FACTORS AFFECTING ATTENDANCE AND NON-ATTENDANCE AT SIX-WEEK POSTPARTUM CLINICS

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Chapter I

The birth of an infant initiates a complex series of changes in the family. In the United States, mother and infant traditionally have been sent home from the hospital and told to return to a doctor or clinic for medical care in six weeks. Recently some providers have added a brief two-week check-up. However, these one or two visits are often the only postpartal contact the new mother has with the health care system. They are her main source of physical care, birth control supplies, counseling, and anticipatory guidance regarding her own health and the health and behavior of the baby. These visits may also be important for social support and resource referrals.

At a northwestern Oregon health department (HD), mothers and babies are scheduled together for two-week postpartum visits, and separate visits are scheduled at six weeks. All care is provided by registered nurses (RNs) and nurse practitioners (NPs).

Clinical practice with women at postpartum clinics provides insight into their varying reasons for attendance. Women express concerns regarding their own physical health such as, "My bottom is still really sore," "My nipples hurt when I nurse my baby," or "I'm bleeding a lot." Others come to request either a

control pills (BCP) or a diaphragm. Mothers also express concerns about the baby's eating, sleeping, breathing or constipation. Some come "because I was given the appointment" while others arrive to show their new baby to the RN and NP who provided prenatal care.

Some women come to the health department from considerable distances (up to 30 miles), despite fatigue and lack of time and transportation. Some face substantial costs for bus fares or emotional costs from friends or relatives who reluctantly provide transportation. Many describe episodes of crying for "no apparent reason" or unexpected feelings of sadness and anger.

The most common reason given for missing postpartum appointments is "I forgot." Women mention lack of transportation or feeling too sick or overwhelmed by their lives to have the energy to get there. Women also say that not having health problems or any perceived need for a BCM are the reason for missing appointments. Investigation by the Frontier Nursing Service (FNS) of follow-up visits for high-risk newborns supports this observation as mothers who perceived that their babies were doing well did not bring them in for appointments (Sachs, personal communication, April, 1988).

Health department limitations of time and staff for the postpartum clinic mean that sometimes all available appointment slots for a day are filled and women seeking a check-up must either wait for another week or be scheduled in a shorter time slot in the family planning clinic. Non-attendance by clients means that scarce resources of staff, time, and examination rooms often are not used to their fullest potential. If the factors affecting attendance were known, perhaps changes could be made in the system to encourage all mothers to obtain postpartum care and to more appropriately time that care. The purpose of this study, therefore, was to discover what factors encourage or discourage new mothers from keeping the six-week postpartum clinic visit.

Review of the Literature

Research specific to postpartum clinic attendance is rare. This literature review will examine factors that have been found to function as either enablers or barriers to care, concerns of postpartum mothers, and psychosocial factors that influence care.

Enabling Factors

The literature suggests that a high value placed on health, a higher socioeconomic status (SES), more education, insurance, and a specific care provider may

function as factors enabling women to seek postpartum care. Timing and content of the visit and location of the clinic may also encourage women to attend.

To obtain preventive health care like postpartum examinations, one must place a high value on health. Lau, Hartman, and Ware (1986) proposed that the value placed on health could be measured and would correlate with health locus of control beliefs and beliefs in the efficacy of certain preventive health behaviors. They designed a four-item Likert scale to measure the value placed on health and tested the scale with five middleto upper-class populations of different ages. The researchers found that health value increased with age in adolescence and that parents scored two to three points higher than their children. They also found that believing in self-control of one's health and placing a high value on health were predictive of preventive health behaviors.

Factors other than health value may also function as enablers to the use of the health care system. In a review of patterns of utilization, Hulka and Wheat (1985) found that preventive care was correlated with higher SES, more education, private insurance coverage, and availability of a specific salaried physician. Women had more visits for illness, prevention of illness, and hospitalizations than did men.

In another study of utilization of health services, Kleinman, Gold, and Makuc (1981) used data from the 1976-1978 National Health Interview Surveys (NHIS) to compare use rates among age, race, and income groups. The researchers found that, after adjusting for age and health status, the poor had between 7% and 44% fewer visits than those with incomes above twice the poverty level. Blacks and the poor were more likely to use hospital clinics and less likely to receive preventive care.

Further insight into enabling factors was provided by a review of the antenatal and postnatal attendance data of 498 women who received care from the FNS in a recent year (Sachs, personal communication, April, 1988). No women missed postpartum appointments. The researcher suggests that the women returned for postpartum care because of close interpersonal relationships with their care providers and because clinics were held in familiar local areas.

<u>Barriers</u>

Postpartal care is usually a follow-up to prenatal care and/or delivery. No research has focused exclusively on barriers to postpartal care; however, intuitively, one would expect that some of the barriers to prenatal care also exist for postnatal care. Bulloughs' (1972) study of utilization of health care

suggests that the same barriers affect postpartum care. Bullough interviewed a random sample of 806 women from three poverty neighborhoods in Los Angeles regarding preventive health care for themselves and their children; 84% of the babies and 86% of the mothers had returned for check-ups by two months. The women reported that they had gone primarily for birth control and 76% reported using some form of contraceptives. The lower the SES, however, the less likely the mother was to have used preventive health services for herself or her children. Powerlessness, hopelessness, and social isolation were also significantly negatively related to obtaining well child care, prenatal and postpartum care, and family planning services.

In a sample of 111 urban women, Poland, Ager, and Olson (1987) found that six sociocultural factors contributed 49% of the variance in the amount of prenatal care received. These were the level of insurance, attitudes towards health professionals, delays in suspecting the pregnancy, delays in telling others about the pregnancy, perception of the importance of prenatal care, and initial attitude towards being pregnant. Several of these factors might be expected to also affect postpartum care-seeking behaviors.

A series of consensus conferences sponsored by the American Nurses' Association (ANA) revealed many nonfinancial barriers to prenatal care that may also be barriers to obtaining postpartum care. These barriers were categorized by Curry (1987a) as policy or system barriers, provider barriers, and patient barriers.

System barriers ranged from uncoordinated care, inconvenient times and places for clinics, long waiting times, and limited appointments to inflexible rules and inadequate reimbursement systems. The lack of comprehensive sexuality and family life education was noted as a critical system barrier, as was inadequate outreach to recruit and retain women in care. Other system inadequacies included the lack of a range of services within a reasonable distance, transportation problems, lack of systems of care for women with special needs, no provision for child care, and lack of marketing of the available services.

Multiple provider barriers were also noted. Negative personal characteristics like rudeness, insensitivity, hostility, condescension, and racism were the most frequent provider barriers identified. Inadequate teaching, communication, and counseling skills also presented barriers. Providers discriminated against some types of clients because of their inadequate understanding of the psychosocial and

cultural aspects of care. Lack of confidentiality and inadequate knowledge and use of community resources constituted additional provider barriers.

Patient barriers to prenatal care were discussed in the context of interactions with the larger society. Seeking care may take more effort, time, and resources than a woman who is caught in a daily struggle for survival can afford. Fear of repercussions about seeking care or about ability to pay the bill may prevent care. Other patient barriers to care identified were lack of information about what constitutes prenatal care, the social and cultural background of the woman, unhealthy life-style habits, impaired cognition and emotions, and lack of social support (Curry, 1987a). System, provider, and patient barriers to care may greatly affect the care a woman receives while she is pregnant and the care the new mother and her infant receive after birth.

Postpartal Concerns

Postpartum mothers have many concerns which were defined by Lemmer (1987) as questions, worries or areas of marked preoccupation or interest related to the posptpartal period. Extensive research details these concerns. Adams (1963) found that primiparous mothers of both low birthweight (LBW) and normal weight infants were concerned about feeding and crying throughout the

first month. Bull, in 1981, showed that after the first week at home, mothers' emotional concerns increased while their concerns related to infant care decreased. Lemmer (1987) compared 21 early discharge mothers with 21 who returned home after 24 hours. Both groups were concerned about body image, being a good mother, exercise, signs of infant illness and infant feeding. McDaniel (1983), in contrast to other researchers, found that 25 primiparas in a small Northwestern town had "very little" concern in many areas and that the level of concern decreased over two weeks. Hiser (1987) studied 20 multiparas and found their primary concerns were meeting the needs of everyone at home, finding time for themselves, being a good mother, and losing weight.

While Robertson (1961) found that digestion, breathing, and bowel movements of the infant were the most common concerns among both primiparas and multiparas, Gruis (1977) found that the chief concern was the return of the mother's figure to normal. Pridham, Hansen, Bradley, and Heighway (1982) found that postpartum issues varied over time while Harrison and Hicks (1983) found that regulating household tasks, fatigue, and emotions were concerns of Canadian women. Other researchers found that women needed more information regarding self-care, breast feeding, and

infant care (Bull & Lawrence, 1985). A recent study of mothers discharged between six and eight hours postpartum revealed that they were most concerned about health hazards, infant care and feeding the baby (Martell, Imle, Horwitz, & Wheeler, in press). Clinical experience with postpartum women suggests that while concerns vary between women throughout the postpartal period, they encourage attendance.

Timing and content of postpartum visits may function as enabling or discouraging variables. Mabray (1979) surveyed women who came to an army hospital for six-week examinations on whether the check-up met their needs and repeated the study five years later in an affluent private practice. The researcher found that over half of the 300 women who obtained care from the army hospital and the 100 who obtained care from a private practitioner in a small Southern college city felt that six weeks was too long to wait for an examination. Mabray concluded that the timing of routine postpartum examinations needed re-evaluation as women's needs were not being met.

Bowers (1985) questioned the appropriateness of the content of the six-week examination. A mail survey of 55 general practitioners in England and interviews with 190 randomly chosen women showed that 88% of women in all social classes attended examinations. Lower

class women had more abnormal deliveries and were less likely (79%) to attend postpartum clinics. Mothers and practitioners agreed that contraception was discussed adequately but mothers desired more help with their concerns about infant feeding, their own feelings and depression, and menstruation. In contrast, practitioners felt that these areas of concern were adequately covered. Bowers concluded that the focus of the six-week check-up might be changed to better meet mothers' needs, though this study might not be generalizable from England to another social system. Psychosocial Factors

Psychosocial factors like depression, social support, self-esteem, and stress affect the lives of postpartum women. In turn, attendance at postpartum clinics may be affected by these factors.

Several of the researchers cited above found that mothers were concerned about emotions, moods, fatigue, and tensions, which are directly related to postpartum depression. Hopkins, Marcus, and Campbell (1984) reported a 20% incidence of postpartum depression. Causes for postpartum depression vary from personality traits, genetic factors, psychosocial stressors of pregnancy, and hormonal change to anxiety (Petrick, 1984).

In a prospective study of 99 white, married middle-class women, O'Hara found that depressed mothers reported more stressful life events and less spousal support. Cutrona and Troutman (1986) demonstrated that social support served a protective function against postpartum depression. In a study of 49 upper middle-class primigravidas, Tentoni and High (1980) suggested that postpartum depression could be culturally induced by negative experiences that resulted in loss of self-esteem. Postpartum depression may not only be a concern for new mothers, but it may also deter them from obtaining care.

In a study of 142 Black, low SES, urban adolescents, Giblin, Poland, and Sachs (1986, 1987) proposed that health needs and psychological attitudes may be related to and may influence health-utilization. They also suggested that social support has an influence on maternal attitudes and behaviors. The researchers assessed age, socioeconomic status, and work/school status by self-report and medical chart They used the Coopersmith Self-Esteem review. Inventory to assess self-esteem and a questionnaire to assess elements of social support, including present living arrangements, sources of financial support, responses of the pregnant adolescent's parents, siblings, and friends to the pregnancy over time,

accessibility and use of health care services and government services for food, shelter, and living expenses, and anticipated help with child care.

A subset (n = 57) of prenatal patients completed additional questionnaires. Those who kept their postpartum appointments (n = 18) were compared with those who did not (n = 39). A high depression score was associated with low self-esteem and missed postpartum visits. Attendance at postpartum visits was positively associated with being in school or having a job, adequate housing, and satisfaction with social support. Attendance was negatively associated with the expectation or receipt of social services. This study has been the only one to date that correlated predictor variables with the outcome of missed postpartum visits. However, this was a young, poor, urban, Black sample; the study needs to be replicated with a larger, more heterogeneous sample before results can be generalized. Summary

This literature review suggests that the question of what factors influence attendance or non-attendance at postpartum visits may be complex. The value of health and other enabling factors for postpartum care, concerns of mothers, psychosocial variables, and barriers to care all need to be considered. No study has examined the interaction of these variables in a

systematic manner with a postpartum population that is primarily white, low SES, and of a variety of ages.

Conceptual Framework

The review of literature and clinical experience suggest variables that may affect attendance or non-attendance at six-week postpartum clinic visits. A tentative framework has been developed that organizes these independent variables into categories of enabling factors, barriers to care, concerns of postpartum women, and psychosocial factors. Demographic variables are also included. (Figure 1)

Demographic variables, psychosocial factors, and concerns of new mothers may affect attendance or non-attendance at six-week postpartum clinic visits by acting as either enablers or barriers to care. Enabling variables and barriers to care may interact and/or may affect either attendance or non-attendance at six-week postpartum visits.

Research Questions

Specific research questions for study were these:

 Is there a relationship between demographic variables and attendance at six-week postpartum clinic visits?

2. Does the presence of enabling factors increase attendance at six-week postpartum clinic visits?

3. Is there a relationship between concerns of mothers and attendance at six-week postpartum clinic visits?

4. Is there a relationship between psychosocial variables and attendance at six-week postpartum clinic visits?

5. Does the presence of barriers to care increase non-attendance at six-week postpartum clinic visits?

6. Are there relationships between enabling factors, concerns, psychosocial variables, barriers, and demographic variables?

Definition of Terms

1. Enablers: system, provider, and patient variables as measured by the enablers scale on the questionnaire.

2. Barriers: socio-cultural, system, provider, and patient variables that may increase the difficulty of attending the postpartum clinic visit as measured by the barriers scale on the questionnaire.

3. Concerns: questions, worries or areas of marked preoccupation or interest related to the postpartal period (Lemmer, 1987) as measured by the concerns scale.

4. Psychosocial factors: self-esteem, social support, depression, and perceptions of stress as measured by the psychosocial scale.

5. Demographic factors: age, race, partner status, education, family income, parity, pregnancy history and outcome, and insurance as measured by the demographic information form.

6. Attendance: arriving at the health department for a scheduled visit.

7. Non-attendance: not arriving at the health department for a scheduled visit and not calling to reschedule.

Article to be Submitted for Publication

CHAPTER II

Factors Affecting Attendance At Six-week Postpartum Clinics

The birth of an infant initiates a complex series of changes in the family. In the United States, mother and infant traditionally have been sent home from the hospital and told to return to a doctor or clinic for medical care in six weeks. Recently some providers have added a brief two-week check-up. However, these one or two visits are often the only postpartal contact the new mother has with the health care system. They are her main source of physical care, birth control supplies, counseling, and anticipatory guidance regarding her own health and the health and behavior of the baby. These visits may also be important for social support and resource referrals.

Clinical practice with women at postpartum clinics provides insight into their varying reasons for attendance. Women express concerns regarding their own and their infants' physical health while others come to obtain a birth control method (BCM) or to change their BCM.

The most common reason given for missing postpartum appointments is forgetting. Women mention lack of transportation or feeling too overwhelmed by their lives to have the energy to get there. Having no

health problems or no perceived need for a BCM are also cited as reasons for missing appointments. Investigation by the Frontier Nursing Service (FNS) of follow-up visits for high-risk newborns supports this observation as mothers who perceived that their babies were doing well did not bring them in for appointments (Sachs, personal communication, April, 1988).

Health department limitations of time and staff for the postpartum clinic mean that sometimes all available appointment slots for a day are filled and women seeking a check-up must either wait for another week or be scheduled in a shorter time slot in the family planning clinic. Non-attendance by clients means that scarce resources of staff, time, and examination rooms often are not used to their fullest potential. If the factors affecting attendance were known, perhaps changes could be made in the system to encourage all mothers to obtain postpartum care and to more appropriately time that care. The purpose of this study, therefore, was to discover what factors encourage or discourage new mothers from keeping the six-week postpartum clinic visit.

Review of the Literature

Enabling Factors

Several factors may encourage preventive health care practices like postpartum clinic visits. Lau, Hartman, and Ware (1986) found that believing in self-control of one's health and placing a high value on health were predictors of preventive health behaviors. Factors other than health value may also function as enablers to the use of the health care system. In a review of patterns of utilization, Hulka and Wheat (1985) found that preventive care was correlated with higher SES, more education, private insurance coverage, and availability of a specific salaried physician. In another study of utilization of health services, Kleinman, Gold, and Makuc (1981) found that, after adjusting for age and health status, the poor had between 7% and 44% fewer visits than those with incomes above twice the poverty level. Neither study specifically examined utilization of care by postpartum women.

Further insight into enabling factors was provided by a review of the antenatal and postnatal attendance data of 498 women who received care from the Frontier Nursing Service (FNS) in a recent year (Sachs, personal communication, April, 1988). No women missed postpartum appointments. The researcher suggests that

the women returned for postpartum care because of close interpersonal relationships with their care providers and because clinics were held in familiar local areas. <u>Barriers</u>

Postpartal care is usually a follow-up to prenatal care and/or delivery. Although much research has studied barriers to prenatal care, no research has focused exclusively on barriers to postpartal care; however, intuitively, one would expect that some of the barriers to prenatal care also exist for postnatal care. Bulloughs' (1972) study of utilization of health care suggests that the same barriers affect postpartum care. Bullough interviewed a random sample of 806 women from three poverty neighborhoods in Los Angeles regarding preventive health care for themselves and their children; 84% of the babies and 86% of the mothers had returned for check-ups by two months. The women reported that they had gone primarily for birth control. The lower the SES, however, the less likely the mother was to have used preventive health services for herself or her children. Powerlessness, hopelessness, and social isolation were also significantly negatively related to obtaining prenatal and postpartum care.

In a sample of 111 urban women, Poland, Ager, and Olson (1987) found six sociocultural factors which

affected prenatal care and might be expected to affect postpartum care. The amount of insurance, attitudes towards health professionals, and the perception of the importance of care might be expected to also affect postpartum care-seeking behaviors.

A series of consensus conferences sponsored by the American Nurses' Association (ANA) revealed many nonfinancial barriers to prenatal care that may also be barriers to obtaining postpartum care. These barriers were categorized by Curry (1987a) as policy or system barriers, provider barriers, and patient barriers. System barriers included uncoordinated care, inconvenient times and places for clinics, long waiting times, transportation problems, and no provision for child care. Multiple provider barriers included negative personal characteristics like rudeness, insensitivity, and hostility. Inadequate understanding of the psychosocial and cultural aspects of care and inadequate knowledge and use of community resources constituted additional provider barriers.

Patient barriers to prenatal care were discussed in the context of interactions with the larger society. Seeking care may take more effort, time, and resources than a woman who is caught in a daily struggle for survival can afford. Fear about ability to pay the bills may prevent care. Other patient barriers to care

identified were the social and cultural background of the woman, unhealthful life-style habits, impaired cognition and emotions, and lack of social support (Curry, 1987a). System, provider, and patient barriers to care may greatly affect the care a woman receives while she is pregnant and the care the new mother and her infant receive after birth.

Postpartal Concerns

Postpartum mothers have many concerns which have been defined by Lemmer (1987) as questions, worries or areas of marked preoccupation or interest related to the posptpartal period. Concerns reflect physical, emotional, or family worries and may not only vary greatly between women but also change over time postpartally. While concerns have not been related empirically to postpartum care seeking, it seems logical they may be related.

Psychosocial Factors

Psychosocial factors like depression, social support, self-esteem, and stress affect the lives of postpartum women. In turn, attendance at postpartum clinics may be affected. In a study of 142 Black, low SES, urban adolescents, Giblin, Poland, and Sachs (1986, 1987) proposed that health needs and psychological attitudes may be related to and may influence health-utilization. They also suggested that

social support has an influence on maternal attitudes and behaviors. The researchers assessed age, socioeconomic status, work/school status, self-esteem, social support, accessibility and use of health care services, and government services for food, shelter, and living expenses.

A subset (n = 57) of prenatal patients completed additional questionnaires. Those who kept their postpartum appointments (n = 18) were compared with those who did not (n = 39). A high depression score was associated with low self-esteem and missed postpartum visits. Attendance at postpartum visits was positively associated with having a job, adequate housing, and social support. Attendance was negatively associated with the expectation or receipt of social services. Only this study has correlated predictor variables with the outcome of missed postpartum visits. However, this was a young, poor, urban, Black sample; the study needs to be replicated with a larger, more heterogeneous sample before results can be generalized. Summary

This literature review suggests that the question of what factors influence attendance or non-attendance at postpartum visits may be complex. This study attempted to examine whether demographic variables, enablers, barriers to care, concerns, and psychosocial

variables affected attendance at six-week postpartum clinic appointments in a primarily white, low SES population. These variables comprise the conceptual framework which guided the following research questions:

 Is there a relationship between demographic variables and attendance at six-week postpartum clinic visits?

2. Does the presence of enabling factors increase attendance at six-week postpartum clinic visits?

3. Is there a relationship between concerns of mothers and attendance at six-week postpartum clinic visits?

4. Is there a relationship between psychosocial variables and attendance at six-week postpartum clinic visits?

5. Does the presence of barriers to care increase non-attendance at six-week postpartum clinic visits?

6. Are there relationships between enabling factors, concerns, psychosocial variables, barriers, and demographic variables?

Methods

Setting

The setting for this descriptive survey was a Western Oregon County Health Department (HD) which serves a geographically large, primarily rural

population. The HD has an existing caseload of 120 to 150 maternity patients, the majority of whom are of lower SES and caucasian. The population was all who registered for postpartum care at the HD during the four month study period.

Sample

The sample consisted of 45 English-speaking women who were scheduled for six-week postpartum visits at the HD during the study period. Out of the 32 who attended the clinic, 30 consented to participate and were interviewed. Of the 13 who did not attend, 2 were lost to follow-up and 1 declined to participate. Thus 30 attenders and 10 non-attenders comprised the sample of women with complete data.

Measurement of the Variables

Demographic Data

A review of the subjects' medical charts was used to gather demographic data regarding age, race, parity, income, partner status, prenatal, intrapartal, or postpartal complications of the mother and infant, infant birthweight, Apgar scores, and weeks gestation. Information was also collected about the number and source of prenatal visits, whether a home visit was made by a community health nurse (CHN), the source of payment for the clinic visit, and mothers' self-report of depression.

Instrument

A four-scale questionnaire was developed by the researcher to be administered in this study. Informal interviews with five postpartum women who attended their six-week visit and with two women who did not attend, clinical experience, and information from the literature regarding enablers, barriers, concerns of postpartum women, and psychosocial factors provided the basis for the questionnaire.

The initial 36 item, Likert-type questionnaire was reviewed by 14 clinicians for clarity, content validity, and utility. The wording of some questions was changed and two open-ended questions were added. The questions were designed to be read to the subjects who had an answer card that read "strongly agree," "agree," "disagree," or "strongly disagree." These four statements were scored from four (strongly agree) to one (strongly disagree). Four individual scales, enablers, barriers, concerns, and psychosocial factors were developed and will be discussed.

Enablers Scale. Enabling factors were those which were thought to facilitate keeping the postpartum appointment. The enablers scale consisted of 12 items (e.g., "The clerks who make my appointments are helpful.") predicted to facilitate attendance. Four items, included as the Health Value subscale with

reported reliabilities from .63 to .73 with five different samples were included in this scale (Lau, Hartman, & Ware, 1986). However, the Health Value subscale did not demonstrate reliability with the current sample and was deleted from the scale (Table 1). The statement "Being seen at the clinic is only really important when I am sick" also did not correlate with the other seven items (Table 2). After these five items were omitted, the scale reliability was 0.76 (Table 1). The possible range for this scale was 7 to 28.

Barriers Scale. The barriers scale consisted of questions (e.g., "Transportation to the health department is a problem for me.") which have been discussed in the literature or observed clinically as barriers to care (Table 2). This scale approached reliability satisfactory for research (r = 0.59) as defined by Polit and Hungler (1987) when the statements "The health department is far from my home" and "I forgot when my appointment was scheduled" were deleted (Table 1). The five-item scale had a posssible range of 5 to 20.

<u>Concerns Scale</u>. The concerns scale represented seven items (e.g., "I have worries about my baby today.") shown by past researchers to be concerns of postpartum women (Table 2). Even with the deletion of

two items with the lowest item-scale correlation, this scale with a possible range of 5 to 20 did not demonstrate reliability (r = 0.42) sufficient for research purposes. This scale was dropped from further consideration (Table 1).

Psychosocial Factors. As stress, social support and self-concept were found to be important independent variables by Giblin, et al. (1987) these factors were measured by the psychosocial scale of the questionnaire (Table 2). Question six was based on ones previously used in research including the Hassles and Uplifts Scales (Kanner, Coyne, Schaefer, & Lazarus, 1981) and Sarason's Life Experience Survey (Sarason, Johnson, & Siegel, 1978). Questions about social support (e.g., "There is no one around to help me in a pinch." and "I have someone who takes me seriously when I have concerns.") were based on the Support Behaviors Inventory (Brown, 1986) which was modified by Curry (1987b). The social support questions demonstrated the lowest item-scale correlations and so were omitted from the final scale. Questions 1,3,5, and 6 about self-concept were derived from the Rosenberg Self-Esteem Scale (Rosenberg, 1965) while questions 2 and 7 reflect common statements made by postpartum The final scale had a range of 10 to 24 and an women. alpha of 0.67 (Table 1).
Additional Questions. Two open-ended questions (e.g., "Could you tell me one main reason why you are here/not here today?" and "Is there anything else you would like to say?") allowed respondents to identify reasons why they either attended or did not attend the clinic visit and to voice any other thoughts they wished to share regarding their postpartum experience or care. All women gave a response regarding attendance but few chose to make further suggestions. Procedures.

A consent form approved by the Institutional Review Board was used. Subjects who were scheduled for their six-week postpartum visit and who arrived for those visits were approached. After the study was explained to them, they were asked to participate. They were assured that the study would not affect their care, that participation was voluntary and that their responses would be held in confidence with all data reported in summary form. Signed consent was obtained. The questionnaires were read to subjects who were asked to respond to the questions by referring to an answer card provided for them. This took an average of 15 minutes.

The researcher contacted subjects who did not attend clinic appointments by telephone, explained the study, and asked them to participate. The researcher

obtained oral informed consent and also read the questionnaires to these subjects. Telephone interviews varied from 15 minutes to over 30 minutes. At the conclusion of each interview, the researcher counseled the woman to call the HD to reschedule the postpartum appointment.

Analysis

All analysis of data was completed using the Crunch statisical package (Crunch Software Corporation, 1987). A probability value < 0.05 was accepted as the level of significance.

Results

Sample

Sample characteristics showed wide variations (Tables 3,4). Women in the sample ranged in age from 15 to 34 ($\underline{M} = 22$, $\underline{SD} = 5.2$) years. The majority were partnered (62%) and had finished high school (66%). Six women reported no monthly family income while one reported a family income of 1800 dollars per month ($\underline{M} =$ 662, $\underline{SD} = 416$). Private insurance paid for postpartum care for two of the women, Medicaid for six, and the rest were charged for care based on a sliding-fee scale. Most of the women (69%) received supplemental food for women, infants, and children (WIC).

The women began prenatal care across a wide range (5-31) of weeks in their pregnancies ($\underline{M} = 17$, $\underline{SD} =$

6.4). Numbers of prenatal visits ($\underline{M} = 10.6$, $\underline{SD} = 2.9$) attended were disparate. Most of the women (80%) had received prenatal care from providers at the HD while 8 (20%) received care from other providers. The majority (82.5%) also had attended a two-week postpartum visit at the HD.

Apgar scores were missing from 19 of the data sets so this item was deleted from further analysis. As few community health nurse referrals were made for the participants, this item was also omitted from analysis. <u>Scale Analysis</u>

After the questionnaires were administered and scored, the negatively worded statements were reverse scored. Frequencies, means, and standard deviations were determined for the enablers, barriers, concerns, and psychosocial scales and the reliability of the scales were tested by Cronbach coefficient alpha. Scale means of attenders and non-attenders were compared by \underline{t} -tests (Table 5).

Research Questions

To answer the research question "Do demographic variables affect attendance?" the interval level demographic data were compared by \underline{t} -tests and the dichotomous data were compared by Fisher's exact test for attenders and non-attenders (Table 3). No statistically significant differences were noted.

Attenders, however, tended to be slighty older, were less likely to be partnered, had less education but higher monthly income, were more likely to be primiparous, and more likely to be paying for their own care than non-attenders.

Health data was also compared by t-tests and Fisher's exact tests (Table 4). Again, no statistically significant differences were found between the two groups. Attenders tended to have fewer prenatal risks, to have began prenatal care earlier, have had more prenatal visits, and have given birth at an older gestational age than non-attenders. Attenders also had fewer intrapartal complications for the mother and infant, and fewer postpartum complications for the infant. However, the attenders had more postpartum complications than non-attenders, an increased time from the birth to the interview, and experienced less postpartum depression. Non-attenders were more likely to have received prenatal care and a two-week visit at the HD. The median birthweight for babies of non-attenders was higher than that for babies of attenders.

Enablers Scale

The enablers scale was designed to answer the question, "Does the presence of enabling factors increase attendance at six-week postpartum clinic

visits?" Scores on this scale were relatively high (\underline{M} = 21.77, <u>SD</u> = 2.9; range 13-28) where high scores indicated high agreement with enablers. The <u>t</u>-test between the means of the attenders and non-attenders was not statistically significant (Table 5).

<u>Barriers</u>

The barriers scale tested whether barriers increase non-attendance at six-week postpartum clinics. Results indicated agreement that barriers to attendance exist ($\underline{M} = 13.43$, $\underline{SD} = 2.5$; range 6-19) but comparison of the means revealed no significant differences between attenders and non-attenders (Table 5).

Psychosocial

The psychosocial scale was designed to measure relationships between psychosocial variables and attendance ($\underline{M} = 16.85$, $\underline{SD} = 3.6$; range 10-24). Comparison of the means indicated no significant differences between attenders and non-attenders (Table 5).

Relationships Between Variables

The final research question was "Are there relationships between the enablers, barriers, concerns, and psychosocial scales and demographic variables?" As the concerns scale did not demonstrate reliability, the researcher was unable to answer this question. However, correlations were computed between interval

level demographic data and the three other scales. Barriers correlated significantly with the age of the mother (r= 0.3849, p < .05) while the number of prenatal visits correlated with the birthweight of the infant (r= 0.3656, p < .05) and the weeks gestation (r= 0.4744, p < .05).

Summary

The findings about the research questions did not support statistically significant differences between the women who attended their six-week postpartum clinic appointments and those who did not. Demographic data and mean scores on the enablers, barriers, and psychosocial scales were very similar and findings indicated that the items measured did not affect attendance.

Additional Findings

Scores of individual questionnaire items revealed several differences between attenders and non-attenders. The attenders were more likely to express fears of having a pelvic examination, had more questions about how they were feeling, were more likely to be unhappy with the way their body looked postpartally and to feel overwhelmed by their lives. Attenders also felt more in control of their lives. The non-attenders, however, were more likely to need a phone call for a reminder, to forget when their appointment was scheduled, have transportation problems, and not have anyone around to help in an emergency. Although subtle, the differences between the item scores for attenders and non-attenders supported the anecdotal statements of the women.

The open-ended question inquiring about reasons for attendance or non-attendance resulted in 40 responses from attenders and 11 from non-attenders. Content analysis of the responses was done to further explore differences between attenders and non-attenders. The majority of attenders came to "make sure I'm okay" or to obtain additional birth control supplies. A significant number expressed concerns about physical problems while some came simply "to keep my appointment."

Four non-attenders reported forgetting the appointment and four others cited lack of transportation as the chief reason for missing their appointment. However, their responses to the questionnaire regarding these two items indicated even larger problems in transportation and remembering their appointments. Clearly, these two factors were significant barriers for these women.

There was another subtle difference between the responses to this open-ended question for attenders and non-attenders. The attenders often expressed several

reasons for attending while the non-attenders generally gave a specific, short answer. The attenders elaborated on their reasons for wanting a check-up, obtaining a birth control method or for worrying about a physical problem and making the effort to get to the HD.

The final question was "Is there anything else you would like to say?" Those who responded gave suggestions such as having a changing table available for babies, providing child care during clinic visits, holding clinics in local areas, and changing the requirement to call the day before to confirm appointments. The women openly shared the frustrations of being a new mother, losing insurance coverage after a spouse's injury, geographical and social isolation, and lack of help with several small children.

The telephone interviews tended to last longer than the face to face interviews as the women wanted to discuss the many problems in their lives and had few, if any, resources. Non-attenders expressed concerns about WIC, breastfeeding, anorexia, and baby care. The researcher addressed as many problems as possible and made referrals to the county mental health clinic, the university breastfeeding clinc, and the WIC clinic. The women were encouraged to re-schedule their postpartum appointments and to obtain well-child care

for their babies. Subsequent to the research phone contact, six women obtained postpartum check-ups.

Discussion

This study found no major demographic differences between women who attended their six-week postpartum visit at a HD clinic and those who did not. In addition, no significant differences were found between enablers, barriers or psychosocial factors as measured by the study instrument.

However, trends did appear in both the demographic and scale data. The finding that attenders were older, had higher family income, began prenatal care earlier in their pregnancies, had fewer prenatal risks, more prenatal visits, and gave birth at older gestational ages agrees with the literature regarding the demographic factors associated with adequate prenatal care (Brown, 1988; Institute of Medicine, 1985).

Attenders also experienced more complications postpartally than did non-attenders. The complications included mastitis, endometritis, anorexia, bulemia, cracked nipples, sore or infected episiotomies, hemorrhoids, and sexually transmitted diseases. Many women returned to seek help with problems or to check on the resolution of problems. A question that remains is "Why did the attenders who had higher incomes and

more prenatal care experience more postpartum
problems?"

A shortcoming of this research was the wide range (37 to 94 days) of timing of the interviews with attenders averaging a longer interval than non-attenders. At least a partial explanation for this can be given. The researcher contacted the non-attenders as soon as possible after they missed their appointment, often the same day. Attenders, on the other hand, frequently arrived at the HD for a visit after one or more previous cancellations. This time factor may have either increased or decreased differences between the two groups as previous research with postpartum women has found that types and intensities of concerns and problems varied over time (Bull, 1981; Hiser, 1987) and may also have increased the incidence of problems among attenders.

More of those who attended were self-pay. This too was perplexing as previous research indicates that having insurance facilitates care. However, the majority of this sample had received prenatal care from the HD and knew that they would not be denied care even if they were unable to pay. Continuity of care and perceived health problems appeared to override the issue of payment.

Attenders reported less depression. This was supported by the fact that attenders were less likely to report feelings of isolation and at the same time reported feeling more in control of their life and had more help available in emergency situations.

Limitations of Study

Developed for this study, the scales could benefit from clarified wording, shorter statements (especially for telephone interviews), and an increased range for the replies. These changes as well as a larger sample size might enhance the discrimination of differences between attenders and non-attenders.

The attenders were interviewed face-to-face while the non-attenders were interviewed by telephone. This limitation could be minimized by interviewing the non-attenders in their homes although that would alter the setting and be very costly of the researcher's time. Three of the non-attenders were lost to follow-up. With a small sample, this loss could substantially alter the data.

Suggestions for Further Study

This study examined a small sample in one setting and needs to be replicated in other settings with larger samples. The questionnaire should be strengthened and reliabilities established in other samples. The same kind of postpartum research could be

repeated with a focus on family functioning or an increased emphasis on stress and social support to assess reasons for attendance or non-attendance. A prospective study could be designed to interview postpartum women two to three weeks before their six-week visit. Scores of those interviews could then be compared for attenders and non-attenders. Despite these limitations, the young, low SES caseload of this HD mirrors that of many other counties in Oregon and results from this study can provide impetus for initiation of system changes.

Implications for Nursing

Clear-cut differences may not exist between women who attend and who do not attend six-week postpartum visits. The non-attending women in this study were especially affected by forgetting appointments, lack of transportation, and not having been notified when their appointments were scheduled. Both groups of women suggested that being reminded, having appointments for themselves and their baby on the same day, having child care available at the clinic, and having clincs in local areas would facilitate attendance.

Nurses are in positions to act on these suggestions by initiating system changes. Health care systems in general and HD systems in particular are beset by financial concerns which impact clinic

organization and policies. Based on this study, the researcher believes that several low-cost changes could be implemented within a HD. All personnel including clerical staff, RNs, and NPs would benefit from increased sensitivity to the needs of new mothers. Inservice programs could provide this training. One person within the HD, perhaps a volunteer, could be assigned the responsibility of contacting the postpartum mothers either by telephone or mail one week before their scheduled appointments as a reminder.

The findings from this study suggest that attenders were more likely to perceive a need for attending their postpartum visits. Therefore, if women were given a more concrete reason for attending, attendance may increase. Well-baby appointments and WIC recertificaton visits could be held on the same day as the postpartum visits. Transportation to the HD was also a major problem. Vans could pick women up at several locations throughout the county and bring them to the HD or clinics could be held in rotating sites like the well-child clinics to take care to the women. Routine follow-up of non-attenders should become the accepted policy.

<u>Conclusion</u>

Although this study did not determine what factors influence attendance or non-attendance at six-week

postpartum clinics it did uncover trends pointing to women at increased risk for non-attendance. The study gave women a chance to share their perspectives on care and provided a basis for possible system changes to facilitate care. Although further research with postpartum women is needed, the findings from this study demonstrated that, given a telephone call as a reminder, the majority of previous non-attending women will overcome barriers and obtain postpartum care.

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<u>Conceptual Framework: Factors That May Affect</u> <u>Attendance or Non-attendance at Six-week Postpartum</u> <u>Visits</u>.



	Number of Items	<u>M</u>	<u>SD</u>	Cronbach's Alpha
Enablers	7	21.77 (range: 13-28)	2.9	0.76
Health Value*	4	10.20	1.6	-0.01
Barriers	5	13.43 (range: 6-19)	2.5	0.59
Concerns*	5	12.97	2.2	0.42
Psycho- social	7	16.85 (range: 10-24)	3.6	0.67

Reliability of Questionnaire Scales

* = omitted from further analysis.

Scales in Questionnaire

Enablers Scale (final):

1. The clerks who make my appointments are helpful.

2. The postpartum visit was scheduled during a time when I needed help from the nurses and nurse practitioners.

3. I feel that it is okay to ask questions about my concerns.

4. A telephone call or note in the mail about appointments would be helpful.

5. I feel at ease talking with the health care staff at the clinic.

6. I feel respected when the people who work at the clinic call me by name.

7. It would be helpful if my postpartum appointment was on the same day as my baby's appointment.

Barriers Scale (final):

1. Transportation to the health department is a problem for me.

2. Waiting room time during clinic visits takes too long.

3. It is hard to pay for lab work and birth control pills.

4. Having a pelvic examination scares me.

5. I am uneasy because I have not met the person who will examine me.

.

Concerns Scale:*

1. I have questions about how I am feeling today.

2. I feel troubled today.

3. I am unhappy with the way my body looks since my baby was born.

4. I have worries about my baby today.

5. I am having a hard time with all the demands from the new baby and the family.

6. I want to get some kind of birth control through the clinic.

7. I would like some help with concerns about intercourse today.

Psychosocial Scale (final):

1. I wish I could have more respect for myself.

2. I never seem to be able to get enough sleep.

3. I take a positive attitude towards myself.

4. I feel like I am in control of my life.

5. I feel generally overloaded these days.

6. I feel useless at times.

7. I cry more often and more easily since my baby has been born.

<u>Note</u> * Concerns Scale did not meet test for reliablity and was omitted from analysis.

 $\begin{array}{cccc} \mbox{Characteristic} & \mbox{Attenders} & \mbox{Non-attenders} & \mbox{\underline{t-Test}} \\ \underline{n} & \underline{M} & \underline{SD} & \underline{n} & \underline{M} & \underline{SD} \end{array}$ _____ ---------Age 20 22.2 5.2 10 21.7 3.9 NS Income 30 714.0 422.0 9 490.0 364.0 NS (per month) _____ ____ % Fisher's <u>n</u> 8 n Exact Test Education <High school 10 35.7 >High school 18 64.3 3 30 NS 7 70 Partner status Living with 17 56.7 Not living 13 43.3 8 80 NS 2 20 Parity Primiparous 18 60 4 40 NS Multiparous 12 40 6 60 Self-pay 25 83.3 Yes 7 70 NS No 5 16.7 3 30

Sociodemographic characteristics of Attenders and Non-attenders

Characteristic	At	tende	rs				<u>t</u> -Test
	<u>n</u>	M	<u>SD</u>	<u>n</u>	M	<u>SD</u>	
Began Care (weeks)	28	16.4	5.8	10	18.5	8.0	NS
# PN Visits	25	11.0	3.1	10	9.5	2.3	NS
Birthweight (grams)	29	3479	594	9	3803	795	NS
Weeks Gestation			1.5	10		3.6	NS
	n	4	ł	n	940		Fisher': Exact Test
Source PN Care: Health Dept:	22	73.	3	10	100		NS
Other:	8	26.		0	0		
2 week Visit?:							
(PP) Yes:	24	80		9	90		NS
No:	6	20		1	10		
PN Risk Score:							
Zero Risk:	11	52.	. 4	3	30		NS
1-10 Risk:	10	47.	. 6	7	70		
Mother (IP) Compl	licatio	ons?:					
Yes:		46.	. 7	5	50		NS
No:	16	53.	. 3	5	50		
Mother (PP) Comp	Licatio	ons?:					
Yes:		63	. 3	3	30		NS
No:	11	36.	. 7	7	70		
Infant (IP) Comp	licatio	ons?:					
Yes:		16	.7	5	50		NS
No:	25	83	. 3	5	50		
Infant (PP) Comp	licatio	ons?:					
Yes:	7	23	. 3	2	20		NS
No:	23	76	.7	8	80		
Receive WIC?:							
Yes:	18	62	.1	9	90		NS
No:	11	37	.9	1	10		
Days, Birth to I	ntervi	ew:					
37-49 days:	14	46.	7	6	60		NS
50-94 days:	16	53.		4	40		
Postpartum Depre	ssion?						
Yes:	11	36.	7	6	60		NS
No:	19	63.	3	4	40		

Pregnancy Related Health Data of Attenders and Non-attenders

Scales	Attenders ($\underline{n} = 30$) $\underline{M} \qquad \underline{SD}$	Non-attenders $(\underline{n} = 10)$ <u>M</u> <u>SD</u>	<u>t</u> -test
Enablers	21.7 2.9	21.9 2.3	NS
(range)	(13-28)	(19-27)	
Barriers	13.4 2.5	13.6 2.5	NS
(range)	(6-17)	(10-19)	
Psychosocial	16.8 3.7	17.1 3.3	NS
(range)	(10-23)	(12-24)	

Maan Co	010	Scores	of	Attenders	and	Non-attenders
mean SC	are	Scores	01	ALLEnders	anu	Non-accentero

Appendix A

Demographic Information Form

Date Study ID #
Attendance Non-attendance
Age Married, living with Unmarried, living with
Race Married, not living with Unmarried, not living with
Income/month
Education:
Parity: G M P A L
Weeks began care
<pre># prenatal visits Source of care: CCHDOther</pre>
2 week postpartum visit Yes No
Complications: Mother Describe:
Prenatal: 37 week risk score
Intrapartal: YesNo
Postpartal: Yes No
Infant
Intrapartal: YesNo
Postnatal: YesNo
CHN visit postpartum: Yes No #
WIC Yes No
Private Insurance: YesNo
Medicaid: Yes No
Self-pay: YesNo
Birth weight of infant#oz. Birthdate
Weeks gestation
Apgars,
Depression Yes No Statement

Appendix B

Questionnaire Administered in Study

1. I have questions about how I am feeling today.			
2. I wish I could have more respect for myself.			
3. I never seem to be able to get enough sleep.			
4. I feel troubled today.			
5. I take a positive at <mark>titude towards</mark> myself.			
6. The health department is far from my home.			
7. If I don't have my heal <mark>th, I don't</mark> have anything.			
8. The clerks who make my appointments are helpful.			
9. Transportation to the health department is a problem for me.			
10. The postpartum visit was scheduled during a time when I needed help from the nurses and nurse practitioners.			
 I feel that it is okay to ask questions about my concerns. 			
12. I am unhappy with the way my body looks since my baby was born.			
13. A telephone call or note in the mail about appointments would be helpful.			
14. There is no one around to help me in a pinch.			
15. Waiting room time during clinic visits takes too long.			
16. It is hard to pay for lab work and birth control pills.	1		

17. I have worries about my baby	1 1	
today.		
18. I forgot when my appointment was scheduled.		
19. There are many things I care about more than my own health.		
20. I feel like I am in control of my life.		
21. I feel at ease talking with the health care staff at the clinic.		
22. I am having a hard time with all the demands from the new baby and family.		
23. I feel respected when the people who work at the clinic call me by name.		
24. I feel generally "overloaded" these days.		
25. Having a pelvic examination scares me.		
26. Being seen at the clinic is only really important when I am sick.		
27. Good health is of minor importance if my life is happy.		
28. I have someone who takes me seriously when I have concerns.		
29. I feel useless at times.		
30. I am uneasy because I have not met the person who will examine me.		
31. I cry more often and more easily since my baby has been born.		
32. I want to get some kind of birth control through the clinic.		
33. It would be helpful if my postpartum appointment was on the same day as my baby's appointment.		

ISA I A I D ISD J

34. I would like some help with concerns about intercourse today.		
35. Nothing is more important to me than good health.		

36. Could you tell me one main reason why you are here (not here) today?

37. Is there anything else you would like to say?

Appendix C

Consent Form

Oregon Health Sciences University

INFORMED CONSENT

You are being asked to participate in a study entitled, "What Factors Affect Attendance or Non-attendance at Six-week Postpartum Clinic Visits?" This study is being conducted by Linda Burgel, RN a graduate student, under the direction of Dr. Mary Ann Curry, a professor in the School of Nursing, Oregon Health Sciences University. The purpose of this study is to find out what encourages women to keep postpartum appointments or what prevents them from keeping their appointment.

If you agree to participate, you will be asked to answer a questionnaire made up of 37 questions about what might make getting here for postpartum care either easier or more difficult. The questionnaire will be read to you and is expected to take from 10 to 15 minutes and will not interfere with your clinic visit. If any of the questions make you feel uncomfortable, you may refuse to answer them.

Participating in this study may give you a chance to discuss issues about your postpartum care. Results from this study may help with planning care that meets more of the needs of women who come to this clinic.

Linda Burgel has offered to answer any questions I might have and can be reached at 655-7636.

I understand that I may refuse to participate or withdraw from this study at any time without affecting my relationship with, or treatment at, Clackamas County Health Department. I understand that my name will not appear on the questionnaire or be used for publication or publicity purposes.

I have read the foregoing and agree to participate in this study.

Signature_____

Date		
Date-	And a state of the	

Witness_____

Date_____

AN ABSTRACT OF THE THESIS OF LINDA L. BURGEL For the Master of Science

TITLE: FACTORS AFFECTING ATTENDANCE AND NON-ATTENDANCE AT SIX-WEEK POSTPARTUM CLINICS APPROVED:

Mary Ann Curry, D.N.Sc., Thesis Advisor

The purpose of this study was to discover, from women themselves, what factors encouraged keeping six-week postpartum clinic visits or conversely, what factors discouraged attendance. A descriptive survey was conducted during four consecutive months at a Northwestern Oregon county health department. Chart review and questionnaires provided data from 30 women who attended their six-week postpartum examination and from 10 women who did not attend regarding enablers, barriers, concerns, and psychosocial and demographic variables. No statistically significant differences were found between the two groups. Attenders had experienced higher frequencies of physical problems postpartally while non-attenders either forgot their appointments or lacked transportation. System changes were suggested to facilitate attendance.