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Patient satisfaction with home-birth care in The Netherlands

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Patient satisfaction with home-birth care in The Netherlands
One of the necessary elements in an obstetric system of home confinements is well-organized postnatal home care In The Netherlands home care assistants assist midwives during home delivery, they care for the new mother as well as the newborn baby, instruct the family on infant health care and carry out household duties The growing demand for postnatal home care is difficult to meet, this has resulted in a short supply of the most popular day care programme and a level of provision which does not result in adequate services This study acknowledges the patient perspective of maternity home care in order to contribute to its organization The majority (79%) of service centres were willing to participate A total of 1812 (81%) women who recently gave birth to a child responded to a postal questionnaire addressing the quality of care according to five dimensions availability, continuity, interpersonal relationships, outcome and assistant's expertise Almost one-third of the new mothers rated the availability as inadequate while the assistant's expertise was rated positively Postnatal maternity home care is personalized, small-scale, and recognizes childbirth as a life event Furthermore, it is relatively inexpensive and contributes to the satisfaction of recipients

INTRODUCTION

The quality of health care services is of great and continuing concern to government, financiers, professionals and patients The responsibilities of medical, nursing and allied professionals in this respect are clearly recognized Quality assessments are usually made according to their perspective and held against their standards

Acknowledgement of the patient's perspective in quality assurance in health care (the boundary with research is vague) has only been highlighted in recent years and has given rise to a new area of quality evaluation or patient satisfaction (Hulka *et al* 1970, Ware *et al* 1983, Pascoe 1983, Hall & Dornan 1988, Campen *et al* 1992)

Compelling reasons have been advanced for involving the patient's perspective (Locker & Dunt 1978, Larsen *et al* 1979, Fleming *et al* 1988, Bond & Thomas 1992) One of the reasons is that publicly funded health services are often in a seller's market (Vuori 1991) where patients are restricted by financial mandates to select alternative services, based on consideration of cost and quality

In regard to Dutch postnatal maternity home-birth care, the lack of market forces is regarded as an obstacle to a more consumer-oriented service Publicly insured persons (about 60% of the population) are eligible for financial compensation only if care is provided by a registered maternity home care centre by virtue of the Health Insurance Act 1966 But the rhetoric and reality may be quite different domains In the British National Health system, for instance, market forces are more evident, but this situation has not made the services more 'consumer-led' This study tries to answer the question of whether or not patients are still satisfied with postnatal maternity home-birth care

Before presenting the reason for and the result of the study, the main features of the Dutch obstetric system will be explained (see also Kloosterman 1984, Hingstman & Boon 1988 and, for comparison with other countries,

Scherjon 1986 and Torres & Reich 1989) Special attention will be paid to the structure and process of maternity home care because there is no equivalent system in the rest of the world

THE DUTCH OBSTETRIC SYSTEM

The distinctive features of the Dutch obstetric system are a large number of home births and a relatively low rate of medical intervention (Treffers *et al* 1990) Because pregnancy, labour and the postnatal period are considered normal physiological events women are encouraged to give birth at home instead of in hospital The choice between home and hospital delivery is free, but without medical referral patients have to pay for the use of the delivery room Home deliveries are attended by professional midwives or general practitioners (van Teijlingen & McCaffery 1987), preferably assisted by a qualified maternity home care assistant

After home delivery the new mother recovers from childbirth at home After hospital delivery women recover from childbirth at home as well, because they are discharged from hospital almost immediately (that is, within 24 hours) after normal deliveries Prolonged stay in the maternity ward is only possible following medical referral Approximately 80% of the new mothers convalesce from labour in their own bedroom at home

One of the necessary elements in the Dutch system is a well-organized structure of maternity home care services which is provided by 76 regional maternity home care centres Qualified maternity home care assistants look after the new mother, as well as the newborn baby and the other members of the family In 1989, approximately 140 000 families were helped by almost 5600 maternity assistants After a primary education of 6 years, followed by a secondary education or vocational training for those aged 12 to 15 years, pupil maternity assistants attend a 3-year vocational training course for those aged 16 to 18 years (MDGO-Vz) The curriculum is shared with pupils from other community care services, including general home help, care for elderly and care for physically handicapped A 20-week period of practical training in maternity home care is required, but pupils with practical training in one of the other services are welcomed as well

There are two basic programmes of maternity home care, both of them available for a period of up to 8 days after the delivery The service options are aimed at enabling the family to cope again when the intervention is at an end The most popular programme is day care (full-time) in which the assistant spends 8 hours a day with the family to

1 assist the midwife or general practitioner during home delivery,
2 care for the new mother and newborn baby,
3 provide infant health education to the family,
4 perform household services,
5 recognize deviations from normality in mother and baby and, if necessary, contact the midwife or general practitioner

The second basic programme (part-time) consists of 1½-hour visits, starting with two visits a day and ending with one daily visit The functions performed are the same as those in day care, but household services are not included On a small scale such postnatal programmes are being carried out in other countries, organized by hospital midwives and (paediatric) nurses (James *et al* 1987, Arborelius & Lindell 1989)

The relative frequency of the two programmes is 67% for day care and 19% for the visists Because day care is not always available at the start of the programme, visits are substituted until day care is provided These combination programmes form 14% of all programmes Recently, another programme has been added partial day care In this programme, the assistant spends about 5–6 hours a day with the family Again, all functions are performed, but household services only partially

GROWING DEMAND FOR MATERNITY HOME-BIRTH CARE

The demand for maternity home care has changed during the period 1955–1987 Figure 1 illustrates these changes After 1975 onwards, the demand for maternity home care did rise again because of the short stay in hospital after delivery followed by postnatal care at home (Butter & Lapré 1986) and a rising number of births Nowadays almost all women who give birth at home want postnatal home care, as do the majority of women who give birth in hospital

This growing demand is not easily met A reduction in programme duration (from 9 to 8 days) because of a (governmental) spending cut brought some relief in the mid-1980s, but nowadays the centres are short of staff The popularity of the profession is decreasing The pressure to economize impedes an increase of the very low wages The job becomes more demanding because of the growing number of serious family problems (e g divorces), the growing number of difficult cases caused by some women being discharged from hospital too soon, and the added difficulties of having to deal with a larger number of immigrants (Teijlingen 1990) There are not enough pupils for the vocational training course and the centres find it difficult to recruit new assistants The turnover rate (±15% per annum) amongst maternity home care assistants is quite high Irregular working hours are hard to combine with running a household

This has resulted in a situation where day care programmes are not available for everyone and the number of programme days are not always up to standard, in spite of

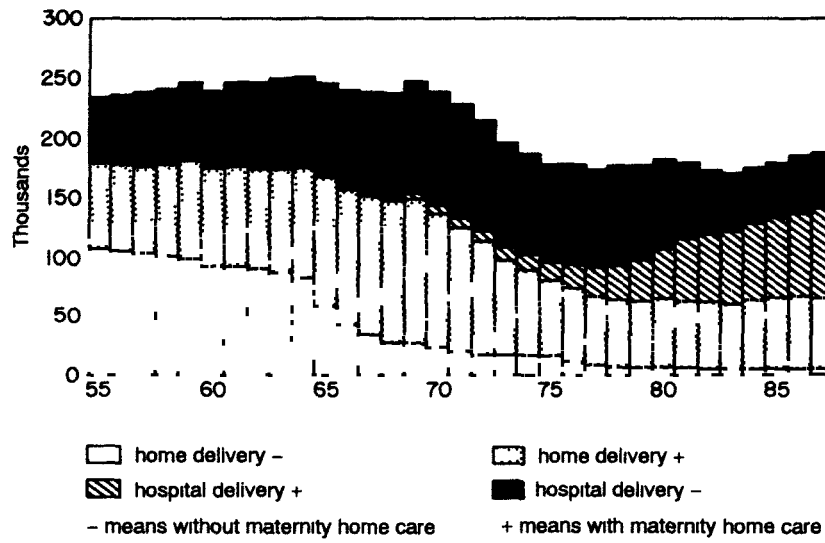

Figure 1 Development of number of births in The Netherlands according to location of delivery and postnatal maternity home care in the period 1955–1987

the Dutch government's explicit policy that 'without sufficiently available postnatal maternity home care of good quality, a system of home deliveries is inconceivable' (Tweede Kamer 1989)

THE RESEARCH PROJECT

Our research project dealt with two questions arising from this statement

1 In the patient's view, is maternity home-birth care sufficiently accessible in terms of day care programmes and the number of days care is provided?
2 In the patient's view, is maternity home-birth care of good quality?

In the context of this study patients are women who very recently gave birth Mothers or infants were not included who developed serious complications before the programme had finished During 1 week in September 1990, 1812 (out of 2242) new mothers responded to a postal questionnaire The self-administered questionnaire was partly based on a patient satisfaction study carried out by the research department of the National Association for Home Care in a maternity home care centre near Amsterdam Airport (Bastiaenen & Dresmé 1989) It was adapted slightly for ease of data entry

Staff in the majority of the Dutch maternity home care centres (60 out of 76) were willing to participate in the study and the combined response of women and staff of centres resulted in a total response of 64% Two of the centres did not participate because of demand problems, probably leading to a slight overestimation of accessibility of maternity home care services in the results Concerning the second question the response is likely to provide representative results to represent average Dutch conditions

Quality of care

Quality of care is explored according to various aspects accessibility, continuity of care, technical quality (expertise), interpersonal relations and efficacy or outcome characteristics (Roberts & Tugwell 1987) In case of obstetric care continuity emerges as an important issue (Zweig *et al* 1986), as well as information about health education of clients (Jacoby 1988)

Emphasis on access to service in this study justifies a separate research question Access relates to programme characteristics and number of service days included The quality in the second research question is assessed in relation to four of the five previous mentioned functions of maternity home care These functions concern the assistant's expertise The fifth function (need for contact with the midwife or general practitioner) has not been investigated because lay evaluation of this function seems to be problematic The four functions were itemized in 18 Likert-type statements rated in the categories good-satisfactory-neutral-unsatisfactory-bad

There are some problems, however, with using patient's evaluation ratings of health care One of these is the lack of meaningful comparative figures This makes levels of satisfaction in absolute terms and in isolation from other data meaningless As high levels of satisfaction (Zastowny *et al* 1983) can be expected, one cannot accept the ratings at face value

Comparative base

In order to interpret results a comparative base is formed Imagine a situation where everything proceeds according to expectations of the mother and her family This condition is fulfilled in the group of women who

Table 1 Factual reports concerning four dimensions of quality of care ($n=1812$)

Dimension/aspect	Percentage positive
Accessibility	
Received preferred kind of programme	82
Length of programme 8 days	56
Assistant present during home delivery[1]	57
Continuity	
One assistant during entire programme	73
Interpersonal relations	
Recommend assistant to others	80
Outcome	
Families able to take care of themselves at end of programme	83
Group of mothers to which all above dimensions/aspects applies (comparative base)	8

[1]This aspect of accessibility related only to women who gave birth at home ($n=751$)

- wanted to give birth at home and did so,
- received the kind of care they preferred,
- were given this care for at least 8 days,
- were delivered at home, attended by a midwife or general practitioner while an assistant was present,
- had the same maternity assistant throughout the entire programme,
- got along well with this assistant, and
- were able to take care of their families at the end of the programme

This group of women, for whom all the conditions are normal, comprises only 8% of respondent mothers Table 1 summarizes the percentage of new mothers' factual reports about the care received

RESULTS

Accessibility

The majority of families (83%) prefer the day care programme over visits (14%) Combination programmes (2%) and partial day care (2%) are not very popular (see Table 2) To a large extent the programme preferences are met, although approximately a quarter (24%) of the families in favour of day care have visits on the first days, followed by day care on the remaining days

About 40% of the families had not taken this situation into account The main reason for supplying the combination instead of the day care programme is shortage of staff

Even more serious is the situation concerning programme length On average, the programmes lasted for 7 2 days (with a standard deviation of 1 4 days), while the women opted for 8 1 days (SD 0 9) Almost half of the families (44%) received care for fewer days than they would have liked, the difference being almost 2 days Programme days are most frequently lost in the postnatal change from hospital to home Owing to an irregularity both the hospital and the maternity home care centre charge for this day, much to the surprise of the women And again, shortage of staff was responsible for receiving fewer care days The majority of these women (68%) could sympathize with the centres to some extent, and recognized the lack of care as being a result of staff shortage Others (32%) were less understanding and wrote that the centre should organize better

Table 2 Relative number of preferred and actual received programmes ($n=1803$)*

	Actual received programme				
	Day care	Visits	Combination	Partial day care	Row total
Preferred programme					
Day care	**76%**	2%	21%	1%	1495
Visits	1%	**96%**	3%	0%	244
Combination	11%	17%	**66%**	6%	35
Partial day care	–	7%	28%	**65%**	29
Column total	1151	267	356	29	

$\chi^2=2312$, d f $=9$, $P<0\,05$
*Nine missing values

Midwives or general practitioners who attend home confinements are supposed to be assisted by a maternity home care assistant In almost half of the cases (43%) the baby had been born before the assistant arrived, the reason being the speed of the delivery Midwives or general practitioners should initiate contact with the maternity home care centre earlier than they do

Ninety per cent of mothers in the comparative group ($n=138$) considered the programme of sufficient length, compared with 69% of the other group A difference of 21% was noted

Technical expertise (nursing assistants)

Figure 2 shows the evaluative rating of the quality of care, related to maternity assistant's expertise in carrying out four different functions Figure 2a shows the relative number of mothers who rated the quality as 'good' using the items concerning the assistance during home delivery The newborn baby was taken care of and the bedroom was properly cleaned according to the vast majority ($\pm 85\%$) of the women The co-operation between midwife and

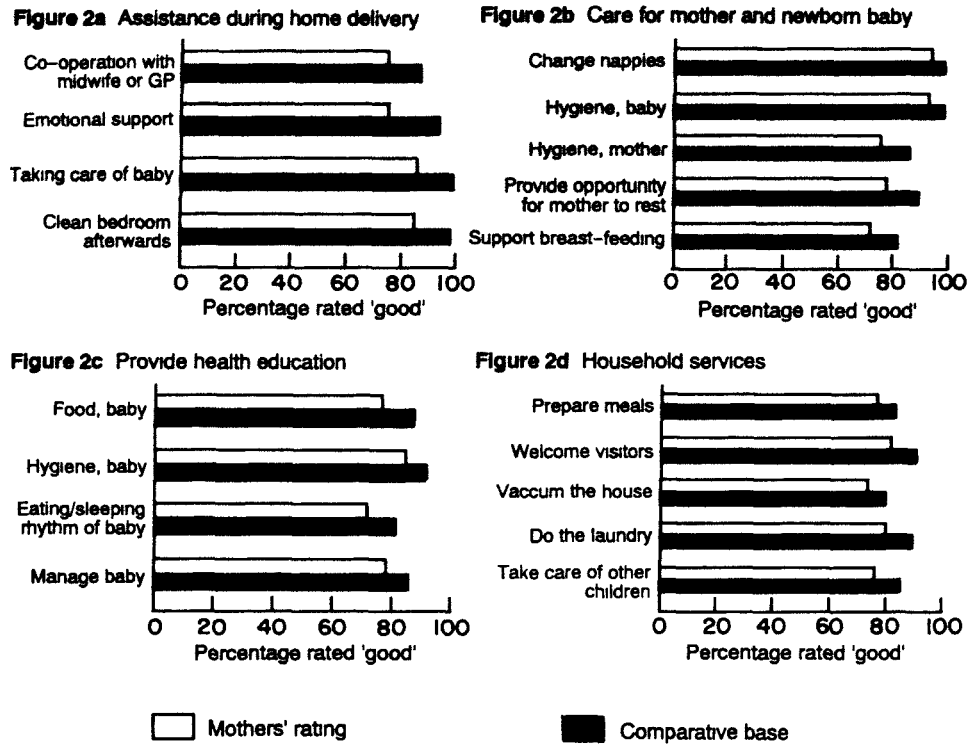

Figure 2 Evaluation of assistant's expertise Relative number of women who rated 18 items concerning four functions as 'good'

assistant was, on average, rated slightly less positively, the same applies to receiving emotional support (±75% rated this item as good) Mothers in the comparative group ranked the assistant's expertise even more highly, especially related to receiving emotional support

Figure 2b shows the percentages of new mothers who rated assistance with personal hygiene highly Care for babies' personal hygiene and changing their nappies are rated very highly (±94% of the mother rated 'good') Care for mothers' personal hygiene, providing enough rest for them and advising about the process of breastfeeding the baby are rated as good by ±75% of the women The comparative base ratings are also shown Care for the babies is rated very highly, even more so than the care for new mothers themselves The differences between the comparative base ratings and the others (ranges from 4 to 10%) are also less pronounced than those calculated using the previous ratings Overall, the mothers are quite satisfied

Figure 2c shows similar results with respect to the evaluation of health education, feeding the baby, attending to personal hygiene, eating and sleeping and general care of the baby The new mothers were satisfied, but less explicitly so than about personal hygiene Again, the difference between the comparative base and the remainder are consistent but small

Evaluation of the assistant's expertise in the last function, domestic activities, is rated similarly to those in the others (see Figure 2d) Again ±75% of the mothers rated the quality in preparation of meals, the welcoming of visitors, vacuum cleaning, doing the laundry and taking care of the other children as satisfactory

CONCLUSION

The results of this study justify a negative answer to the first research question and a positive one to the second

1 Maternity home-birth care is *not* sufficiently accessible Day care is in short supply and the average programme duration falls 1 day short of its agreed standard
2 Maternity home-birth care is of good quality All four investigated functions of the assistant's expertise (assistance of midwife or general practitioner during home delivery, care for mother and baby, provision of infant health education to the family, and performance of household services) were rated as very satisfactory

The comparative base showed that in normal conditions — that is, when things are as they should be according to expectations by all involved — approximately 90% of the mothers regard the programmes as lasting-long enough In less favourable circumstances (which currently applies to the vast majority of women), 69% expressed the same view

The reason why the availability figure shows a larger discrepancy compared with the comparative base than the technical quality ratings is probably a matter of

disconfirmation of expectations Satisfaction with care relates to the level of expectations (Linder-Pelz 1982a,b) This was also demonstrated in the field of obstetrics, 20 years ago by Noyes *et al* (1974) and recently by Green *et al* (1990) The expectations of accessibility are explicit disconfirmation is easily noticed in relation to day care programmes of 8 days The expectations of the assistant's expertise are probably more ambiguous while it is also likely that disconfirmation is experienced less often

The results did not reveal association between technical quality, continuity, interpersonal relations and outcome on the one side and availability on the other side A multivariate regression analysis of the same data is reported elsewhere (Kerssens 1993) This analysis showed that apart from the actual programme length the outcome measure was strongly associated with the evaluation of programme length Satisfaction figures dropped sharply from 90% with positive outcome to 50% if the outcome was less positive That is, when the mother was not able to take complete care of her family at the end of the programme, the chance of being satisfied is half

Decreased access

The pressure to reduce health care expenses has led to decreased access to the service But erosion of maternity home care can eventually undermine the Dutch system of home confinements, resulting in a less agreeable and more expensive postnatal maternity care Butter & Lapré (1986) calculated the price of maternity home care compared with hospital-based maternity care, the latter being twice as expensive as the former Postnatal maternity care is the most substantial cost component of total obstetric care

Consideration of costs is not the main issue for the new mother and her family The Netherlands has a partly public (covering 60%) and partly private health insurance system (covering 40% of the population) Publicly insured women are obliged to pay 12% of the costs themselves Privately insured women are payed a fixed amount of money irrespective of whether or not they spend it on postnatal care This sum will buy them a 6-day care package Many mothers prefer 8 days and are prepared to pay about 25% of the costs out of their own pocket Kleiverda *et al* (1990) showed that financial considerations are also of little importance in the choice of birth location

Home delivery

Reasons for preferring home delivery have to do with intimacy and control over the environment, while reasons for preferring hospital delivery relate to feeling safe The same picture emerges from the preferences of care package Although supplementary payment for day care is three times as much as that for visits, this does not seem to influence the choice between options Women who choose the visits seem to value privacy more highly and are more eager to get back to normal life again after the delivery Furthermore, women who opt for the visits are always helped, for instance, by their mother or other relatives and friends

Taylor (1986) mentions ongoing debate in the British National Health Service concerning the choice of maternity services Having conducted a study on consumer's preferences she concludes, 'Important characteristics of the preferred services are accessibility, continuity, personalized and small scale care and recognition of childbirth as a life event' (Taylor 1986)

This paper has outlined a form of postnatal maternity care which has all these features Moreover, it is relatively inexpensive, fits the World Health Organization's philosophy of primary care and contributes to the satisfaction of recipients

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