conceptually" fit the rest of the items loading on a factor."

(p.304)

These guidelines were followed in analyzing the data. With the small sample size, the most interpretable solution obtained was a seven factor solution which accounted for approximately 66% of the variance. All of the factors had eigenvalues of greater than 1.6, and each

accounted for more than 5% of overall variance. Only items with factor loadings of greater than 0.50 were included.

Table 12 shows the rotated factor solution. Each factor will be discussed separately.

Factor 1. Process

This factor accounted for 19% of the total variance. Three measures had high positive loadings on this factor, being at 0.78 and higher. The items were the man's satisfaction with being with his wife during labour, finding the whole experience terrific and his intention to go in for delivery of future children. The factor was labelled 'process' because all of the items were related to overall satisfaction with participation in the processes of labour and delivery. All items had a mean of more than 4.5 (out of 5) indicating that this group of subjects were very satisfied with their presence.

Factor 2. Support

This factor accounted for 12% of the total variance. Two items loaded highly, at 0.81 and 0.80. They were his feelings towards helping his wife feel more comfortable during contractions and being a source of strength to her. Because both items related to helping, the factor was labelled 'support'. The means of the items were 4.2 and 4.3. This suggests that these men felt they had provided a high degree of support to their wives.

TABLE 12

MAJOR VARIABLES IN PERCEPTION: VARIMAX ROTATED FACTOR STRUCTURE MATRIX

Variable Description	Communalities	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Being with my wife in labour was a very satisfying experience	.92120	.89685	.06905	.21826	.06035	.17369	.02238	.01692
I will definitely go in for delivery if/when we have more children	.86204	.87889	.09463	.02921	.17337	.05829	.07717	.14083
The whole experience was terrific	.84102	.87583	.05873	.11043	.08397	.08887	.05262	.03680
I helped my wife feel more comfortable during contractions	.70087	.03955	.81794	.04663	.01073	.00978	.00763	.01387
I was a great source of strength to my wife	.66150	.03886	.80151	.03091	.06532	.02860	.05281	.05937
I was really afraid I would drop the baby	.88841	.16293	.34117	.76672	.13173	.17627	.06514	.09504
I was afraid to touch my baby because he/she is so small	.79401	.24929	.06668	.75277	.12078	.13283	.23234	.18889
Labour was not anything like I thought it would be	.67209	.07509	.39266	.58471	.01428	.29596	.09428	.14677
I can understand why some fathers don't want to come to the Case Room	.77898	.05965	.20973	.23045	.79555	.19376	.05451	.00548
I felt like my wife was a stranger during labour	.74142	.24649	.37386	.08414	.69601	.15336	.10784	.05654
I often felt I was in the way	.79109	.33179	.25082	.08154	.55583	.16455	.01023	.31510
Delivery wasn't anything like I thought it would be	.80700	.35537	.02311	.07442	.07050	.76696	.11377	.11314
My baby looked beautiful from the first moment I saw him/her	.79925	.00778	.25084	.12050	.13736	.74576	.00176	.30359
My baby will look better after a bath	.80643	.09163	.21482	.07715	.18975	.53612	.12683	.35849
I wish I had known more about how to help my wife during delivery	.88125	.03019	.15505	.03442	.07610	.04667	.91202	.08068
I wish I had known more about how to help my wife during labour	.87454	.01218	.05075	.28456	.00006	.05499	.87550	.05432
All new babies look alike.	.62189	.06562	.06225	.06947	.27500	.06030	.03490	.66775
Percentage of total variance	65.7%	18.9	11.8	9.1	7.8	6.4	6.0	5.8
Eigenvalue		5.46939	3.42320	2.62941	2.25324	1.86307	1.74561	1.67202

Factor 3. Fatherhood

The third factor accounted for 9% of the total variance. The two items which loaded at 0.75 and higher on this factor were his fear that he would drop the baby and being afraid to touch the baby because he/she was so small. A third item regarding labour being as they had expected loaded at 0.58 on this factor suggesting a degree of relationship between this expectation and his confidence in handling his newborn. The factor was labelled 'fatherhood' because the items with the highest loadings related to his attitude towards touching and holding his baby. Item means indicated a high degree of confidence in touching the baby (4.02) and a moderately high degree of confidence in holding the baby (3.8). The mean of 3.3 on the item regarding labour being as expected suggested a moderately positive overall perception on this item by these subjects.

Factor 4. Involvement

This factor accounted for 8% of the total variance. Three items loaded highly on this factor; understanding why some fathers don't want to come to the Case Room, feeling like the wife was like a stranger during labour and feeling in the way. The implication of the feeling of involvement of fathers in these items was the rationale for the name given this factor. A suggestion of ambivalence regarding understanding why other men don't come was indicated by the

overall item mean of 3.14. The means of the other two items of greater than 4.3 indicated, however, that these men had felt very involved.

Factor 5. Delivery of the Baby

This factor accounted for 6% of the total variance, with 3 items loading highly on the factor. Delivery being as expected, the baby looking beautiful from the moment of first sight and thinking the baby would look better after a bath are all items related to the actual delivery of the baby, thus the choice of this factor name. The mean of 3.3 on the item related to delivery being as expected again suggested a moderately positive perception on this item. The mean of 4.5 indicated a strongly positive perception of the subjects' first sight of their child. The lower mean of 2.4 indicated that the fathers felt that a bath would improve their babies' appearance. This suggests that the men may not have a true picture of what a newborn looks like, as most babies are relatively clean when handed to the parents.

Factor 6. Knowledge

This factor accounted for 6% of overall variance with 2 items loading, at .87 and .91. The items were wishing they had known more about how to help their wives during labour and during delivery, hence the factor name. The

item means of 2.5 (labour) and 2.6 (delivery) indicated the subjects perceived that they had not known enough about how to assist their wives.

Factor 7. Babies

The last factor which fit the criteria for inclusion was a single item which accounted for 6% of total variance. The item was that all new babies look alike and it loaded at 0.66. The item mean of 4.2 indicated that these fathers definitely did not think that.

Correlation Among the Factors

A correlation among the 7 factors indicated positive correlations between all of them. The range was from very low positive to moderately positive relationships. Table 13 contains the factor correlation matrix.

Analysis of Significance

Two of the objectives of this study were to explore differences in perceptions of their participation of subgroups of the study population. These were differences between prepared and unprepared fathers and those who attended delivery and those who did not.

TABLE 13

FACTOR CORRELATION SIGNIFICANCE MATRIX

FACTOR NAMES	Satisfaction	Support	Fatherhood	Involvement	Knowledge	Delivery of Baby	Babies
Satisfaction							
Support	.42545						
Fatherhood	.00519	.36534					
Involvement	.14106	.18589	.41215				
Knowledge	.43133	.41321	.04296	.30039			
Delivery of Baby	.00334	.49148	.14170	.08060	.18405		
Babies	.41839	.32416	.40465	.05219	.29480	.26649	

Chi Square Tests

These tests were run comparing the named subsets with the item groups identified by the principle componants of the unrotated factor analysis, with alpha levels greater than .75. Because of the small sample size, probability of less than 0.01 was selected as the level of significance. These results are shown on Table 14.

With the selected criteria, there was only one significant difference. Unprepared fathers perceived their desire for more knowledge of how to help their wives significantely lower than did prepared fathers. This finding was also reported as a significant difference by Cronenwett and Newmark (1974). MacLaughlin and Taubenheim (1983) did not report a difference in this aspect of their study comparing prepared and unprepared fathers. They reported:

> The results of this present study indicated that the fathers came to the experience with a realistic idea of their roles and expectations of childbirth, whether they were formally prepared or not." (p.11)

Half of the subjects in Gabel's (1982) study group of 20 unprepared fathers stated that they had been adequately prepared by the attending nurse- midwife (p.7). The latter two studies did not indicate whether tests of significance had been performed.

TABLE 14

CHI SQUARE TEST RESULTS

Prepared/Unprepared Fathers

Variable Name	Chi Square	Degrees of Freedom	Significance
Process	19.507	14	0.15
Participation	6.526	11	0.84
Knowledge	16.011	6	0.01*
Fatherhood	3.759	7	0.81

Attended/Did Not Attend Delivery

Variable Name	Chi Square	Degrees of Freedom	Significance
Process	24.888	14	0.04
Participation	11.200	11	0.43
Knowledge			0.29
Fatherhood	15.555	7	0.03

* p = 0.01

T Test

Using the 7 factors indicated in the Varimax rotation which accounted for 66% of the total variance as the dependent variables, T tests were run on each of these groupings. The 2 tailed probability results with significance considered at less than the 0.02 level were used due to the small sample size. The results of each group of T tests are illustrated on Tables 15 and 16. They will be discussed separately.

Prepared/Unprepared Fathers.

One factor showed a significant difference between those men who were prepared and those who were not. Process showed the most difference with a probability level of 0.002. Although the overall mean indicated a high level of satisfaction, the wide standard deviation in the unprepared group indicated that some of this small group must have had negative feelings. Cronenwett and Newmark (1974), and MacLaughlin and Taubenheim (1983) reported positive feelings of nurturance toward wife and child in both groups in their comparisons of prepared and unprepared fathers. Gabel (1982,) reported that 90% of her study group of 20 unprepared fathers "spontaneously indicated that they were feeling pride and high self-esteem". The lack of significant differences and the generally high

positive means, excluding knowledge, of the other factors in the fathers in this study are also similar to those reported by Cronenwett and Newmark (1974) and MacLaughlin and Taubenheim (1983).

Fathers Who Did/Did Not Attend Delivery.

One factor showed a significant difference between these 2 groups. Process again showed the most difference with a probability of 0.003. This is not surprising considering that 6 of the 9 nonattending fathers had intended to be present at their child's delivery, but were unable to attend due to the need for Caesarian births. Not being able to fulfill that goal may have been a large contributing factor in this difference. In the study of father's reactions to unanticipated Caesarian birth by May and Sollid (1984), negative reactions were expressed that were centered not on the surgery itself, but on policies which excluded fathers from attendance arbitrarily and on staff behaviours which reflected disregard for the fathers' need to feel included in the birth, whether they were permitted to attend the delivery or not. This finding associating perception of the process with presence at delivery is consistant with the findings of Bowan and Miller (1980), Cronenwett and Newmark (1974), Greenberg and Morris (1974), Gabel (1982) and others.

TABLE 15

T TEST RESULTS OF PREPARED/UNPREPARED FATHERS

Variable	Group	Number of Cases	Mean	Standard Deviation	Standard Error	F Value	2 Tail Probabili
Satisfaction (3 items)	Prepared	29	13.8966	1.760	0.327	5.28	0.002*
	Unprepared	7	13.0000	4.041	1.528		
Support (2 items)	Prepared	29	8.5862	1.268	0.236	2.81	0.199
	Unprepared	7	8.7143	0.756	0.286		
Fatherhood (3 items)	Prepared	29	11.3448	2.857	0.531	1.23	0.859
	Unprepared	7	9.5714	2.573	0.972		
Involvement (3 items)	Prepared	29	12.0000	2.420	0.449	1.27	0.827
	Unprepared	7	11.5714	2.149	0.812		
Delivery of baby (3 items)	Prepared	29	10.0000	2.659	0.494	1.37	0.737
	Unprepared	7	10.1429	2.268	0.857		
Knowledge (2 items)	Prepared	29	5.5517	2.063	0.383	5.26	0.046
	Unprepared	7	2.8571	0.900	0.340		
Babies (1 item)	Prepared	29	4.2414	0.951	0.177	1.26	0.610
	Unprepared	7	4.1429	1.069	0.404		

* Significant at < 0.02 level

TABLE 16

T TEST RESULTS OF FATHERS WHO DID/DID NOT ATTEND DELIVERY

Variable	Group	Number of Cases	Mean	Standard Deviation	Standard Error	F Value	2 Tail Probability
Satisfaction (3 items)	Attenders	27	14.333	1.544	0.297	4.55	0.003*
	Nonattenders	9	11.8889	3.296	1.099		
Support (2 items)	Attenders	27	8.4815	1.252	0.241	2.09	0.280
	Nonattenders	9	9.0000	0.866	0.289		
Fatherhood (3 items)	Attenders	27	11.2222	2.873	0.553	1.00	1.000
	Nonattenders	9	10.3333	2.872	0.957		
Involvement (3 items)	Attenders	27	12.3333	2.219	0.427	1.17	0.710
	Nonattenders	9	10.6667	2.398	0.799		
Delivery of baby (3 items)	Attenders	27	10.4074	2.406	0.463	1.36	0.521
	Nonattenders	9	8.8889	2.804	0.935		
Knowledge (2 items)	Attenders	27	5.0741	2.200	0.423	1.00	0.913
	Nonattenders	9	4.8889	2.205	0.735		
Babies (1 item)	Attenders	27	4.2593	1.059	0.204	3.11	0.099
	Nonattenders	9	4.1111	0.601	0.200		

* Significant at < 0.02 level

Summary

This was a descriptive study of 36 first-time fathers between the ages of 20 and 37 years. They had varying education levels and occupations. Regarding variables related to their identification with the fatherhood role, these subjects described motivations for parenthood which were marriage and parent role centered. Although most of the subjects stated they had not spent a lot of time with their own father, most stated that they got along well. The majority had discussed desired family size with their wives, indicating contemplation of fatherhood.

Variables thought to be associated with rehearsal and practice for fatherhood elicited responses which concurred with much of the published literature. Most of the pregnancies were planned, and while most initial reactions were positive, others were ambivalent, negative or neutral. More than half of the subjects had recognized emotional changes in themselves during the pregnancy. All acknowledged social changes and Couvade symptoms were reported by 10 men. The majority of the study group expressed concerns, mostly related to the health of wife and/or baby.

Preparation for the support role had been carried out by 27 of the subjects. All had attended at least 50% of a course of prenatal classes. Other activities included

reading and practicing breathing techniques with their wives. A small number had discussed measures to assist their wives with others and/or visited the attending physician during antenatal visits. Few had used health care professionals for advice or support.

Preparation for the fatherhood role was reported by all of the subjects to varying degrees. Most activity consisted of discussion of the coming baby with the man's wife. Some held discussions with male friends and/or their parents. No formal support systems were mentioned.

Analysis of emotional involvement, preparation for the support role and preparation for the fatherhood role as continuous variables supported the suggestions of May (1982) and Wapner (1976) of two levels of preparation occurring. These analyses also suggested that the amount of emotional investment these subjects had was not always indicated by overt participatory behaviours.

Chi square tests suggested that unprepared fathers had perceived their knowledge level significantly lower than had prepared fathers. Factor analysis of the dependent variables indicated 7 factors accounting for 66% of total variance. Satisfaction with participation was very positively perceived by these subjects, as was their perceived support of their wives. They indicated confidence in handling their newborns. Although there was a suggestion that the study group could understand why some

men don't attend, they perceived their own involvement positively. These fathers had strong positive feelings toward their babies at first sight but thought a bath would improve the appearance of their newborns. The lower group mean regarding knowledge suggested a need for more information. When and what was not determined in this study. The old adage that all new babies look alike was not perceived to be true by these fathers. Overall, the majority of item and factor means indicated that these subjects generally perceived their participation positively.

T tests performed on subgroups of this population showed 2 areas of significance. Perception of the processes of labour and delivery was significantly higher in prepared fathers than unprepared and in men who attended delivery than those who did not.

CHAPTER V

LIMITATIONS, CONCLUSIONS AND IMPLICATIONS

This chapter contains the limitations of the study as well as conclusions of the research. Implications for the provision of anticipatory care to fathers participating in their partners pregnancies, labours, deliveries and postpartal period and further research are explored.

Limitations

The Study

The subjects who participated in this study are not representative of any other group of fathers attending their wives labours and/or deliveries. They were a convenience sample who fit the criteria established for the study during the time period of the investigation. The small sample number precludes inferences to any other group and the results must be treated as descriptive only of the participating subjects. The sample included only married men, a stipulation imposed by all of the Ethics Committees consulted. This may have contributed to the small number of unprepared fathers in the study group.

The participants were self-selected, as evidenced by their presence in the Case Room and their willingness to be included in the study. This participatory characteristic

suggests a degree of homogeneity of this population that may have contributed to the small number of statistically significant results found in the analyses of variance in the reliability tests, factor analysis and T tests. Finally, the study itself must be considered a limitation. As previously mentioned, the desire to receive increased social supports had been expressed by fathers participating in other studies (Moore, 1976 and others). The individual attention these men received may have constituted a bias in their perceptions of the events.

The Tools

The major limitations of the interview schedule were the broad areas covered regarding the subjects' feelings throughout the pregnancy and the retroactivity of requested responses covering a significant period of time. There was little intent to elicit sensitive responses regarding the quality of changes and those described can only be interpreted as a broad overview of those subjects who agreed to be included in the study.

The post-birth questionnaire was limited by the number of perceptions to which the subjects were asked to respond and the small number of subjects participating in the study. A larger number of statements for each of the dependent variables and/or a larger sample may have resulted in a more sensitive measure of men's perceptions of their participation. A further limitation was the

post-birth immediacy of the administration of the questionnaire. The intent was to obtain the most spontaneous and immediate reaction possible. A similar questionnaire administered to the same subjects later in the postpartum might yield a more permanent perception of the events.

Another limitation was in the administration of the tools. There was only one interviewer, due to limited resources. Although the tools were totally scripted, interviewer bias must be considered.

Conclusions

The primary purpose of this study was to obtain an overview of factors thought to predispose a man to participate in the childbearing cycle, changes occurring in these men and their perceptions of their participation. The study base was obtained from a review of available literature on expectant fathers. Implications of fathers' participation were derived from writings which pertained to the changing roles of fathers. Considering the previously outlined limitations, the following conclusions are made based on the results obtained from this group of fathers who were participating in their wives' labours and deliveries.

The review of sociological literature indicated major changes in role enactment in contemporary young families.

These descriptions indicated a current trend for earlier and more nurturing activities for young fathers and suggested that these changes may be of considerable benefit to the unity and healthy development of these families. Some have even suggested that early participation may be crucial. Henderson (1980, part II), Gray et al. (1979), and LeMasters (1977) stated that men today have no clear role-model and little preparation for parenting. If this role change is considered to be of such importance one might think that the health care system would be providing anticipatory guidance at every available opportunity.

The majority of these men noted psycho-social changes in themselves, 10 reported Couvade symptoms and almost all acknowledged concerns related either to the pregnancy outcome and/or their impending fatherhood role. Apart from information obtained from prenatal classes, few of these subjects used health care professionals as sources of information. There is little evidence that prenatal class content addresses needs of the father apart from how to support his mate during pregnancy and coach her during labour and delivery.

Prenatal classes were attended by 75% of the study group. These 27 considered themselves prepared for their support role when interviewed in early labour. Only ten had attended all six classes, while the other 17 had attended more than fifty percent. Even though these men had gone to

prenatal classes some expressed prebirth concerns and the post-birth questionnaire results indicated they had not rated their knowledge of how to help their wives very highly. Only eleven of the prepared couples practiced breathing exercises regularly; the others occasionally or not at all. Of the twelve subjects who sought advice from others for their support role, the majority went to friends or relatives. Sixteen of the total study group had read books or pamphlets on labour and delivery. Only nine men had accompanied their wives to see their physicians during the antenatal period. Five of them had only gone once. There is actually little evidence that health care professionals are giving expectant fathers any more than lip service support.

The subjects' responses indicated that becoming a father had been on their minds during the pregnancy. Discussion about the coming baby with their wives was the most prevalent activity mentioned. Slightly more discussion about the coming baby with male friends than with parents suggests that these men might have related more to their contemporaries than to the previous generation in formulation of their thoughts about fatherhood. The majority of the study group had had fairly recent contact with small babies, but only sixteen of the men reported this contact as frequent. The type of activities carried out with the infants had been of a

social nature, not custodial. Activities in preparation for the fatherhood role were unstructured and self-motivated.

Overall anticipatory socialization illustrated on Tables 10a and 10b and the analysis of these data suggested several conclusions:

1. The wide range of scores of emotional involvement in both prepared and unprepared fathers support May's (1982) suggestion that participation in prenatal classes is not a reliable indicator of a man's emotional involvement in the pregnancy. Conversely, the fact that there is little or no participation in overt activities to prepare for the support role does not preclude a man's emotional involvement in the pregnancy.

2. The wide discrepancies in preparedness in the study group suggests that attendance at prenatal classes can only be considered a starting point in assessing each man's knowledge and ability to fulfill the support role. Although the majority of these subjects were attending the labour on their own volition, 10 were present at the suggestion of someone else, in most instances their wives. In relation to May's (1982) comments that many health professionals assume all fathers want to and should be active participants in the labour and delivery, one might question the prevalence of this attitude to see whether or not the men who may not be highly committed to their

participation are receiving appropriate, non-judgemental support.

3. With no formal social supports available to men to prepare them for the fatherhood role, the subjects in this study had all indicated some degree of personal preparation. This is suggestive of an emotional readiness to learn.

4. The wide discrepancy between the support scores and the fatherhood scores of some prepared men is suggestive of different foci of committment or priority of these subjects. Some had placed emphasis on providing support to their wives while others appeared highly committed to being father to the child. Although this sample is small, this phenomena has been alluded to by May (1982) and Wapner (1976).

The factor means indicated that these subjects generally perceived their participation positively except for their desire to have had more knowledge of how to help their wives and lack of knowledge about the physical appearance of newborns. These findings have implications for prenatal course instructors and Case Room nurses.

Implications

Although this study can only be considered descriptive of the 36 participants, when the results are compared with

available literature, it has implications for the practice and education of nurses and physicians as well as implications for further research.

Nursing Practice

Prenatal classes are usually taught by community health nurses with the primary foci on the labour and delivery processes and some discussion of infant nutrition. Information regarding changes and concerns commonly observed in expectant fathers should be incorporated in at least one session. An optional extra class for fathers only would seem to be beneficial, especially if conducted by a man (Barnhill et al., 1979). Another suggestion to enhance the man's perception of his value in the situation is to have couples conduct some or all of the classes.

Specific concerns voiced in the pre-birth interview by some of the prepared fathers in this study were related to the delivery process. Four stated they were 'nervous about the blood' and two stated they 'didn't know what to expect'. This suggests a need for prenatal instructors to review how they present delivery from the father's perspective, as well as the mother's.

Nurses in labour and delivery areas can also contribute to attending fathers' participation. The subjects in this study did not rate their knowledge of how to help their wives very highly. With the anxiety of

labour occurring, even prepared fathers may not remember information from prenatal classes. Handout sheets outlining the phases of labour with 'helpful hints' regarding how the man can increase his wife's comfort and control could help the prepared fathers recall and be of great assistance to unprepared fathers. The sheet should contain an opening statement that such participation is optional and that the attending nurse is available to provide support and information to the father as well as the labouring mother. This should dispel any anxiety 'observational' fathers might have that they must take responsibility for these measures.

In post partum units, when the taking on of the fatherhood role becomes a reality, evening classes for couples regarding infant care and nutrition could be offered. This would enable men who work during the day to attend, if they wished. It is recognized that not all women return to employment outside the home shortly after the baby is born and that some fathers may not have a need for such classes. For this reason, a hospital might pilot this approach for a trial period.

Medical Practice

As the primary care giver during pregnancy, family physicians and obstetricians are in an excellent position to alleviate individual concerns of expectant fathers. A minimum of three visits to include fathers during the

antenatal course should be given serious consideration. It is suggested that attempts be made to synchronize these visits with the emotional developmental process proposed by May (1982); for example, one visit during the announcement phase and two others when the father reaches the focussing phase.

Education

In the basic educational programmes of physicians and nurses, pregnancy should be presented as a family event. Although the biological aspects pertain to the mother and fetus, emphasis can now be placed on the father as well in psychosocial aspects as more studies are being conducted and their findings consolidated.

Continuing education programmes for family physicians, obstetricians, community health and obstetrical nurses should inform practitioners of current knowledge about fathers' needs. As yet, the studies on these men are fragmented and included small numbers of subjects. It is, therefore, unlikely that those who have been in practice for a number of years would have been provided with information on expectant fathers in their educational programmes. Patterns of paternal behaviour are, however, described. Often making professionals aware of strategies which promote family health stimulates them to seek further knowledge as it becomes available.

Research

Although the conceptual model on which this study was based proved very useful in categorizing observations from reviewed literature, concurrent validity of the instrument used to measure the dependent variables needs to be established. Sets of objective measures by which to assess men's perception of their participation need to be generated. This might be achieved by testing the same tool with a larger sample and/or developing a larger range of items to which the subjects could respond. One of the constructs proposed in the model may not belong in an immediate post partum study. The use of measures designed to determine the father's perception of his newborn as a separate being may be inappropriate to assess shortly after birth. Administration of instruments to measure this attribute may yield more accurate information at 48 to 72 hours post partum when the fathers have been able to spend more time with their babies.

The results which revealed significant differences in this study need to be investigated further. With this small sample, positive perception of the processes cannot be considered an attribute of either preparation or attendance. The quality of preparation was not investigated in this study nor did the study control for the marital relationship, physical and/or emotional stress

unrelated to childbirth, the quality of care from staff perceived by the subjects, or socioeconomic status.

As stated previously, the intent of this study was to obtain a broad overview of men who chose to participate and their perceptions of their participation. The literature review and the study results have suggested several areas of further research.

May's (1978) statements regarding the assumptions of caregivers toward 'observational' fathers needs validation. A study of attitudes of caregivers could also serve as an educational awareness strategy of the needs of different types of fathers present in the Case Room.

Another study which might assist in improving the quality of fathers' experiences could be one that not only questioned his perception of his participation but asked each how the experience could have been enhanced for him and his wife.

Prospective studies on men during their mates pregnancies need to be carried out in a variety of settings. Many reactions are socially determined and whereas, the majority of reviewed studies had been conducted in middle class America, overall prevalence of observed changes in expectant fathers need to be tested in larger, more diverse populations.

Finally, considering the concerns expressed by expectant fathers in the normal pregnancies of this and reviewed studies, one can only speculate on the anxiety levels of expectant fathers when the pregnancy is diagnosed as high-risk. Little has been documented on this group of men and what strategies might alleviate their stresses.

In conclusion it is felt that this study did, through the literature review, provide an overview of men who participate in pregnancy, labour and delivery and found identified characteristics to be present in varying degrees in the subjects participating in the study. The perceptions of their participation in the study population was found to be quite positive. With the increasing recognition that promotion of health is as much a function of the health care system as treatment of disease, further exploration of avenues by which professionals can promote family health and unity would seem justifiable. To provide appropriate anticipatory guidance to all couples during childbearing, needs of the fathers require further study throughout the perinatal period.

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Appendix A

Letter to Participants

MEMORIAL UNIVERSITY OF NEWFOUNDLAND
St. John's, Newfoundland, Canada A1B 3V6

Division of Community Medicine & Behavioural Sciences
Faculty of Medicine
The Health Sciences Centre

Telex: 016-4101
Tel.: (709) 737-6300

Dear Expectant Parents,

As a student in the Master of Science programme at the Medical School of Memorial University, I and some of my colleagues are very interested in the increasing numbers of fathers who stay with their wives during labour and often during delivery.

Although the mother and child are the main focus of care, the needs of the father are now being investigated. Before any suggestions can be made, we have to know how different fathers feel. I am, therefore, conducting a study on this matter and would appreciate your participation. The study consists of two parts. First an interview with the father to get some background information. Secondly, father is asked to fill out a questionnaire after the baby is born. This gives him an opportunity to express how he feels about labour, delivery and your new baby.

No names are to be used. All individual information will be confidential, only to be released in the form of overall trends indicated by all participating fathers.

Most evaluation of health care services include studies such as this. I hope you will agree to allow me to share this special time with you.

Thank you,

Beverley Rockwell
M.Sc. Candidate

Appendix B

Interview and Questionnaire Schedules

PART 1. INTERVIEW SCHEDULE

The questions I would like to ask you during this interview are about parts of your childhood, how you feel about being a father, whether or not you have noticed any changes in yourself during the pregnancy and how you reached the decision to stay with your wife.

Well, the pregnancy is nearly over, pretty soon you will be looking at your new little person. Today is a big day with the labour and birth coming up.

1. Whose idea was it to stay with your wife during labour?

1 - other _____
2 - my wife's _____
3 - my own _____

2. What made you decide to attend?_____

1 - other _____
2 - wife/child_____
3 - self/couple_____

3. Were you prepared for this experience?

0 - no _____
1 - yes _____

4. Did you attend prenatal classes ? If so, how many ?

0 - none/ less than half _____
1 - attended more than half_____
2 - attended all _____

5. Did you read books on labour and delivery? If so, about how many?

0 - none _____
1 - 1 or 2 _____
2 - > 2 _____

6. Coached wife in breathing and relaxation.

0 - no _____
1 - yes _____
If yes, how often? _____

0 - never _____
1 - occasionally _____
2 - regularly _____

7. Accompanied wife to prenatal visits (i.e., saw M.D. with wife)

0 - no _____
1 - once _____
2 - several times _____

8. Discussed other measures to assist wife during labour.

0 - no _____
1 - other _____
2 - health professional _____

9. Do you intend to go into the delivery room?

0 - no _____ 1 - yes _____

Why not? _____ Do you have any concerns about this experience?

_____ _____

_____ _____

_____ _____

0 - N/A _____
1 - other _____
2 - wife _____
3 - self _____

0 - N/A _____
1 - wife/baby _____
2 - self _____
3 - none _____

10. Having a child will make a big difference in your life. I would like to talk to you about how you feel generally about being a father.

Why do you think having children is important? _____

_____

0 - not sure _____
1 - culture _____
2 - marriage/family _____
3 - self _____

11. In a word or two, could you tell me how you feel about some reasons given by people for having children. I'll read them out, one at a time.

a. Because marriage is lonely without children. _____

b. Because my wife wants children. _____

c. Because having children will make my marriage stronger. _____

d. Because I want someone to carry on my family name. _____

e. Because having children will help our family economically later on. _____

f. Because it will be fun to have children around the house. _____

g. Because children are a comfort in one's old age. _____

h. Because I will enjoy caring for and raising children. _____

i. Because having children will prove that I'm an adult. _____

j. Because I think I will make a good parent. _____

0 - disagree _____
1 - agree _____

12. Have you and your wife discussed how many children you hope to have altogether?

0 - no _____
1 - yes _____

13. Have you had contact with babies under 6 months of age within the last 3 years?

0 - no _____
1 - yes _____

14. How often?

0 - never _____
1 - occasionally _____
2 - sometimes _____
3 - often _____

15. If so, what have you done with these babies?

held _____

fed _____

changed diapers _____

comforted _____

played _____

0 - no _____
1 - yes _____

16. This is quite a day for both you and your wife, but how did you feel when you <u>first</u> learned that you were going to be a father? _____

0 - negative _____
1 - neutral _____
2 - ambivalent _____
3 - positive _____

17. Had you been trying to start a pregnancy?

0 - no _____
1 - yes _____

18. If yes, whose idea was it originally?

0 - N/A _____
1 - wife _____
2 - couple _____
3 - husband _____

19. Nine months seems a long time. Your wife went through plenty of changes as the pregnancy went along. Did you notice any changes in yourself during this time?

0 - no _____
1 - yes _____

20. How about:

relationship to own parents _____
physical changes _____
awareness of children _____
work patterns _____
time spent with your wife _____

0 - decrease _____
1 - neutral _____
2 - increase _____

21. Did you have any particular worries about the pregnancy?

0 - no _____
1 - Yes _____

22. Were they about:

the responsibility of parenthood _____
wife's well-being _____
child's well-being _____
financial _____

0 - no _____
1 - yes _____

23. Did you discuss the coming baby with your wife?

0 - never _____
1 - occasionally _____
2 - sometimes _____
3 - often _____

24. What are you hoping the baby will be?

0 - boy _____
1 - girl _____
2 - no preference _____

25. Do you have any names picked out?

0 - no _____
1 - yes/discussed _____

26. Did you discuss the coming baby with your parents?

0 - never _____
1 - occasionally _____
2 - sometimes _____
3 - often _____

27. Did you discuss the coming baby with your male friends?

0 - never _____
1 - occasionally _____
2 - sometimes _____
3 - often _____

You know, we all develop a lot of our attitudes and ideas from those around us when we were growing up. Things like the kind of community we were raised in and our family life, particularly our parents, are really important.

Please think back to the time and place of your childhood.

28. How many people lived in the community in which you grew up?

1 - < 1000 _____
2 - 1-5000 _____
3 - 5-10,000 _____
4 - 10-20,000 _____
5 - > 20,000 _____

29. Did you grow up with both of your parents?

0 - neither _____
1 - father _____
2 - mother _____
3 - both _____

30. How many brothers and sisters did you have? _____

0 - none _____
1 - 1-3 _____
2 - 4-5 _____
3 - > 6 _____

31. Where did you place in your family? (ordinal position) _____

0 - youngest _____
1 - middle _____
2 - oldest _____

I said before, our parents are a strong influence on how we feel about our own children.

32. Did you spend much time with your father when you were growing up?

0 - N/A _____
1 - none _____
2 - hardly any _____
3 - not too much _____
4 - some _____
5 - a lot _____

33. How did you get along with your father?

0 - N/A _____
1 - not well _____
2 - fairly well _____
3 - well _____

Now we're getting to the end and I just need some information to help us sort out if men from different backgrounds have similar or different feelings about becoming fathers.

34. What is your birth date? _____

age in years _____

35. How much schooling have you completed?

0 - < 8 grade _____
1 - 9th - 11th grade _____
2 - high school diploma _____
3 - vocational courses _____
4 - vocational diploma _____
5 - some university _____
6 - university degree(s) _____

36. What is your present occupation? _____

0 - unemployed _____
1 - unskilled labour _____
2 - skilled labour _____
3 - clerical/sales _____
4 - craftsman/technician _____
5 - management _____
6 - professional _____

PART II

QUESTIONNAIRE ON POST DELIVERY

Place a mark in the box which most closely indicates how you feel about the given statements. Please be frank, remember that your answers will be placed with many others and will not be able to be singled out. After you have finished, please place the questionnaire in the envelope with your interview sheet, seal it and return it to the desk.

	Strongly Agree	Agree	Agree Somewhat	Disagree	Strongly Disagree
1. Having a baby is woman's work.					
2. I didn't cope with labour as well as I thought I would.					
3. I was a great source of strength to my wife.					
4. My baby looked beautiful from the first moment I saw him/her.					
5. I was really nervous about all of the machinery around.					
6. I was afraid to touch the baby becuase he/she was so small					
7. I helped my wife feel more comfortable during contractions.					
8. The baby will look better after a bath.					
9. I often felt I was in the way.					
10. I remembered everything I was supposed to do.					
11. New babies can't do very much.					
12. Being with my wife in labour was a very satisfying experience.					
13. The time in the delivery room was an ordeal.					
14. I did not expect to feel as excited about the baby as I did.					
15. My wife would have had a lot harder time in labour without me.					

	Strongly Agree	Agree	Agree Somewhat	Disagree	Strongly Disagree
16. The baby has some features that are just like mine or my wife's or someone in our family.					
17. I wish I had known more about how to help my wife during delivery.					
18. All new babies look alike.					
19. Labour was not anything like I thought it would be.					
20. I was really afraid I would drop the baby.					
21. I meant more to my wife to have the staff with her than me.					
22. I will definitely go in for delivery if/when we have more children.					
23. I wish I had known more about how to help my wife during labour.					
24. I really don't feel like a father yet.					
25. Delivery wasn't anything like I thought it would be.					
26. My baby seems to have a personality of his/her own.					
27. I was the person who helped my wife the most.					
28. I can understand why some fathers don't want to come to the Case Room.					
29. I felt like my wife was a stranger during labour.					
30. The whole experience was terrific.					

Thank you very much for your participation in this study. If you wish to have a summary of the results, please put your name and mailing address on the enclosed card. We will be pleased to send you the information when it becomes available.

Other data collected:

1. Was husband in attendance at delivery?

   0 - no _____
   1 - not advisable _____
   2 - yes _____

2. Preferred sex of the child

   0 - no _____
   1 - preferred _____
   2 - no preference _____

3. Course of Labour

   Duration (from contractions of 30 second duration, Q5 minutes to delivery) _____

   0 - 2-3 hours _____
   1 - 4-5 hours _____
   2 - 6-8 hours _____
   3 - 9-11 hours _____
   4 - 12-14 hours _____

4. Method of delivery

   0 - caesarian _____
   1 - vaginal _____

5. Interventions - induction of labour _____
   stimulation of labour _____
   electronic monitoring _____
   forceps delivery _____
   regional anaesthesia _____
   general anaesthesia _____

   0 - no _____
   1 - yes _____

Appendix C

Complete Responses to Post-Delivery Questionnaire

Post Delivery Questionnaire With Responses
N = 36

Coded as:
5 - strongly agree
4 - agree
3 - agree somewhat
2 - disagree
1 - strongly disagree
0 - missing

a. Responses reversed to indicate positive.

Sentence		Value	n.	Relative Percent	Overall Item Mean
1.[a]	Having a baby is woman's work	5	19	6	
		4	9	8	
		3	2	6	
		2	3	25	
		1	2	53	
		0	1	3	3.97
2.[a]	I didn't cope with labour as well as I thought I would	5	16	8	
		4	14	8	
		3	3	39	
		2	3	44	3.80
3.	I was a great source of strength to my wife	5	14	39	
		4	18	50	
		3	4	11	4.28
4.	My baby looked beautiful from the first moment I saw him/her	5	28	78	
		4	3	8	
		3	3	8	
		2	2	6	4.58
5.[a]	I was really nervous with all of the machinery around	5	13	36	
		4	11	31	
		3	9	25	
		2	2	6	
		1	1	3	3.91
6.[a]	I was afraid to touch the baby because he/she was so small	5	18	50	
		4	8	22	
		3	3	8	
		2	4	11	
		1	2	6	
		0	1	3	3.92
7.	I helped my wife feel more comfortable during contractions	5	16	44	
		4	16	44	
		3	4	11	4.33

	Sentence	Value	n.	Relative Percent	Overall Item Mean
8.[a]	My baby will look better after a bath	5	2	6	
		4	5	14	
		3	7	19	
		2	16	44	
		1	6	17	2.47
9.[a]	I often felt I was in the way	5	22	61	
		4	9	25	
		3	5	14	4.47
10.	I remembered everything I was supposed to do	5	2	6	
		4	14	39	
		3	13	36	
		2	7	19	3.31
11.[a]	New babies can't do very much	5	12	33	
		4	6	1	
		3	8	22	
		2	10	28	3.56
12.	Being with my wife in labour was a very satisfying experience	5	26	72	
		4	8	22	
		3	1	3	
		2	1	3	4.64
13.[a]	The time in the delivery room was an ordeal	5	10	28	
		4	7	19	
		3	3	8	
		2	12	33	
		1	3	3	3.26
14.	My wife would have had a lot harder time without me	5	12	33	
		4	15	42	
		3	8	22	
		1	1	3	4.03
15.	The baby has some features that are just like mine or my wife's or someone in our family	5	9	25	
		4	17	47	
		3	9	25	
		2	1	3	3.94
16.	I wish I had known more about how to help my wife during labour	5	2	6	
		4	8	22	
		3	5	14	
		2	14	39	
		1	6	17	
		0	1	3	2.60

Sentence	Value	n.	Relative Percent	Overall Item Mean
17.[a] All new babies look alike	5	17	47	
	4	13	36	
	3	4	11	
	2	1	3	
	1	1	3	3.94
18.[a] Labour was not anything like I thought it would be	5	3	8	
	4	14	39	
	3	10	28	
	2	7	19	
	1	1	3	
	0	1	3	3.31
19.[a] I was really afraid I would drop the baby	5	13	36	
	4	13	36	
	3	4	11	
	2	4	11	
	1	2	6	3.58
20.[a] The staff coached my wife more than I did	5	4	6	
	4	11	33	
	3	7	19	
	2	12	31	
	1	2	11	3.08
21. I will definitely go in for delivery if/when we have more children	5	28	79	
	4	6	17	
	2	1	3	
	1	1	3	4.64
22.[a] I wish I had known more about how to help my wife during labour	5	1	3	
	4	9	25	
	3	2	6	
	2	19	53	
	1	5	14	2.5
23. I really don't feel like a father yet	5	11	31	
	4	10	28	
	3	8	22	
	2	7	19	3.69
24.[a] Delivery wasn't anything like I thought it would be	5	4	11	
	4	14	39	
	3	6	17	
	2	5	14	
	1	3	8	
	0	4	11	3.34

Sentence	Value	n.	Relative Percent	Overall Item Mean
25. My baby seems to have a personality of his/her own	5	3	8	
	4	15	42	
	3	11	31	
	2	5	14	
	0	2	6	3.47
26. I was the person who helped my wife the most	4	9	25	
	3	11	31	
	2	13	36	
	1	3	8	2.72
27.[a] I can understand why some fathers don't want to come to the Case Room	5	8	22	
	4	5	14	
	3	9	25	
	2	10	28	
	1	3	8	
	0	1	3	3.14
28.[a] I felt like my wife was a stranger during labour	5	22	61	
	4	7	19	
	3	6	17	
	2	1	3	4.39
29. The whole experience was terrific.	5	24	68	
	4	9	25	
	3	1	3	
	1	1	3	
	0	1	3	4.57

Appendix D

Reliability Results

Reliability Results

1. Process

Being with my wife in labour was a very satisfying experience.
The whole experience was terrific.
The time in the delivery room was an ordeal.
I will definitely go in for delivery if/when we have more children.
Labour was not anything like I thought it would be.
Delivery was not anything like I thought it would be.

Item means: 3.847 Alpha = .7650

2. Participation

I remembered everything I was supposed to do.
I often felt I was in the way.
I helped my wife feel more comfortable during contractions.
I was a great source of strength to my wife.
I felt like my wife was a stranger during labour.
I didn't cope with labour as well as I thought I would.

Item means: 4.1620 Alpha = .7511

3. Knowledge

I wish I had known more about how to help my wife during labour.
I wish I had known more about how to help my wife during delivery.

Item means: 2.505 Alpha = .8123

4. Fatherhood

I was afraid to touch the baby because he/she was so small.
I was really afraid I would drop the baby.

Item means: 3.026 Alpha = .7661