

**Men and Infant Feeding: Perceptions of Embarrassment, Sexuality, and Social Conduct
in White Low Income British Men**

Lesley Henderson, BA, PhD, PGCLTHE, Brian McMillan, BSSc, PhD, CSci, CPsychol,

Josephine M. Green, BA(Hons), PhD, AFBPsS, CPsychol, and Mary J. Renfrew, BSc, PhD,
RGN, SCM

Lesley Anderson is a Senior Lecturer, Sociology & Communications, School of Social Sciences, Brunel University, West London; Brian McMillan is a Visiting Research Fellow, Institute of Psychological Sciences, University of Leeds, Leeds; Josephine Green is a Professor of Psychosocial Reproductive Health, Mother & Infant Research Unit, Department of Health Sciences, University of York, York; and Mary Renfrew is a Professor of Mother & Infant Health and Director of the Mother & Infant Research Unit, Department of Health Sciences, University of York, York, United Kingdom.

Accepted June 14, 2010

Address for Correspondence to the Author: Dr Lesley Henderson

Department of Sociology and Communications, School of Social Sciences

Brunel University

Cleveland Road, Uxbridge, West London UB8 3PH, UK

Direct Line: (01895) 265459

Fax: 01895 203018 or 203207

Email: lesley.henderson@brunel.ac.uk

The study “Infant feeding in the Media: An Analysis of Representation and Influence” was funded by the Economic and Social Research Council (grant No R000222785), Swindon, England. The “Looking at Infant Feeding Today” (LIFT) study was funded by Department of Health, London, England. The views expressed in this publication are those of the present

authors and not necessarily those of the Department of Health.

Abstract

Background: The views of fathers have been shown to be important determinants of infant feeding decisions, but men's perceptions of breastfeeding and formula feeding are rarely explored. Our objectives were to address this gap and examine cultural associations and beliefs concerning infant feeding practices among men.

Methods: Five focus groups were conducted with low-income men ($n = 28$) living in areas of social deprivation in Leeds, Northeast of England and low-income areas of Glasgow, west of Scotland. Participants were white British men, aged between 16 and 45 years, and included fathers, expectant fathers, and potential fathers.

Results: Overarching themes concerning sexuality, embarrassment, and social conduct were identified across all groups. Participants perceived breastfeeding as 'natural' but problematic, whereas formula feeding was mainly considered as convenient and safe. Participants without direct experience of breastfeeding assumed that it involved excessive public exposure and attracted unwanted male attention. Underpinning these fears were strong cultural associations between breasts and sexuality and anxieties concerning appropriate gender roles.

Conclusions: In some communities few opportunities may occur to witness breastfeeding, and thus existing fears concerning the activity as attracting predatory male attention remain unchallenged. Perceptions of breastfeeding as a sexual activity and the dominant mass media emphasis on breasts as a sexual site may present additional obstacles to breastfeeding.

Antenatal or perinatal education with men should address not only practical issues but also provide advice on tackling problems generated by wider sociocultural issues of sexuality and masculinity.

Keywords: breastfeeding, men, focus groups, media, risk, sexuality, embarrassment.

Studies consistently identify that breastfeeding provides both mother and infant with considerable health benefits (1-6). In recognition of this, international and United Kingdom public health policies now strongly endorse breastfeeding (7-10). However, the prevalence of breastfeeding in the United Kingdom is low compared with the rest of Europe, and breastfeeding rates are lowest among low-income, young, white women, thus compounding existing health inequalities. Strong associations are found between infant feeding and social demographics, and prevalence of breastfeeding at 6 weeks is 65 percent among women from managerial and professional occupations compared with just 32 percent among mothers from routine and manual occupations (11). Investigation of the attitudes of parents and potential parents is a necessary step in understanding these low rates, and the differences related to socioeconomic factors (12-15).

Media portrayals of breastfeeding may be considered a proxy for real life exposure in communities where formula feeding is the norm (16). However, an Australian study found that breastfeeding tends to be depicted in the media as healthy but problematic (17), and a systematic study of breastfeeding and formula feeding as presented in British media found that breastfeeding was typically portrayed as difficult, funny, or embarrassing (18).

Breastfeeding was also associated with particular types of women, such as middle-class 'earth mothers,' and by contrast, formula feeding was presented as largely normalized, socially integrated, associated with 'ordinary' and 'normal' families, and represented as being problem free. Feeding by bottle was presented as a positive opportunity for fatherly involvement (18).

Fathers and Infant Feeding

The father's role in infant feeding decisions has been identified as crucial in studies conducted in both the United Kingdom (19, 20) and the United States (21). The father's opinion has been identified as the most important factor related to breastfeeding regardless of

maternal age, educational level, ethnic group, or marital status (22). Arora et al (21) highlighted that negative perceptions of the father's attitudes to breastfeeding was the main reason for formula feeding. Sherriff et al (19) found that new fathers could act as key supporters or deterrents to breastfeeding and were conscious of their partner's exposure in public. Other studies identified that fathers' views have a strong influence on initiation and duration of breastfeeding (20). Practical interventions with fathers have been shown to increase breastfeeding initiation and maintenance (23), yet continuing to breastfeed may involve challenging more emotional issues, such as feelings of jealousy or neglect on the part of the father (24). In one study, fathers of both breastfed and formula-fed infants were more likely than their partners to disapprove of women breastfeeding in public (25). Another study conducted in the United States (26) found that, whereas partners of low-income women were more positive than may have been expected about breastfeeding, as many as 29 percent said that breastfeeding in public was not acceptable and 34 percent said that it was embarrassing.

In light of the important role that male partners may have in women's decisions to initiate and continue breastfeeding, and the paucity of research in this area, this study aimed to examine this topic in more depth. This complex issue requires interdisciplinary perspectives; our multidisciplinary team comprises a media sociologist, health and social psychologists, and a health researcher with a background in infant feeding. Our approach and analysis draw on audience reception studies within cultural studies and communications in addition to sociological concepts of 'the body,' 'performative masculinity' and 'sexuality,' and an in-depth understanding of infant feeding behavior. Psychological approaches to the formation of attitudes and beliefs are underpinned conceptually here by the theory of planned behavior.

Methods

This paper presents previously unpublished data drawn from two studies of aspects of infant feeding that included men from low-income areas of Glasgow, west of Scotland (18) and socially deprived areas of Leeds, northeast of England (27). The sessions were conducted during 1999 (Glasgow) and 2000 (Leeds), and involved qualitative data collection designed to explore sociocultural understanding of infant feeding choices. Although we recognize that perceptions may have changed since the time when our data were collected, it is worth noting that despite several public health initiatives and other cultural influences including changes in relevant legislation, the rates of breastfeeding for these areas still remain low. Recent data from Leeds indicate breastfeeding prevalence of 48 percent at 6 to 8 weeks, with only 37 percent exclusively breastfed (28). Although exclusive breastfeeding rates have increased from 11.9 percent to 14.4 percent in the most deprived areas of Scotland between 2001 and 2008, they still fall far short of breastfeeding rates in the least deprived areas (43.4% in 2001 and 42.4% in 2008) (29). We still know very little about men's perceptions of breastfeeding and bottle-feeding, particularly among the study communities, and it is timely to reflect on these rare insights into the views of men from low-income, urban communities on infant feeding.

Our sampling was targeted toward young, white, low-income men who are often disenfranchised from research agendas. As with other qualitative research, the sample was not intended to systematically represent the population as a whole but, rather, designed to pilot data collection techniques and generate new hypotheses. We were particularly interested in 'how' infant feeding-related information is socially mediated and focus groups can be a powerful tool in the exploration of people's 'frameworks of understanding' (30). The sample was chosen to include partners and members of women's social networks (e.g., brothers, brothers-in-law, male friends). The aim was to explore sources of belief among men living in

low-income urban communities, and to generate rich contextual data that may illuminate why breastfeeding is especially low in those communities.

It has been noted that among the few studies about infant feeding conducted with men, the participants have tended to be drawn from higher social classes or have been conducted from the woman's perspective (26). Focus groups were considered to be an appropriate research tool because most health-related decisions are made in a social context and these group settings allowed us to tap into how some behavior may be considered 'normal' or 'aberrant' (31). Participants were possibly more comfortable discussing their views on breastfeeding and formula feeding in a peer group setting rather than in individual interviews, and this method has been found to work well as it encourages participation within groups of people who may be lacking in confidence or reluctant to share their experiences with those "outside" their community. Facilitators were responsive to the possibility that dissenting views may not be easily expressed in a group situation and also that, particularly with a female facilitator, participants may 'play up' in terms of performing male machismo behavior. In practice we found that minority views were expressed during the sessions.

Groups in Leeds were conducted by a male researcher (BM); these groups were fairly small, and participants were able to participate fully. The groups in Glasgow were larger and facilitated by a female researcher (LH); she has considerable experience of managing focus groups on sensitive topics and is comfortable conducting research with 'hard-to-reach' populations, such as young low-income men while being aware that the subject matter and age of some respondents might generate comments or behavior that could be interpreted as sexually suggestive (32).

Both facilitators employed strategies for ensuring full participation and maximizing group interaction (while encouraging dissenting views) by adopting a strategic role during the

session and ‘echoing back’ to participants’ (31). We found that the group context allowed for a more relaxed research session and provided vital data concerning the use of slang, colloquialisms, and jokes, and playful banter that surrounds breastfeeding and formula feeding, thus adding a crucial element to the research data and providing useful indicators of the sociocultural positioning of this contentious topic (32).

Group Composition

The first three groups conducted in low-income areas of Glasgow were ‘cluster sampled’. As illustrated in Table 1, group 1 involved teenage fathers whose partners and friends were mainly formula feeding; group 2 involved partners and male relatives or friends of women who were breastfeeding; group 3 involved fathers whose partners are or were breastfeeding and/or formula feeding. The groups thus provided a diverse range of infant feeding experiences, which was useful in terms of our aim to pilot data-gathering techniques. An additional two focus groups were conducted with men living in areas of socioeconomic deprivation in Leeds. Group 4 comprised a small group of teenage fathers-to-be, whose partners intended to formula feed; group 5 involved young men without children who were living in the same area (potential fathers) and provided a point of comparison with fathers and fathers-to-be.

Conduct of the sessions

The sessions were convened in community centers and participants’ homes, lasted about 60 to 90 minutes and, with permission, all were audio-recorded and fully transcribed. All participants were invited to discuss images, memories, and associations about breastfeeding and formula feeding, using stimulus material (newspaper headlines about breastfeeding and formula feeding or statements written on cards) followed by writing or verbalizing dialogue

prompted by visual material (health education posters with the strap line, ‘*Breastfeeding is...*’ or photos taken from a television soap opera storyline that showed a character breastfeeding). Finally, participants were asked about explicit knowledge and health information on infant feeding. For example, what have you heard about breastfeeding or formula feeding? Can you list the pros and cons of breastfeeding? Can you list the pros and cons of formula feeding? Can you say where you heard or read this? Did you trust or believe it? If so why? If not why? Facilitators probed for sources of information, such as peers, family, media, or specialized educational materials.

Analysis

Transcripts were read by two of the authors, who marked key passages according to analytical themes. This approach used some of the principles of grounded theory, developing analytical constructs, which were then applied in an iterative manner across the sample allowing us to confirm, reject, or modify concepts (33). Key questions, such as ‘Can you think of any advantages of breastfeeding?’ ‘Can you think of any advantages of formula feeding?’ ‘What are your sources?’, were cross-tabulated, and commonalities and differences were highlighted across all participants and for formula/bottle feeding or breastfeeding. This method has been used previously to explore public understandings of other sensitive health issues such as breast cancer (34) and sexual violence (35). Deviant cases were particularly sought out to explore the factors that influenced those participants who did not adhere to community norms (36, 37). To preserve anonymity, participants are identified only by their transcript code; thus a quotation attributed to (4:3) refers to comments made by participant 4 in group 3.

Results

Breasts, Social Banter, and Embarrassment

Perceptions of breastfeeding as humorous, embarrassing, and involving (for some, inappropriate) public exposure were identified across all groups. When participants were asked about what first comes to mind when they hear the word ‘breastfeeding,’ several said quite simply, ‘embarrassment,’ and the topic of embarrassment was raised spontaneously in every group. Indeed, the initial mention of the word ‘breastfeeding’ provoked considerable embarrassed laughter and banter in the groups. For one participant the word conjured up culturally iconic images of “Playboy magazine” (2:3) Another participant joked:

I mean you’ve got big storage tanks if you’ve got large breasts haven’t you?

The more women getting their baps out in public the better [laughs] (2:5).

Health education materials showing an infant suckling at the breast attracted comments such as:

[Baby] is on the left. Can I go on the right one? (4:2)

He wants some for his cornflakes! (6:1).

However, it was clear that participants were using humor to deflect feelings of social embarrassment and discomfort. As one participant who did not yet have children explained:

I think it’s the sight of somebody with their breasts out in public [makes me uncomfortable].

Not the actual act of feeding a child ... but it’s just more like seeing someone’s breasts exposed in public, and that’s always got sexual connotations as far as men are concerned (3:5).

Others discussed how embarrassed they would feel if a woman were to breastfeed on public transport, as one participant put it,

On a bus, for instance...not that you see it very often (4:3).

One participant reflected on how he would cope if his partner began breastfeeding publicly,

If I was sitting on a train with my friends and she lifted her top and started feeding the baby, I would be embarrassed (3:3).

A teenage father- to-be (whose partner intended to formula feed) commented that it is not just embarrassing for those who witness breastfeeding, but also for women,

Some people say they want to do it, but they're embarrassed (2:4).

The sexuality of breasts also emerged as a dominant theme within the group discussions. For some men the sole function of breasts is sexual and there is significant fear that breastfeeding may represent an obstacle to their sexual intimacy. This feeling was the case with one participant who did not yet have children and who could not reconcile the lactating breast with the sexual breast:

For me breasts are always associated with sex and sexual arousal for me, and yet to see them *in an alien*...being used for what they are actually intended for ...it would kind of distance them from the sexual act and that would make them in some way asexual... and not appear as interesting anymore (4:5) (emphasis added)

For some of those participants who had children, even writing their thoughts about breastfeeding was considered morally inappropriate. One teenage father confided:

My bird would kill me if she saw me writing things like (nipple) (3:1).

Among most of our participants, breasts were considered to be sexual. Indeed, during one group session in Glasgow an 8-year-old boy was swiftly dragged away from the community center by his grandmother when she noticed our health education poster with a baby suckling at the breast – her comment:

You're far too young to see the likes of this!

In our view this reaction would seem to emphasize the considerable changes that need to occur within certain communities for breastfeeding to be perceived as appropriate. The incident also illustrates how some men are arguably socialized at an early age into accepting the view that women's breasts have only a sexual function.

Breastfeeding in Public: The Idea versus the Reality

Participants whose partner had breastfed recounted their initial fears, all of which were associated with the idea of their partner breastfeeding in public. Indeed, a central fear was the voyeurism of friends or as one participant describes:

Your mates [are] getting a look and all that (5:2).

In fact, this participant discovered that breastfeeding can be a fairly discreet activity, as he explained:

Of course it is (the thought of breastfeeding in public that's worrying) rather than the reality, [my mates] ended up sat next to her not realising (5:2).

Another participant in the same group, whose wife had recently given birth, added that,

If we are out for lunch and she is breastfeeding at the table, people don't know. It is very subtle (7:2).

Thus some participants did challenge assumptions made within group sessions about breastfeeding as involving excessive public exposure. Nonetheless, the issue of breastfeeding in public was of great concern across all of the groups (including those involving partners or relatives and friends of breastfeeding women). Even those who considered themselves to be entirely supportive of women publicly breastfeeding admitted to feeling uneasy if in close proximity to a breastfeeding woman:

I am going to put my hand up acknowledging that I am a product of the west of Scotland male system, and there is a bit of me that would say 'Can you not do that somewhere else?' but my head would say she is entitled to do it (4:3).

Related to this dilemma is the fact that some participants expressed support for a woman's right to breastfeed in public, but revealed that they felt quite differently at the prospect of their own partner doing so. For those participants without children, this feeling was a key concern:

It's probably a jealousy thing .. it's probably other males looking at my partner's breasts and then there's that sort of sexual thing coming in and feeling more protective towards that sort of family.. I don't know what it is really, but I feel like I'd feel more sensitive to it if it was my partner's breasts being exposed in public (1:5).

His friend agreed, saying:

I'd like to think I wouldn't feel uncomfortable but I probably would, I'd feel a bit edgy perhaps breastfeeding in public because you might get some leery geezer coming up... (2:5).

Indeed, breastfeeding in public and possible predatory attention from other men was the source of considerable anxiety for some participants in our sample, particularly participants who did not yet have children (groups 4 and 5) and teenage fathers (group 1). One participant termed this as simply “a healthy protectiveness” (1:5), but serious worries were expressed about being unable to ‘control the situation’:

If some tosser [British slang for an irritating, stupid, or ridiculous person] came up, causing trouble almost you know...It's an easier life not to breastfeed in public isn't it? (2:5).

These fears partly tap into anxieties about just how exposing breastfeeding needs to be. As one teenage father-to-be declared:

I couldn't let my bird do that, just get her tit out anywhere and having a baby sucking on it (1:4)

Another participant in the same group agreed:

It's got to be out constantly hasn't it? ... Your tits (3:4).

Some younger participants, whose partners were formula feeding, perceived breastfeeding as morally inappropriate and described breastfeeding women as “slappers” (4:1). Teenage participants were more likely than older participants to discuss breasts in slang or colloquial terms, and consistently emphasised the sexual rather than maternal function of breasts. Of

course their ‘talk’ simply reflected their culture, in which scenes of breastfeeding are rare to nonexistent and also where ‘laddish’ talk and behavior is ‘performed’ and accepted.

Considerable anxiety was expressed by the group of teenage fathers and fathers-to-be in Glasgow about the very idea of their partner breastfeeding publicly:

If it is nothing to do with you [i.e., not your girlfriend] it is minted [fine] but apart from that I would go mental (1:1).

You would get in a buzz and get in a state and all that (2:1).

Indeed, several participants suggested that the situation could possibly not be controlled and thus was best avoided, as one remarked:

If it was my bird, I would tell her to jump in the toilet and do it (1:1).

Others could not envisage supporting their partner to breastfeed publicly under any circumstances, as one teenage father-to-be in Leeds stated:

No, I wouldn’t let her do it. No way. That’s it. (1:4).

Of course we do not know in reality how much power these participants would have over their partners’ decisions, but such comments did reveal just how normalized formula feeding is in some communities.

Formula and Bottle-feeding: The ‘Safe’ and ‘Only’ Option?

By comparison, the practice of bottle-feeding with formula was discussed openly and without the culturally laden ‘baggage’ of breastfeeding. For some participants, bottle-feeding with formula was simply the only option:

Since I’ve been brought up, since I was little it’s always been bottles (3:4).

As other participants pointed out, in comparison with breastfeeding,

It’s more convenient, it’s easier, and you can do it in more popular places (2:1).

Teenage fathers-to-be discussed the benefits of being able to sterilize a bottle and described bottle-feeding as, “a lot safer” (3:4). Another added

At least the fathers can do something if it’s bottle fed, ‘cause we can make it and feed it (2:4).

Indeed, one participant explained:

Bottle-feeding gives you independence (2:3).

Compared with breastfeeding, which was seen as fraught with problems, for most of our participants formula feeding represented the easy solution because in their view:

You can do them anytime. It only takes ten minutes and that’s it [the baby’s] happy (3:4).

Misconceptions that breastfeeding involves having to publicly remove clothing meant that bottle-feeding was preferable as:

When you're out on the buses ...you don't have to start getting undressed (2:4).

Our participants struggled to think of many problems with formula feeding. The exception was references made to the campaign concerning the formula milk company Nestlé, which was mentioned specifically in two groups (3 and 5). One participant, who described himself as 'political', recalled:

I always remember a big poster they had with a woman with two kids and she was breastfeeding one and the other kiddie looked as though he was dying...the kids were dying because they weren't getting the immunity protection (5:3).

Other participants mentioned media stories about tampering with formula milk or baby food:

People put stuff in it like glass and all that (2:3).

One participant recalled the difficulties of heating a bottle on a car journey, but in the end still judged that formula feeding was more convenient than breastfeeding:

You have to have everything in the bag, and nine times out of ten it had to be heated up and you weren't near a place to plug in the bottle heater...saying that obviously a woman can't just breastfeed a baby in the back of a car or outside in the street ...
(8:2).

Negative media accounts concerning breastfeeding also helped to support the idea that formula feeding was preferable. As one participant explained:

...mastitis as well, it is a word I came across in a column by Julie Burchill [a British journalist] about breastfeeding. Mastitis is sort of cracked nipples, it's very painful, and the mother has to stop feeding after a while. I [wrote] that 'bottle feeding is not painful' (4:5).

Breastfeeding as Beneficial: Natural but Risky?

It was striking that many participants were unaware of specific health benefits of breastfeeding for mother and infant. While claiming the practice was 'natural' or 'healthy,' participants discussed the benefits in vague terms:

It is natural isn't it? (2:1)

Breastfeeding is more natural than the bottle. It is full of vitamins and ...that is in the actual woman herself (3:3).

Breast is best (4:2).

Reducing breast cancer or something like that, or have I just made that up? (2:5)

If you get breastfed, it's supposed to be good for your nutrition and stuff...it gets you big (3:4).

Builds up resistance to disease, stuff like that (2:3).

Passing on genes from the mother (3:5).

However, others saw the concept of 'transmission' in only negative terms, with several participants claiming that it was possible for breastfeeding to "trigger" cancer or for a breastfeeding woman to "pass on" cancer:

The woman might have cancer, and if it is in the breast she might pass it on (3:1).

The source of these beliefs was attributed to media stories:

I read in the paper that breastfeeding gives you cancer and that, man, doesn't it? (3:4)

A teenage father whose child was formula fed believed very strongly that female drug users should never breastfeed because the outcome would always be harmful to the baby:

In the paper [it said] if the woman is a junkie, she can give the baby things if the woman has got it, that is if you breastfeed the baby (2:1).

However, we did find one participant who was expecting a first baby and had sought out specialist materials to make an informed decision:

[My partner] didn't want to breastfeed, but I got a wee book and read through about all the stuff you benefit the baby and she benefits from it as well. I read the book cover to cover and now she has changed her mind. She wants to breastfeed (8:2).

Breastfeeding: Impact on Body Image

In addition to the perceived need for excessive public exposure, breastfeeding was viewed negatively because of the perceived negative impact on body shape. Indeed, this issue was perhaps more salient for teenagers who are likely to be extremely body conscious, and the topic was raised spontaneously by the younger participants. It was common to assume that breastfeeding resulted in breasts becoming "saggy." As one young participant declared:

You would end up with flat paps (4:1).

Another went further to say:

[Breastfeeding] makes the woman look deformed and then she is ugly for the rest of her life (3:1).

Television images were also a source of information, as one participant recounted a program that showed,

When you breastfeed, all your veins come up and it makes them go weird (3:4).

The impact of breastfeeding on women and their sexual attractiveness was also mentioned by older participants. For one man the low rates of breastfeeding were not due to lack of male support but, rather, as he described it, “a woman’s vanity” (1:3). Another participant in the same group agreed:

I think most women would be more concerned about their sexual desirability than getting their baby off to a good start...If you look at the silicon gel (breast implants) and all this kind of thing...I think women are proud of their breasts, they like to show them, and they like to be desired ... they know what guys like to see. They know guys like to look at [breasts]. They will look at them if they have got a nice figure (2:3).

However, this particular group also included a participant whose wife was breastfeeding, and he was quick to challenge these negative assumptions by saying:

I heard it helps restore their figure quicker (5:3).

Discussion

Despite the important role that fathers play in influencing infant feeding decisions, their views have received little attention, in contrast to the extensive literature on mothers (38). In addition, cultural representations are widely assumed to play a vital role in influencing infant feeding choices and mobilizing community support, but few studies have specifically explored how cultural associations may influence infant feeding choices. This study focuses on a relatively understudied group – mostly young, white, low-income or unemployed men living in urban areas where breastfeeding rates are lower than average.

For some of our participants breastfeeding was closely associated or even synonymous with sexual activity, and many participants expected that breastfeeding in public would be very exposing and might incite negative reactions. This perception has also been noted in studies of women (39). Media sources may fuel such misconceptions about different health topics, and in some communities these remain unchallenged (40). Thus media accounts, for example, of breastfeeding women being turned away from restaurants in the United Kingdom may fuel existing fears. In practice, however, a recent study found that just one in eight women surveyed had actually been stopped or made to feel uncomfortable while breastfeeding in public (41).

Prior assumptions appeared to be partly informed by surrounding community attitudes or personal feelings of disgust, combined with a lack of opportunity to witness uneventful breastfeeding in 'everyday life' or in the media. Fears about being required to, and perhaps failing to, protect their partners from unwanted (male, predatory) attention can be related to deep-seated anxieties about masculinity and perhaps being placed under pressure rather publicly to perform an appropriate protective role. These beliefs may act as an additional barrier for those who are not especially motivated to support breastfeeding in the first place.

Perceptions of breastfeeding as a visible, sexual activity and the dominant mass media emphasis on breasts as a sexual site are likely to present additional obstacles to breastfeeding.

These new findings indicate that the experience of being a father of a breastfed baby can modify and alleviate men's negative views, so arguably, as breastfeeding rates rise, more men may develop positive views. However, for men to accept and support breastfeeding as a normative, unremarkable behavior in the United Kingdom, work is needed to develop promotion activity that addresses their views and the deep-rooted fears identified in this research. An important part of such promotion will be to tackle the accepted equivalence – or even perceived advantages -- of formula feeding, which results in men not understanding the health deficits resulting from not breastfeeding for both infants and mothers. Such activity will need to be tailored to the specific needs of different groups, taking factors such as socioeconomic status, age, and ethnicity into account, as has been shown in relation to interventions to support women to breastfeed (41). Giving information on practical issues, such as how men can remain involved with breastfed babies and suggestions of clothing to wear to avoid unnecessary exposure, may help. Information on how to tackle the inherent problems that result from wider sociocultural issues of sexuality and masculinity, acknowledging their own feelings, and supporting their partners to breastfeed in public, may also be of use.

Further research is needed on other groups of men, particularly broadening the study to include men from minority ethnic groups, or simply focusing on those men from similar communities whose partner is breastfeeding. Research should develop and test tailored interventions, either alone or as a package, together with education and support for women.

Conclusions

Breastfeeding in public is the source of considerable anxiety for men, as other studies have found for women. Until breastfeeding becomes a commonplace activity and breastfeeding in public becomes normalized, people are unlikely to learn from the experience of seeing other women breastfeed; breastfeeding will remain a contentious issue, and rates will remain low, especially in young, low-income families.

It is hard to see how even well-designed health sector interventions can tackle such deep-seated issues in the context of a culture where highly sexualized images of women's breasts are prevalent and easily accessible, to very young girls and boys as well as to men and women. This situation has 'normalized' such perverted images. In such an environment, any degree of breast exposure, even for the simple act of feeding a baby, is likely to trigger predatory male responses, thereby preventing many women from breastfeeding. Sociocultural changes are likely to be needed to create an environment in which women are enabled to breastfeed, and men are enabled to support them.

Acknowledgments

The 'Infant Feeding in the Media' study was conducted by researchers at Glasgow University. Lesley Henderson and Josephine Green would like to thank co-grant holder Jenny Kitzinger. Brian McMillan, Josephine Green, and Mary Renfrew also acknowledge the contribution of other members of the LIFT project, including (Kuldip Bharj, Graham Clarke, Mark Connor, Lisa Dyson, and Mike Woolridge, and particularly Lisa Dyson's major input to the focus group schedule).

References

1. Howie PW, Forsyth JS, Ogston SA, Clark A, Florey CD. Protective effect of breast feeding against infection. *BMJ* 1990;300:11-16.
2. Wilson AC, Forsyth JS, Greene SA, Irvine L, Hau C, Howie PW. Relation of infant diet to childhood health: seven year follow up of cohort of children in Dundee infant feeding study. *BMJ* 1998;316(7124):21-25.
3. Collaborative Group on Hormonal Factors in Breast Cancer. Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50302 women with breast cancer and 96973 women without the disease. *Lancet* 2002;360(9328):187-95.
4. Quigley MA, Kelly YJ, Sacker A. Breastfeeding and Hospitalization for Diarrheal and Respiratory Infection in the United Kingdom Millennium Cohort Study. *Pediatrics* 2007;119(4):e837-e842.
5. Ip S, Chung M, Raman G, Chew P, Magula N, DeVine D. et al. *Breastfeeding and maternal and infant health outcomes in developed countries. Evidence Report / Technology Assessment*; Rockville, MD: Agency for Healthcare Research and Quality. Report No:153, 2007.
6. Kramer MS, Aboud F, Mironova E, Vanilovich I, Platt RW, Matush L, et al. for the Promotion of Breastfeeding Intervention Trial (PROBIT) Study Group . Breastfeeding and

Child Cognitive Development. New Evidence From a Large Randomized Trial. *Arch Gen Psychiatry* 2008;65(5):578-584.

7. World Health Organisation. *Global Strategy for Infant and Young Child Feeding*. Geneva: WHO; 2003.

8. Cattaneo A. Breastfeeding in Europe: a blueprint for action. *J Public Health* 2005;13:89-96.

9. Department of Health and Department of Children Schools and Families. *Healthy lives, brighter futures; The strategy for children and young people's health*. London: DH/DCSF; 2009.

10. National Institute for Health and Clinical Excellence. *Improving the nutrition of pregnant and breastfeeding mothers and children in low-income households*. NICE Public Health Guidance, 11. London: NICE; www.nice.org.uk/PH011. 2008. [Accessed 1st September 2010]

11. Bolling K, Grant C Hamlyn B, Thornton A. *Infant Feeding Survey 2005*. London: The Information Centre for Health and Social Care; 2007.

12. Dyson L, Green JM, Renfrew MJ, McMillan B, Woolridge M. Factors influencing the infant feeding decision for socioeconomically deprived pregnant: The moral dimension. *Birth* 2010;37(2):141-149.

13. McMillan B, Conner M, Woolridge M, Dyson L, Bharj K, Renfrew M, Green JM, Clarke G. Predicting breastfeeding in women living in areas of economic hardship: Explanatory role of the theory of planned behaviour. *Psychol Health* 2008;23(7):767-788.
14. McMillan B, Conner MT, Green J, Woolridge M, Dyson L, Renfrew M. Using an extended theory of planned behaviour to inform interventions aimed at increasing breastfeeding uptake in primiparas experiencing material deprivation. *Br J Health Psychol* 2009a;14(2):379-403.
15. Losch M, Dungy CI, Russell D, Dusdieker LB. Impact of attitudes on maternal decisions regarding infant feeding. *J Pediatr* 1995;126(4):507-514.
16. Hoddinott P, Pill R. Qualitative study of decisions about infant feeding among women in east end of London, *BMJ* 1995;318:30-34.
17. Henderson A. Mixed messages about the meanings of breastfeeding representations in the Australian press and popular magazines. *Midwifery* 1999;15(1):24-31.
18. Henderson L, Kitzinger J, Green J. Representing infant feeding: content analysis of British media portrayals of bottle feeding and breast feeding. *BMJ* 2000;321:1196-1198.
19. Sherriff N, Hall V, Pickin M. Fathers' perspectives on breastfeeding: ideas for intervention. *Br J Midwifery* 2000;17(4):223-227.

20. Swanson V, Power KG. Initiation and continuation of breastfeeding: Theory of planned behaviour. *J Adv Nurs* 2005;50:272-282.
21. Arora S, McJunkin C, Wehrer J, Kuhn P. Major Factors Influencing Breastfeeding Rates: Mother's Perception of Father's Attitude and Milk Supply. *Paediatrics* 2000;106(5):e67.
22. Giugliani E, Caiaffa W, Vogelhut J, Witter F, Perman J. Effect of Breastfeeding Support from Different Sources on Mothers' Decisions to Breastfeed *J Hum Lact* 1994;10:157-161.
23. Wolfberg AJ, Michels KB, Shields W, O'Campo P. Dads as breastfeeding advocates: Results from a randomized controlled trial of an educational intervention. *Am J Obst Gynecol* 2004;191:708-12.
24. Pisacane A, Continisio GI, Aldinucci M, D'Amora S, Continisio P. Controlled Trial of the Father's Role in Breastfeeding Promotion. *Paediatrics* 2005;116(4):e494-e498.
25. Shaker I, Scott JA, Reid M. Infant feeding attitudes of expectant parents: breastfeeding and formula feeding. *J Adv Nurs* 2004;45(3):260-268.
26. Pollock CA, Bustamante-Forest R, Giarratano G. Men of diverse cultures: knowledge and attitudes about breastfeeding. *JOGN Nurs* 2002;31(6):673-679.
27. McMillan B, Green JM, Woolridge MW, Dyson L, Renfrew MJ, Clarke GP . Studying the infant feeding intentions of pregnant women experiencing material deprivation:

Methodology of the LIFT (Looking at Infant Feeding Today) study. *Soc Sci Med* 2009;68:845-849.

28. Public Health Observatory for Children and Maternity (ChiMat). Data atlas. Department of Health (ChiMat). [online] Available from: <http://www.atlas.chimat.org.uk/MapHTML.asp> [Accessed 1st September 2010].

29. Information Services Division. Breastfeeding by Maternal Age, Deprivation and Smoking Status. [online] Available from: <http://www.isdscotland.org/isd/1764.html> [Accessed 1st September 2010].

30. Carter S, Henderson L. Approaches to qualitative data collection in social science. In: Bowling A, Ebrahim S, (eds.) *Handbook of health research methods*. Maidenhead: Open University Press; 2005.215-229.

31. Kitzinger J. Qualitative Research: Introducing focus groups. *BMJ* 1995;311:299-302.

32. Green G, Barbour R, Barnard M, Kitzinger J. Who wears the trousers? Sexual harassment in research settings. *Womens Stud Int Forum* 1993;16:627-637

32. Carter S, Henderson L. Approaches to qualitative data collection in social science. In: Bowling A, Ebrahim S, (eds.) *Handbook of Health Research Methods: Investigation, Measurement and Analysis*. Buckingham: Open University Press; 2005. 219-229.

33. Green J, Britten N. Qualitative research and evidence based medicine. *BMJ* 1998;316:1230-1232.
34. Henderson L, Kitzinger J, The human drama of genetics: 'hard and 'soft' media representations of inherited breast cancer. *Sociol Health Illn* 1999;21(5):560-578.
35. Henderson L. *Social Issues in Television Fiction*. Edinburgh: Edinburgh University Press; 2007.
36. Green J, Thorogood N. *Qualitative Methods for Health Research*. London: Sage; 2004.
37. Henderson L, Millett C, Thorogood N. Barriers to Childhood Immunisation in a Minority Community: Qualitative Study, *J R Soc Med* 2008;101:1-8.
38. Britton C, McCormick FM, Renfrew MJ, Wade A, King SE. Support for breastfeeding mothers. Cochrane Database of Systematic Reviews, Issue 1. 2007. Art. No.: CD001141. DOI: 10.1002/14651858.CD001141.pub3.
39. Scott JA, Mostyn T. Women's Experiences of Breastfeeding in a Bottle-Feeding Culture. *J Hum Lact* 2003;19(3):270-277.
40. Henderson L, Millett C, Thorogood N. Barriers to Childhood Immunisation in a Minority Community: Qualitative Study, *J R SocMed* 2008;101:1-8.

41. Dyson L, Renfrew MJ, McFadden A, McCormick F, Herbert G, Thomas J. Policy and public health recommendations to promote the initiation and duration of breast-feeding in developed country settings. *Public Health Nutr* 2009;13(1):137-44.

Table 1. Composition of the Focus Groups

Reference	Description	Age Range	Location	No. of Participants
Group 1	Teenage fathers whose partners are bottle-feeding. Unemployed/in receipt of benefits	16 – 19 yr	Glasgow	6
Group 2	Male relatives, partners, and friends of women who are breastfeeding. Employed/low income	25 - 40 yr	Glasgow	10
Group 3	Partners of women who are/were breastfeeding or bottle-feeding. Employed/low income	35 – 45 yr	Glasgow	5
Group 4	Teenage fathers-to- be. Partners intending to bottle-feed Unemployed/in receipt of benefits	17 yr	Leeds	3

Group 5	Potential fathers, low income	28 - 32 yr	Leeds	4
---------	----------------------------------	------------	-------	---

