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What type of information do parents need after being discharged directly from the delivery ward?

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ABSTRACT

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Early discharge normally means that mother and infant are discharged from the hospital between six hours and three days after delivery. Early discharge with home-visits after normal delivery was introduced at Uppsala University Hospital in 1990. Seventeen percent of the women who gave birth in 2003 in Uppsala used the home-care option as an alternative to postnatal care at the hospital. The home-visiting midwives use a checklist to give and gain information about the health of the child and mother and about how breast-feeding is going. The purpose of this study was to examine the parents' need of information after early discharge after delivery and to compare their needs with the information given according to the checklist for home-visits. Forty-two couples completed the study. They were asked to formulate five questions to the midwife at the home-visit. After the questions were gathered, a content-analysis was done. Three different main groups were identified: questions concerning 1) the child (68%) such as hygiene, bowel movements, burping, vomiting, eating, sleeping and sneezing 2) breast-feeding (21%) questions were asked about position while breast-feeding, nipples and amount of milk 3) the mother (11%) questions concerned afterpains, stitches, eating and drinking. The results show that the checklist worked sufficiently well as a work tool, but can be adjusted further according to the parents' need. This study shows that they needed more information about the care of the infant, primarily concerning hygiene.

INTRODUCTION

Twenty years ago, women who had given birth to their first child stayed at a postnatal ward an average of six days in Sweden (6). Since then, the average stay has successively been shortened (2). Early discharge after delivery in combination with a

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home visit by a midwife was introduced in Sweden 1984 as an alternative to postnatal care in the hospital ward (12). The Swedish Nation Board of Health and Welfare has defined early discharge as being when both mother and infant are discharged from the hospital between six hours after birth and, at the latest, three days after birth. The concept of early discharge can also imply that both mother and infant have been discharged directly from the labour and delivery ward without spending any time on the postnatal ward. To qualify for discharge as early as six hours after birth, the following criteria must be met: the mother must be healthy and had a normal pregnancy and delivery without complications. The infant must be born during gestation week 37–42 and must be examined and determined healthy by a paediatrician before leaving the hospital.

Since 1990, early discharge has been used as an alternative and a compliment to postnatal care at the Uppsala University Hospital. This alternative type of care has been evaluated and showed that all mothers were satisfied with the care they received in their homes (1). The most common questions new mothers had concerned breast-feeding. A follow-up study showed that 95% still were breast-feeding after four months (1). A review of literature showed just one previous study concerning need of information to new parents directly discharged from the delivery ward. This study concluded that the most common areas of concerns among primiparas regarded breast-feeding, post-delivery questions and baby-caring, while multiparas had concerns about the newborn's siblings (5). Grullon and Grimes showed that early discharge worked well for carefully chosen families (2). Medical risks for mother and child have been studied thoroughly (1, 2). An Australian study showed that there was no increased risk for depression after delivery with early discharge (10). Yet another study showed that early discharge is both cost-efficient and risk free if there is a well-established home visit unit. (7).

Seven midwives staff the Outpatient Care Unit at the Department of Obstetrics and Gynaecology, Uppsala University Hospital. This unit is called the Postnatal Visiting Midwives Group (PVMG). Families who choose to be discharged early are contacted by telephone the day after they arrive home. The family will thereafter be contacted daily and offered a home visit until four days after delivery. On the fifth day, the family visits the PVMG for an examination of the infant by a paediatrician and to take a metabolic screening test on the baby.

At the home visit a standardised checklist, developed by the midwives at the hospital, is used. By following it, the midwife gains information about the child's and the mother's health and about how breast-feeding is going. The midwife asks questions from the checklist, gets answers from the parents and then gives feedback to the parents based on the answers to the midwife's questions. This creates a dialogue between the midwife and parents. The parents are asked if the child has urinated, had a bowel movement and about the colour and consistency of the faeces which should change from black and sticky to a less solid and lighter colour. On the third to fourth day, it should be more fluid, yellow, grainy and

have a sour smell. The child is undressed and the midwife examines the infant's movements, skin colour, breathing patterns, head shape, fontanels, eyes, muscle tone and genitals. The midwife gives information about and demonstrates how the navel should be cleaned. If the child's skin is yellow, the midwife can take a blood test for analysis of bilirubin. To get an idea about how breast-feeding is going, the midwife observes while the mother nurses. It is important that the infant has the right sucking technique. This is important so as not to develop sores or tenderness in the nipple and for the infant to get enough milk. Information about the willingness of the infant to nurse and about the frequency of breast-feeding is important information. The midwife asks questions about how the mother's breasts feel. About three days after birth, the breasts are usually swollen because the milk has begun to flow. The midwife can explain that this is normal and give ideas about steps to take should the breasts become too swollen. The midwife also informs the parents according to Breast-feeding Strategies for Uppsala County that a pacifier should not be used in the beginning as it can affect breast-feeding in a negative manner (13). Concerning the mother's health, the midwife asks about the mother's general health, bleeding, cramping, tears and sutures. Information is given about nutrition, sleep, exercising, spouse relationships and about the care of the infant. If there is a special request, the midwife can review with the patient her chart during labour and delivery. If there isn't a need for a home visit, the midwife asks a series of standardised questions and completes the patient's chart.

Since 1997, there are laws in Sweden requiring that the healthcare system systematically and continually develops to assure the quality of healthcare. Among other things, this emphasises that the patient and nearest of kin should be informed and participate in decisions and that all personnel must co-operate. The aim of this study was to evaluate the quality of care by comparing the parents' need of information with the information given by the midwife.

METHODS

A pilot test, including ten couples was conducted to evaluate the study method used. The number of informants was not decided before start. New participants were included as long as there were new questions from the parents. The midwives at the PVMG recruited parents while informing those who wanted to go home directly from the delivery ward about the home-care. An information letter was given to the parents when they were discharged, earliest six hours after the delivery. The letter held information about the purpose of the study, a request for participation and the parents were informed that participation was voluntary. Ethical approval was obtained from the Head of the Department of Obstetrics and Gynaecology at the hospital and not from the Ethics committee at the Medical Faculty of the University, as the study was designed as a quality assurance project at the clinic.

The participants accepted involvement in the study at the first home visit. They

were asked to write down five questions they would like to ask the midwife the next day. In most cases the parents had formulated their questions before the midwife's visit, but in some cases the parents wrote their questions during the home visit. If there were more questions written on the paper, the first five were included in the study. At the home visit, the midwife gathered the questions and answered them as a part of the home visit routine. A total of 116 questions were gathered which gave an average of 2.8 questions per couple. All information was handled confidentially.

When all the material had been collected, each question was written down and the paper was cut into pieces with one question per piece. A code number was noted on each paper so we could note if the women had just got her first, second, third or fourth child. First, the material was reviewed to obtain an overview of type of questions. Then, all questions were categorised into main themes (by the first author). These themes were reanalysed together with a second midwife and divided into sub-groups. This second midwife was not working at the PVMG. Data were analysed by using a content analysis. As a complement to the qualitative method to analyse the questions, a quantitative method was used to calculate how many questions there were in each theme and sub-group.

MATERIALS

During three months, September 10 to December 15, 2001, parents were asked to participate in this study. The inclusion criteria were: 1) each family had been discharged daytime from the delivery ward without moving to the postnatal ward at the Uppsala University Hospital, 2) all were residents of Uppsala County, 3) only Swedish speaking couples were included due to practical reasons, 4) families that did not want home visits were excluded. During the study period 50 out of 53 possible couples were recruited and accepted participation. Four couples were excluded, as they were not allowed to be discharged early. Four couples did not return the questionnaire despite reminders. In this study, nine (21%) were first time mothers and 33 (79%) had at least two children. Of these, 21 had just given birth to her second child, nine her third and three her fourth. Three couples completed the study, but had no questions, when the midwife made the home-visit. Questions from 39 (78 %) of the recruited couples were analysed.

RESULTS

Three main themes were identified. Questions concerned the child, breast-feeding and the mother (Table 1). The main group, which contained 79 questions concerned the child and childcare, 24 questions concerned breast-feeding and 13 questions concerned the mother. The kind of questions between first time mothers and women with more than one child are presented in Table 1. *Examples of questions are presented in italics.*

Table 1. Number of question distributed in main groups according to first time mothers and mothers with more than one child.

Main groups	First time mothers	More than one child	Total
Child	23 (20%)	56 (48%)	79 (68%)
Breast-feeding	7 (6%)	17 (15%)	24 (21%)
Mother	4 (3%)	9 (8%)	13 (11%)

Questions about the child

Hyg iene

In this group, 26 questions about how a child's hygiene should be maintained are included: Fifteen questions about bathing a child. *"When should one bathe the child?"* Seven questions about care of the navel. *"How do you wash the navel?"* Four questions were about dry skin and redness of the bottom *"Can you put lotion on dry skin?"*

Bowel movements, urination, burping and vomiting

This subgroup includes questions about when and how often a child should urinate or have a bowel movement. Questions about burping or vomiting are also included. There were a total of eight questions in this subgroup. *"When will she have a bowel movement?"*

Eating and sleeping

Parents had concerns about the activities the child devotes most of the day and night to, eating and sleeping, are included in this subgroup. They asked if the child should be allowed to steer feeding times or if he should be awaken to be nursed. *"Should he be allowed to sleep as long as he wants or should I wake him after a while and try to get him to eat?"*

Sitting, lying down

Questions were asked if the child should lie on his back or stomach. A few questions worried if it is dangerous if the child were to vomit while lying on his back. There were also questions about if the child can lie on his stomach and sleep. As far as questions about sitting, there were questions about if a child can sit in a soft bouncy baby chair. *"How shall she lie?"*

Nose

A few questions were raised about the child's stuffy nose and sneezing. *"Why does the child sneeze so often?"*

Medical questions

In this group there were 15 medically related question of which four questions were about jaundice and three about rashes. The remaining questions were about uneven breathing, eye infections, blue feet, body temperature, the risk that sick siblings

may infect the infant and about vaccinations. Two questions were also about the bump that was seen on the chest (the sternum).

Miscellaneous

Questions not fitting into the above categories were included in this subgroup, for example, outdoor and indoor clothing, cutting the nails, crying and sibling relationships.

Questions about breast-feeding

Breast-feeding positions, nipples

Nine couples had questions about various breast-feeding positions, the child's position at the breast and the correct sucking technique at the nipple. *"How do you nurse lying down?"* Eight questions were about sores and tender nipples and breast-feeding positions. *"How can I get these sores to heal?", "Which positions can I use that won't give me sores?"*

Time per breast-feeding, amount of milk

Four questions were about the amount of milk. *"Is there enough milk?"* There were two questions about the length of time per breast-feeding. *"How long should you nurse each time?"*

Questions about mothers

Afterpains, stitches

Examples of questions about afterpains and stitches: *"How long do you have afterpains?" "When will the stitches fall off?"*

Eating, drinking, medications

Within this group, there were five questions about how much food and fluids to take and about drug usage during breast-feeding. Some questions were about taking pain relievers. Three questions were about food and fluids suited to the breast-feeding period. *"Can I eat as usual now?"*

DISCUSSION

Seventeen percent of the families were discharged from the University Hospital in Uppsala 2001, without staying at the postnatal ward. Questions about childcare seem to be the most pressing questions to be answered. A great deal of all questions were about bathing the child and taking care of the navel. In the check list for home visit, information about care of the navel is included which means that there is no need for improvement because the midwife always has a dialogue with the parents on this point. When considering bathing the infant, there are still notions that the infant should not be bathed until the navel has healed. Current opinions are that the

infant can be bathed anyway (3). In today's segregated society, many families have lost the continuing contact with older generations who previously gave advice as to the care of an infant. In the present study only 20 % of the participating families had had their first child. Eighty percent had own experience of caring for at least one new-born child before. The proportions of first time mothers and those with children before are exactly the same as in the previous study at the same clinic (1). The results show, however, that there is a great need of routinely given information about e.g. bathing the child. Thus, the checklist for home visits should be redesigned to include space for this. Parents also have questions about dry skin. A square for information about skin/skin colour is included in the chart/check list for home visits. It is used today to note infant jaundice. The checklist can also include a box for skin quality as well as one for jaundice.

Questions and answers concerning the infant's urination and bowel movements are also important for parents. In the home visit checklist, there is a square for urination and bowel movements. By asking about the form and colour of the faeces, the midwife gains information about the child's intake of breast milk. This information is very important for both the parents and the midwife. In this regard, the checklist for home visits works well.

Questions about when the infant should eat and sleep are answered by the midwife during the section about the breast-feeding interval in the checklist for home visits. The midwife's information and the parents' needs are met on this point. Most parents know that it is now recommended that infants sleep on their backs or side to reduce the risk for Sudden Infant Death Syndrome, but it is desirable that the midwife discuss this on a routine basis. Questions on why the infant sneezes or has a stuffy nose also come up. There is no special box for this but this is included in the observations the midwife makes on the general health of the baby.

A small fraction of the questions was about medical aspects. This can be because only healthy infants and mothers are discharged directly from labour and delivery. It can also possibly be that parents feel secure within their own home environment with access to 24-hour advice.

Over 20% of all questions were about breast-feeding and these results correspond to the previous results from Uppsala (1). Most of them concerned breast-feeding technique and sores or tender nipples. This corresponds well with the experiences from home visits. During a home visit, the midwife observes a breast-feeding. The advantage with a home visit is that the midwife can show the mother how to find a comfortable position in the woman's own home. Problems with tender nipples or sores are less and eventually disappear completely when the mother and infant have the right technique while breast-feeding (8). The midwife's information in this area is very thorough and is based on the home visit checklist. Questions that were asked in this group were answered when the midwife observed the mother breast-feeding and, in appropriate cases, corrected the position and the infant's position and technique. The midwife answered questions about the time per feeding during the breast-feeding interval in the checklist for the home visit. There is no box in the

home visit check list corresponding to questions about the amount of milk but it is common that the midwife informs the parents that there is enough raw milk (colostrums) the first few days and that the quantity of milk increases afterwards.

It was not surprising and corresponds well with the midwives experience, that there were few questions concerning the mother's health. The midwife following the checklist for the home visit answers questions about afterpains, stitches and nutrition for the breast-feeding mother. New mothers, influenced by the hormone, oxytocin, are more harmonious and better able to cope with sleeping only short periods of time (11). Lundberg and Öberg, found that the father's responsibility for care was greater if the mother and infant were discharged early (4). That gives the woman time to devote herself to important tasks for both herself and the infant: breast-feeding, rest, eating and drinking. The spouse devotes more time to taking care of household chores and siblings.

The results show that the checklist, developed by midwives, in co-operation with paediatricians and gynaecologists at the hospital, for home visits works well as a work tool. From the parents' perspective, improvements can be made concerning information about childcare such as taking care of the infant's personal hygiene, burping/vomiting and appropriate sleeping positions. Documentation can also be improved concerning jaundice and the skin appearance of the infant.

It could be of interest to know what kind of questions families who stay at the postnatal ward have, if it differs from those who leave the hospital early. Furthermore, it could be interesting to study if the questions differed between mothers and fathers. In Uppsala County there are 22% immigrants and in Sweden there are totally 17 % immigrants (9). We have no information about parents who did not speak Swedish. Though, it would be interesting to find out if parents from other cultures have different concerns after coming home with their new-born baby.

The midwives working at the PVMG will continue to develop the checklist for home visits so that it will better serve the informational needs of the parents. The demands for better documentation will be a part of changes we make in the future.

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Appendix 1
Chart/check list for Home Visit and 2nd examination by paediatrician

Delivery date……..time…….

Discharge date……time……..

Time before discharge……..

Child: 1 2 3 4 5 >5

Weight……..Pregnancy week……

Discharged from ward……

Person Number (social security number)……

Name……

Address……

……..

Telephone number……...

Date: Midwife visit								Date: Doctor visit	
Day									
Home visit								Day	
Telephone								Signature	
Signature midwife									
INFANT									
Gen. Health									
Urine/Faeces								Vitality	
Navel								Spont. Movement	
Skin/Colour								Cyanosis	
Bilirubin								Icterus	
								Skin	
MOTHER									
Gen. Health								Heart	
Uterus								Fem. pulse	
Tear/Episiotomy								Breathing	
								Skull, form	
BREAST-FEEDING								Fontanel	
Position/Suck technique								Eyes	
Pacifier								Reflexes	
Willingness to suck								Tone	
Breast-feeding interval								Abdomen	
Breast								Navel	
								Genitals	
INFORMATION								Back	
Delivery								Skeleton	
Nutrition								Hips	
Exercise								Mouth	
Family Relations									
Childcare								PKU date taken	
TIME FOR VISIT									