Factors affecting the initiation of breastfeeding: implications for breastfeeding promotion

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SUMMARY

Breastfeeding rates in the United Kingdom (UK) are one of the lowest in the developed world and certainly the lowest in Europe. There have been numerous studies of breastfeeding in the UK, most of which have adopted a quantitative approach, and they have largely focused on obstetric or socio-demographic factors in the decision to breastfeed. Whilst these studies have an important role to play, this paper draws on a study that adopts a qualitative methodology to explore women's personal experiences and perceptions of breastfeeding. A qualitative study of 19 primagravidae was undertaken and completed in 1998. Participants were recruited to the study via 12 antenatal clinics in the West Midlands, England, UK. Their ages ranged from 16 to 30 years and the majority described themselves as 'white'. The majority of participants were in paid employment in a variety of occupations. The study was prospective in design. Participants were interviewed three times either during pregnancy or after childbirth: the first

stage was between 6 and 14 weeks of pregnancy; the second stage was between 34 and 39 weeks; and the third stage was between 6 and 14 weeks after childbirth. The data indicate that there are several factors affecting breastfeeding initiation. First, infant feeding decisions seem to be made prior to, or irrespective of, contact with health professionals. Secondly, the data suggest that health promotion campaigns in the UK have been influential in their ability to educate women about the benefits of breastfeeding. However, this did not dissuade participants from formula feeding once their decision was made. The desire for paternal involvement also seemed to be another influential factor; fathers were either seen as able to alleviate the daily grind of early motherhood, or there was a desire for 'shared parenting'. Finally, some of the formula feeding women expressed a strong desire to re-establish their identities as separate individuals and as 'nonmothers'.

Key words: barriers; breastfeeding initiation; breastfeeding promotion; qualitative research; women's identity

INTRODUCTION

The advantages of breastfeeding are widely documented (Cunningham *et al.*, 1991; Renfrew and McCandish, 1992; Robertson and Goddard, 1997; Dermer, 1998; WHO, 2001) and, in general, undisputed (Booth, 2001). In the developing world, breastfeeding is strongly correlated to a reduction in infant mortality and morbidity (Booth, 2001), and in the developed world, there is overwhelming evidence to suggest that breastfeeding offers babies some protection from sudden infant death syndrome (Mitchell, 1992; Golding, 1993), eczema (Lawrence, 1995) and juvenile onset diabetes (Park, 1992). It is also suggested that breastfed babies are at a significantly reduced risk of gastrointestinal, urinary and respiratory infections (Howie *et al.*, 1990) and that breastfeeding can enhance neurodevelopment (Crawford, 1993). Research also suggests that breastfeeding may protect women from developing breast cancer (Newcomb, 1994) and certain ovarian cancers (Rosenblatt, 1993). The literature also identifies a range of psychosocial advantages for breastfeeding women and babies (Lawrence, 1995).

Some research findings not only outline the advantages of breastfeeding, but also highlight the disadvantages of formula feeding, even in developed countries (Walker, 1993; Dudsdieker et al., 1994; Gerstein, 1994). Consequently, many health organizations are keen to stress that breastmilk is superior to other types of infant feeding and that formula milk is, in fact, not equivalent to breastmilk (see, for example: World Alliance for Breastfeeding Action at http://www.waba.org.br; La Leche League International at http://www.laleche.org; and UNICEF at http://www.unicef.org). Indeed, in the most recent systematic review of the literature to date, exclusive breastfeeding is now recommended for ~6 months (WHO, 2001).

Breastfeeding rates in the UK are one of the lowest in the developed world. The last published UK Infant Feeding Survey conducted in 1995 (Foster *et al.*, 1997) revealed no increases in rates of breastfeeding for >15 years. This survey showed that the prevalence of breastfeeding at birth in the UK was 66%, at 4 months this had dropped to 21% and at 9 months breastfeeding rates dropped further to 14%. However, preliminary findings of the 2000 UK Infant Feeding Survey suggest that rates may have increased (Department of Health, 2001). For example, in 1995 the prevalence of breastfeeding at birth in England and Wales was 68%, but the most recent survey indicates a rate of 70%.

The comparison of breastfeeding rates between countries is problematic; the use of different definitions, the timing, and the varied methods of data collection make it difficult to compare data accurately. However, a comparative analysis of breastfeeding rates in 30 European Member States (WHO, 1999) places the UK firmly at the bottom of this list. For example, at 4 months postpartum, Sweden has a breastfeeding rate of 90%, and even Ireland, which has a relatively low rate of breastfeeding shows a rate of 38% (see Table 1). Data also indicate that the UK has lower rates of breastfeeding than the United States (US Department of Health and Human Services, 2000).

In this paper, the experiences of 19 women are explored to identify some of the factors that affect breastfeeding initiation. Previous studies,

Table 1: Com	parison o	of breastfee	eding rates
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	Rates of breastfeeding (%) (1992–1998)		
Country	≥4 months	≥6 months	
Sweden ^a	90	64	
Germany ^b	60	45	
Denmark ^c	60	25	
Ireland ^c	38	27	
United States ^d	-	29	
UK ^e	27	14	

^a(WHO, 1999), 1993 data.

^b(WHO, 1999), 1996 data.

^c(WHO, 1999), 1992 data.

^d(US Department of Health and Human Services, 2000), 1998 data.

^e(Foster *et al.*, 1997), 1995 data.

both in the UK and elsewhere, highlight a clear link between socio-economic status and the initiation and duration of breastfeeding (Bryant et al., 1992; Agnew et al., 1997; Foster, 1997); however, this paper does not support this view. Whilst acknowledging these general demographic trends within the literature, this paper seeks to highlight how women's perceptions and experiences of infant feeding can cut across these socio-economic boundaries. The paper highlights the success of health promotion campaigns in their efforts to educate and inform women of the benefits of breastfeeding. However, the data indicate that despite this knowledge, women often choose to formula feed their infants in spite of the stigma that is associated with this practice.

METHODS

This paper draws on a qualitative study of 19 primagravidae, completed in 1998. Participants were recruited to the study via 12 antenatal clinics in the West Midlands (UK), after being granted approval by the local Hospital Ethics Committee. In total, 21 primagravidae were invited to participate in the research study group and all gave their informed consent. Before the interviews began, two participants withdrew from the research: one participant changed her mind due to mental health difficulties and the other miscarried.

The research was prospective in design; participants were interviewed three times at specific stages of the pregnancy and following childbirth. The first stage interviews were conducted as soon as possible after the confirmation of pregnancy (between 6 and 14 weeks), the second stage interviews were conducted towards the end of the pregnancy (between 34 and 39 weeks), and the third stage between 6 and 14 weeks after childbirth.

Generating and analysing the data

In-depth unstructured interviewing was used to generate 'rich' descriptions of women's lived experiences and perceptions of infant feeding; this allowed each participant to establish her own agenda for discussion, within broadly defined research themes. This method also ensured that the data was reflexively generated and grounded in women's own personal experiences (Strauss and Corbin, 1990; Jones, 1993). Initially, open questions were used to pursue research themes, which were then followed up using the participants' own words and phrases as a means of eliciting further data (Hollway and Jefferson, 1997).

All interviews were conducted by the same interviewer in the participants' homes, although participants were offered the opportunity of an alternative venue. The interviews were audio tape-recorded with the consent of each individual and then transcribed ad verbatim. The length of interviews ranged from 30 min to 2.5 h, the longest interviews being at either the second or third stage of the interview process. The interview data were analysed using 'grounded theory' style-a system of 'open coding', which involved sorting the data into analytical categories by 'breaking down, examining, comparing, conceptualizing and categorizing data' [(Strauss and Corbin, 1990), p. 61]. These categories of data were then compared and contrasted to generate themes; these themes form the basis of our analysis and discussion. On completion of the research, participants were invited to read and to provide comment on the final manuscript, although none of the respondents chose to do so.

The study group

The ages of women in the study group ranged from 16 to 30 years. Two participants were below the age of 20 years, but the majority were aged between 20 and 29 years. Similarly, there was a broad range of women in relation to occupation, including those women who were in work, unemployed and those not seeking work. Those who were in work were employed in a variety of occupations, including professional and management positions, clerical positions and manual occupations, such as waitressing and factoryassembly. The majority of participants described themselves as 'white'; only one participant described herself as 'Asian'. Participants were given pseudonyms to ensure confidentiality and to protect their anonymity.

Using qualitative evidence

Qualitative methodologies are becoming increasingly accepted within health promotion research as a way of focusing on and understanding individuals' 'lived experiences' (Bryman, 1988). As Raphael points out:

The increasing popularity of qualitative methods is a result of a perceived failure of traditional methods to provide insights into the determinants—both structural and personal—of whether people pursue or do not pursue health-promoting actions. [(Raphael, 2000), p. 355]

However, while traditional research methods play an important role within health promotion research, it is also important to understand how qualitative 'evidence' can be used to inform health promotion practice. Qualitative methodologies are frequently criticized as lacking in both reliability and generalizability (Somers-Smith, 1999), although the epistemological and methodological principles of qualitative research methods are often misunderstood. In general, qualitative methodologies seek to explore personal perceptions and constructions of health and health behaviour (Atkinson, 1990). This research does not seek to be representative, or typical, of all women's experiences, or to be statistically generalizable. Rather, it seeks to explore the ways in which we might understand women's experiences and perceptions of breastfeeding using the process of 'logical inference' (Mitchell, 1983; Hammersley, 1992). The process of logical inference is used to generate theoretical generalizations from the analysis of a sample that is not statistically representative, thereby producing theoretically rigorous conclusions, not statistically generalizable ones (Sharp, 1998). The aim of this paper is to provide an insight into the personal factors that affect women's decisions to breastfeed; it does not claim to represent the experiences of all women.

RESULTS AND DISCUSSION

Making the decision: breast milk or formula milk?

Research suggests that the majority of women make infant feeding decisions prior to, and irrespective of, any contact with health professionals, such as doctors, midwives or health visitors (Bryant, 1982; Bowes and Meehan Domokos, 1998). The interview data from this research study supports these findings. Of the 19 women who participated in the study, all but one participant had made a decision concerning the method of infant feeding prior to the first stage of interviewing; 12 had chosen to formula feed and seven had chosen to breastfeed. Indeed, six participants reported that they had made a decision prior to conception and 12 reported making their decision sometime before the ninth week of pregnancy. For example:

Pam: I plan to breastfeed if I can.

Interviewer: When did you make that decision?

Pam: I made it ages ago, when I first found out I was pregnant. (Second interview; age 30 years, factory assembler, breastfeeding.)

Infant feeding has an important place within women's experiences of maternity care in the UK and, more generally, within women's experiences of early motherhood (Murcott, 1993). As the data indicate, participants seemed concerned with the issue of infant feeding, even when they had not considered other important issues relating to pregnancy, childbirth and motherhood.

Interviewer: How are you planning to feed the baby?

Angela: Breastfeed, I've thought about that. I haven't thought about anything else. (First interview; age 19 years, waitress, breastfeeding.)

Alison: The first thing I went out and bought after my pram was my steriliser. (Second interview; age 21 years, unemployed, formula feeding.)

All of those who had reported a decision to formula feed were still doing so at the end of the

research. Of those reporting a decision to breastfeed, all had initiated breastfeeding but one participant ceased to breastfeed at 3 days postpartum (reporting difficulties with lactation). It is notable that the prevalence for early decision making was as equally likely for women intending to breastfeed as it was for women who planned to formula feed. In contrast to the findings of previous research (Foster *et al.*, 1997), the data from this study do not show a correlation to socio-economic status: respondents seemed equally likely to initiate breastfeeding irrespective of their social class.

Knowledge, information and breastfeeding promotion

The health promotion literature in the UK presents breastfeeding as the best method of infant feeding (Carter, 1995); as one participant describes:

Kelly: The emphasis is always on breastfeeding ... yes, breast is best! (Third interview; age 23 years, laboratory assistant, formula feeding.)

The biopsychosocial benefits of breastfeeding are widely discussed within the academic literature, within health promotion materials and within other literature directly aimed at pregnant and nursing women (Britton, 1998). Whilst research suggests that women make infant feeding decisions irrespective of their contact with health professionals, it is clear that the health promotion message—breast is best—has been successful in improving women's knowledge and understanding of the benefits of breastfeeding for both themselves and their babies. The breastfeeding participants in the study group explain their reasons for choosing breastmilk over formula milk:

Interviewer: Why are you planning on breastfeeding?

Angela: It's best for the baby. (First interview; age 19 years, waitress, breastfeeding.)

Interviewer: Why do you want to breastfeed?

Pam: I just felt that it was better to breastfeed for the first few months or as long as you can. Because I have read it before, it prevents infections and things like that. (Second interview; age 30 years, factory assembler, breastfeeding.)

Interviewer: Why do you want to breastfeed?

Trudy: Just because I know it's better for the baby and for me. (Second interview; age 29 years, university lecturer, breastfeeding.)

The participants that had chosen to formula feed were also aware of the benefits of breastfeeding:

Kelly: I think it's fine for people who want to do it and obviously it is best for the baby but I personally don't want to do it. I mean if anything, they say breastfeeding is better for you because it helps bring your stomach back to what it was before. (Second interview; age 24 years, laboratory assistant, formula feeding.)

Linda: The only thing that is really making me think should I be breastfeeding is this immune system. (Second interview; age 28 years, financial administrator, formula feeding.)

Alison: It is more natural to breastfeed ... I know it is better, and the antibodies and everything else. (Second interview; age 21 years, unemployed, formula feeding.)

The research participants identified some of the advantages of breastfeeding; in particular, a general recognition that breastfeeding offers some protection from illness and disease, both for themselves and for their babies. Other participants highlighted the more psychosocial benefits, emphasizing the importance of emotional fulfilment and bonding, which they felt could be enhanced through breastfeeding. It is notable that, once again, socio-economic status did not appear to be relevant with respect to respondents' knowledge of breastfeeding; both breastfeeding and formula feeding women of all social classes were equally knowledgeable:

Pam: At least the baby has more contact with you in that way. Once it comes out you feel it will cling to you. (Second interview; age 30 years, factory assembler, breastfeeding.)

Gayle: When I did try [breastfeeding] I thought it was absolutely wonderful, for the first three days, I think it creates a bond, a really special bond. (Third interview; age 27 years, legal executive, breastfeeding.)

Jill: I don't know what it will be like. I would imagine at times it is going to be painful, but I would hope quite fulfilling, I hope very natural. (Second interview; age 28 years, police officer, breastfeeding.)

The data indicate that women who choose to either breast or formula feed their babies are aware of the biopsychosocial benefits of breastfeeding. Previous research in this area supports these findings, suggesting that women who formula feed are very unlikely to claim that formula feeding is the 'best' method and will frequently acknowledge that 'breast is best' (Murphy, 1999). However, whilst health education campaigns have been successful in educating and informing women of the benefits of breastfeeding they are not always successful in promoting healthy behaviour, and as Daykin and Naidoo suggest, such campaigns may sometimes even be counterproductive (Daykin and Naidoo, 1995).

Breastfeeding as 'everyday': the sexualization of breasts

Historically, evidence suggests that breastfeeding was once perceived as an ordinary 'everyday' experience within societies such as the UK, in which this is now no longer the case (Oakley, 1979; Carter, 1996). Only one participant in the study describes this:

Hannah: My mum breastfed all of us, I was 12 when my little brother was born, so I actually had some experience of seeing a baby and it being breastfed. (Third interview; age 24 years, not seeking work, breastfeeding.)

However, in contemporary western societies, the situation seems to be quite different. With specific reference to the UK, research suggests that women have very little visual experience of breastfeeding, and that this influences both the initiation and duration of breastfeeding (Dykes and Griffiths, 1998). Many of the formula feeding participants expressed their concerns with breastfeeding:

Alison: The actual action of doing it wouldn't bother me at all. I would feel embarrassed in front of his family, I would. Say I was in the middle of town and you get these mothers that formula feed their babies, or even breastfeed them. I just couldn't breastfeed a baby in the middle of town. (Second interview; age 21 years, unemployed, formula feeding.)

Rebecca: I wouldn't do it in public, I just couldn't get my body out anywhere, for anybody. It is more private, isn't it? (Second interview; age 23 years, assistant buyer, formula feeding.)

Linda: I just didn't fancy the idea of breastfeeding, the inconvenience of it really ... I just couldn't breastfeed in front of anybody, no way, some people can, but I don't think I could. It was that, that made my mind up.

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(Third interview; age 28 years, financial administrator, formula feeding.)

Another formula feeding participant identified society's perceptions of breastfeeding as playing an important role in her decision-making:

Kelly: Well I couldn't do it in public like some people, you know some people don't have a problem ... I'd just feel uncomfortable I think. It's the way society looks at it as well, the way people see things like that. They'd think it was wrong, I think. A lot of people think you should do that sort of thing in private. (Second interview; age 24 years, laboratory assistant, formula feeding.)

The breastfeeding women in the study also acknowledged their feelings of disgust and embarrassment:

Jill: I wanted to [breastfeed] but wasn't sure if I felt comfortable about it. Purely because I think how I have been brought up very private and breastfeeding isn't at all that way, and it is knowing whether I felt comfortable in front of family and that sort of stuff ... with my family it something we got embarrassed about ... but as I have changed during the pregnancy I suppose, relaxed more and things like that. I have always wanted to do the right thing for the baby ... it was a struggle with my own emotions. But I have decided and I haven't looked back. (Second interview; age 28 years, police officer, breastfeeding.)

Gayle: I thought it sounded like the most disgusting thing in the world, the thought of it. I didn't like the thought of it. The funny thing now I think of it as the most natural thing in the world, but before not having children, not trying it before, I was just horrified at the thought of it. (Third interview; age 27 years, legal executive, breastfeeding.)

The data suggest that both breast and formula feeding women are ambivalent about breastfeeding, especially in front of others, and that feelings of embarrassment and disgust are expressed by women of varied socio-economic backgrounds. These experiences raise the issue of what breasts are for and what they represent within society. As Carter points out, it highlights the tension between the breasts' function as a symbol of sexuality within western society and the function of the breast as an organic source of nutrients for the infant (Carter, 1996). One respondent highlights this tension:

Hannah: I suppose it is a case of that they are there for him, I am not in the least bit shy of breastfeeding him in a restaurant or anything like that. Before I would have been extremely shy about bearing my breasts on a beach or anything like that, because I would feel uncomfortable about it. (Third interview; age 24 years, not seeking work, breastfeeding.)

Breast or formula? Men's role

More recently, researchers have begun to recognize the importance of men's role within pregnancy, childbirth and parenting (Richman, 1982; Lewis, 1986; Draper, 1997; Somers-Smith, 1999) and men's support for breastfeeding has been recognized as important in women's decision to either breast or formula feed their infant (Freed and Fraley, 1993; Jenkins, 1993; Earle, 2000). For those women in the study who had chosen to formula feed, paternal involvement seemed especially important; this involvement fell into one of two categories.

In the first category, participants seem keen to encourage fathers to share in the 'daily grind' (Graham, 1983) of early motherhood. Participants express a need for 'time out' from the continuous demands of caring for a newborn baby:

Kelly: You can share the feeds easier and things like that. Share the load. (Second interview; age 23 years, laboratory assistant, formula feeding.)

Rebecca: Well, it will not only be me having to get up in the middle of the night. (Second interview; age 23 years, assistant buyer, formula feeding.)

Linda: I think it is important for my husband to be able to feed it ... I don't think I could stand being tied down every single feed. At least my husband can feed him at weekends and nights. We both seem very tired and I just can't imagine having to feed him every time. (Second/third interview; age 28 years, financial administrator, formula feeding.)

As Murcott points out, 'one of the most wearingly obvious characteristics of an infant is the demand for food at unsocial [sic] hours' [(Murcott, 1993), p. 126]. The data suggest that respondents believe that paternal involvement in infant feeding may be more likely to secure his help during these hours.

Some participants were more focused on a desire to share the baby with the father and formula feeding seemed to provide an opportunity for this, whereas breastfeeding did not. Two respondents describe this:

Laura: I think really it's nice to be able to share that responsibility with your partner. (Second interview; age 24 years, insurance clerk, formula feeding.) Alison: I haven't discussed it with my midwife. That is just one of the things, at least Luke will be able to help. I think that it's nice for him to get involved, to share everything, to see Billy grow up. (Second interview; age 21 years, unemployed, formula feeding.)

Indeed, contemporary parenting manuals present the notion of shared parenting, where the mother and father are jointly involved, as the ideal and these manuals warn women against monopolizing the baby and excluding the father (Marshall, 1991). Murphy goes further, suggesting that women are now 'made responsible for their partners' 'bonding' with their babies' [(Murphy, 1999), p. 201]. Of course, contemporary parenting manuals do recognize that fathers can share in the work of parenting in other ways aside from the actual feeding of the infant, as the New Pregnancy Book (which is distributed to all pregnant women in the UK) states: 'learn to bath and change nappies ... Enjoy cuddling your new baby' [(Health Education Authority, 1994), p. 45]. However, as noted above, it is during the 'unsocial' hours (Murcott, 1993) that some respondents particularly wished to secure paternal involvement and, with respect to this, formula feeding was seen as especially important.

Breastfeeding, identity and 'good mothering'

Despite the fact that the UK has one of the lowest rates of breastfeeding in the developed world, breastfeeding promotion has had a pervasive influence on women's knowledge of breastfeeding and on their perceptions of what is 'best' for babies. Oakley argues that 'like natural childbirth, natural infant feeding has become fashionable in a society that is technological 'by nature' [(Oakley, 1979), p. 166]. Carter highlights the powerful link between 'good' mothering and breastfeeding; that is, the desire and ability to feed one's infant 'naturally' is associated with being a good mother (Carter, 1996). Formula feeding poses a risk to the notion of 'good mothering'; it carries with it stigma (Goffman, 1963), which is potentially discrediting.

Linda: I think there is a bit of a stigma attached to it [formula feeding]. I think it is your conscience. I think as well with formula feeding you are left to it. I don't think they gave it to breastfeeders, they give you a sheet and you have to fill it in how much feed they have, and the midwives come round and have a look at it. But with the breastfed babies, the midwives were there, telling them how to do it, I suppose it is because you are left alone, you sort of think 'Oh I am one of the naughty ones', so they let you get on with it. (Third interview; age 28 years, financial administrator, formula feeding.)

Many respondents made connections between formula feeding and feelings of guilt and failure, as three participants describe below:

Gayle: I wasn't really happy with it because I think no matter what people say you do feel a bit guilty if you can't do everything you plan. I hadn't anticipated having a caesarean, I thought everything was going to be OK. You have all these plans of what you are going to do and I saw breastfeeding as being a good thing and something I wanted to do, and I felt a bit of a failure that I didn't feel up to doing it all of the time. (Third interview; age 27 years, legal executive, breastfeeding.)

Trudy: I always said I would breastfeed for 12 weeks and that would be it, but up until the last few days I really didn't want to formula feed, I couldn't stand him near me when we started to formula feed at first, I thought I was totally failing him by giving him a bottle. I never dreamt I would feel like that. I am not antiformula feeding at all, I think it is your choice and you do want you want to do. (Third interview; age 29 years, university lecturer, breastfeeding.)

Alison: All the leaflets I have had as well, say it is best for baby, and you're a horrible mother if you didn't do it. That is how it feels ... (Second interview; age 21 years, unemployed, formula feeding.)

However, despite their sometimes strong feelings of guilt and failure, many of the formulafeeding participants expressed a powerful desire to re-establish their identities outside of the context of pregnancy, childbirth or mothering:

Judith: I don't know why, breastfeeding isn't something that I had ever thought about, given the choice, and seeing how much he drinks I am glad I decided to formula feed him. It was not something that I would like to give a go, just, no, I am not doing it ... the thought of having somebody hanging off you when you are in that much pain anyway. I thought no, forget it. You have suffered enough, I am not going through that as well. (Third interview; age 23 years, civil servant, formula feeding.)

Charmaine: I have thought about it a lot ... I always get the impression that they're permanently latched there. I want to get out and about and do other things. (Second interview; age 23 years, administrative assistant, formula feeding.) Linda: About 18 months ago my sister-in-law had a baby and she seemed to be feeding all the time. She was always up in the bedroom feeding, to me it was as if she lost her identity, she was this baby's feeding machine. (Second interview; age 28 years, financial administrator, formula feeding.)

This reinforces the view held by Oakley who suggests that 'health promoting work may be damaging for those who do it'; in this instance, participants felt that breastfeeding was damaging their sense of self-identity [Oakley (1989), p. 329]. In contrast to previous research, which highlights the relationship between breastfeeding, mothering identities and social class, the findings of this study do not support this.

CONCLUSIONS AND IMPLICATIONS FOR BREASTFEEDING PROMOTION

The data presented here offer some insights into women's perceptions and personal experiences of infant feeding. Whilst statistical generalizations cannot be made, some tentative conclusions can be drawn that are relevant to health promotion practice. The data indicate that there are several factors which affect the initiation (and duration) of breastfeeding.

First, infant feeding decisions seem to be made prior to, or irrespective of, direct contact with health professionals during pregnancy, childbirth or early motherhood. This supports previous research findings (Bryant, 1982; Bowes and Meehan Domokos, 1998; Earle, 2000) and appears constant both for women who choose to formula feed or breastfeed. The implications of this are two-fold: first, breastfeeding promotion must be targeted at women prior to conception; and secondly, it highlights the significance of the breastfeeding promotion literature targeted at all women of childbearing age.

The data further suggest that health promotion campaigns have been influential in their ability to educate women about the benefits of breastfeeding; both formula and breastfeeding women were aware of some of the advantages of breastfeeding. However, this did not dissuade participants from formula feeding, once their decision had been made. This suggests that information and knowledge are only one factor in the decisionmaking process.

The desire for paternal involvement also appears to be an influential factor; fathers were either seen as able to alleviate the daily grind of early motherhood, or there was a desire for 'shared parenting'. It is ironic that the desire for a more conjugal parenting relationship (Lewis, 1986), demonstrated in these terms, should have a detrimental biopsychosocial effect on women and babies. Although further research on fathers' roles is desirable, health promotion practice should acknowledge the important role that fathers can play and should ensure that health promotion is targeted at men and fathers, as well as women.

Finally, the data suggest that whilst formula feeding confers stigma, some of the participants in this study expressed a strong desire to reestablish their identities as 'non-mothers'. Breastfeeding was generally perceived as an activity which is 'out of place' within modern western society; the majority of both formula and breastfeeding women in this study perceived breastfeeding to be embarrassing, disgusting and inconvenient, whilst at the same time acknowledging that 'breast is best'. Health promotion practice must acknowledge that health behaviour is influenced by a wide range of personal, social and cultural factors, as Hepworth argues, health promotion practice involves 'social phenomena, wide-reaching cultural, psychological, political and ideological problems and issues' as well as biomedical and clinical ones [(Hepworth, 1997), p. 233]. Breastfeeding creates a tension between the sexual objectification of women's bodies for pleasure and their role as an organic and natural method of infant feeding, and it is within this context that women, and men, make decisions about infant feeding.

Previous studies clearly indicate a strong correlation between social class and the initiation and duration of breastfeeding, and although this study is not able to make statistical generalizations of this kind, the findings of this research do not support this. Although the data presented here are not statistically representative, they do suggest that respondents' perceptions and experiences of infant feeding are surprisingly alike. Whilst one might expect women of lower socio-economic status to be less informed of the advantages of breastfeeding, to be more affected by feelings of disgust and embarrassment, and to be more likely to formula feed, the findings of this study cannot support these conclusions.

To conclude, although breastfeeding promotion in the UK appears to have been successful in informing women about the advantages of breastfeeding over formula feeding, the findings of this research study indicate that there are several barriers that must be overcome if breastfeeding rates are to be improved within the UK. These perceived barriers include the difficulty and embarrassment of breastfeeding in public, the problem of maintaining personal identity whilst breastfeeding and general attitudes towards breastfeeding and women's bodies in wider society—as well as those held by mothers, fathers and families. Future research should focus on the ways in which the barriers to breastfeeding could be dismantled for all women and health promotion practitioners should address how they can work towards removing such barriers.

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