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# Engaging and supporting fathers to promote breast feeding: A concept analysis \*



Nigel Sherriff, PhD (Senior Research Fellow)\*, Valerie Hall, PhD (Professor of Midwifery), Christina Panton, PhD (Research Officer)

Centre for Health Research (CHR), Mayfield House, University of Brighton, Falmer, Brighton BN1 9PH, UK

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#### ABSTRACT

Objective: Empirical evidence demonstrates that fathers have a strong influence on a mother's decision to initiate and continue breast feeding. However, no clear delineation of what behaviours and attributes constitute father support or differentiate it from other kinds of support is provided in the current literature. The purpose of this study was to analyse the concept of 'father support' in relation to maternity services and broader health settings, thereby clarifying meaning to enable comprehension and application in practice, education, and research.

Design: A concept analysis combining the evolutionary model of concept development with the interrelated theoretical, fieldwork and analytical phases of the hybrid model of concept development. Setting: Children's Centres in East and West Sussex in Southern England.

*Participants:* Repeated qualitative research over two phases with 16 parents of breast fed infants through seven focus groups and five telephone interviews.

Measurements and findings: CINAHL, PsycINFO, AMED, MEDLINE, OVID and EMBASE databases were searched for articles published in English between 1999 and 2013 using the keywords breast feeding, father, and support. Seven same-sex focus groups and five individual interviews were also conducted over two research phases with the parents of breast fed infants to expand and exemplify, and then validate the analysis of the literature search. Five main attributes of father support in relation to breast feeding were identified: (1) knowledge about breast feeding; (2) positive attitude to breast feeding; (3) involvement in the decision-making process; (4) practical support; and (5) emotional support. Multiple antecedents and consequences to these attributes were also identified.

*Key conclusion:* This study has contributed to clarifying the meaning of father support in relation to breast feeding and provides an important starting point for the development of a theoretical and practical model of optimal breast feeding that takes into account father support.

Implications for practice: Identification of attributes, antecedents, and consequences of father support may assist practitioners to reflect on current working practices and service delivery models, and offer important educational opportunities for the training of student midwives and other health professionals.

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# Introduction

Despite recent challenges to the optimum length of exclusive feeding for infants in developed countries (Fewtrell et al., 2011) there is clear evidence that breast feeding has positive health benefits for both mother and baby in the short and longer term (WHO/UNICEF, 1990; World Health Organisation (WHO), 2003,

E-mail addresses: n.s.sherriff@brighton.ac.uk, nigel@sherriff.org.uk (N. Sherriff).

2009; Horta et al., 2007; Department of Health, 2008). However, although the latest Infant Feeding Survey (McAndrew et al., 2012) indicates that UK mothers are breast feeding for longer than in 2005 (Bolling et al., 2007), only 34% are breast feeding at six months and of these only 1% are exclusively breast feeding as recommended by the UK Department of Health.

Father support has been demonstrated empirically to have a strong influence on a mother's decision to initiate and continue breast feeding (e.g. Arora et al., 2000; Swanson and Power, 2005; Britton et al., 2007). For instance, research with mothers identifies fathers as a primary source of support for the continuance of breast feeding; however little is known about the nature of this support (Sherriff et al., 2009). Indeed, although the importance of the father's role in supporting breast feeding has been known for

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 $<sup>\ ^{*}\,</sup>Corresponding\,\,author.$ 

some time, our own research shows that in practice little has changed in the intervening years (Sherriff and Hall, 2011). There are few studies that actually involve fathers directly in breast feeding research, and fewer still that draw out the specific aspects and determinants of, a father's supportive role in the breast feeding process. It is important to understand more fully the role of a father's support in the breast feeding process as it is, arguably, unlikely that any intervention designed to increase rates of breast feeding will be successful without taking this into account. This is particularly important when trying to address inequalities between different socio-economic groups.

Defining the concept of support underpinning a father's role in supporting breast feeding is complex as use of the term is ambiguous and not fully understood by parents or health professionals. Concept analysis is therefore a useful method of primary research for refining such ambiguous concepts so that everyone who subsequently uses the term will be speaking about the same thing (Walker and Avant, 2010). Such clarification can be particularly important in maternity services and broader health and social care settings. The purpose of the present study therefore was to analyse the concept of 'father support' in relation to breast feeding and maternity services as well as other health settings, aimed at clarifying its meaning to enable comprehension and use in practice, education, and research.

#### Method

The concept analysis was undertaken drawing on aspects of the evolutionary model of concept development (Rodgers, 1993) in combination with aspects of the hybrid model (Schwartz-Barcott and Kim, 1986, 1993). Rodgers' (1989, 1993, 2000) evolutionary approach is an inductive method of analysis which acknowledges that concepts develop over time and are influenced by the context in which they are used. Concepts are therefore perceived as dynamic and constantly undergoing development. In other words, concepts are not finite entities; instead, over time redefinition becomes necessary if the concept is to remain useful, applicable, and effective (Rodgers, 1993). Thus in the evolutionary approach, concept analysis can provide a useful basis for further inquiry in a continuing cycle of concept development (Endacott, 1997; Rodgers, 1993) rather than providing a static definition of a concept with rigid boundaries (see Rodgers, 2000; cf. Walker and Avant, 2010). The concept of 'father support' is likely to be multifactorial, being influenced by government policy such as paternity leave, maternity and child health service delivery models, societal and cultural norms, and also behaviours and beliefs of parents and health professionals. It is also fluid, changing over time in response to the infants move from exclusive breast feeding to taking solid food. The evolutionary approach to concept analysis, therefore, appears both congruent and suitable to address the many facets of father support in promoting breast feeding.

However, we wanted to situate the concept analysis in the reality of parents' experiences, and therefore we used it in conjunction with the hybrid model of concept development (Schwartz-Barcott and Kim, 1993) which clearly identifies empirical fieldwork as a separate entity to the theoretical phase (or literature search). This still allowed us to acknowledge the dynamic and developmental nature of concepts (see Fig. 1).

## **Data sources**

Theoretical phase: literature search and analysis

The theoretical phase began with the identification and selection of the concept of father support in relation to breast feeding and a comprehensive review of the literature. CINAHL, PsycINFO, AMED, MEDLINE, OVID, Maternity and Infant Care, and EMBASE, databases were searched systematically using the keywords with wild cards: breast feeding, AND father\*, AND support\*. Searches were conducted independently by the first and third author and cross-checked and verified by the second author. Inclusion criteria included: written in English, qualitative/quantitative, published between 1999 and 2013, and described or studied how fathers provided support to their breast feeding partner in any setting. Additional web-based searches were also conducted to capture further relevant papers (e.g. 'grey' literature). 4301 articles were identified through EMBASE, 145 through Medline (PubMed), and 86 via CINAHL. Once irrelevant papers and duplicates were eliminated, 452 abstracts were read. Of these, 51 contained substantive elements of or reference to 'father support'. The full papers were obtained, 40 of which were deemed particularly relevant and were analysed for sections of text that containing elements or an 'essence' of the concept of 'father support' in relation to breast feeding (Table 1). In doing so, attributes (characteristics of the concept that define and differentiate the concept), antecedents (events that must occur prior to the occurrence of the concept) and consequences (events that occur as a result of the occurrence of the concept) were extrapolated. Using QSR Nvivo 8, a preliminary coding structure was devised as emerging themes, ideas, and topics relevant to the concept were identified. This was an iterative process whereby continual reflection on the emerging categories lead to reordering and further re-categorisation until the conceptual features became more evident.

Primary data generation from fieldwork (Phases 1 and 2)

Seven focus groups and five telephone interviews were conducted in two phases with the parents of breast fed infants (Table 2). In the first phase, primary data was generated to both expand and exemplify the results of the literature search. For example to elaborate and provide detail on the themes that emerged from the thematic analysis of the literature, as well as provide the opportunity to explore illustrative examples (e.g. of antecedents) from parents' own experiences. In the second phase, primary data generated was used to validate the concept development.

As breast feeding rates differ by socio-economic status (Flacking et al., 2010; McAndrew et al., 2012), to ensure recruitment of a heterogeneous group, fathers and/or breast feeding groups were targeted in four Children's Centres located in different Lower Super Output Areas (LSOAs) across Sussex in the UK. LSOAs are ranked according to the Index of Multiple Deprivation (IMD; see Table 2). The IMD provides a score for the LSOA which represents an overall measure of deprivation based on various factors (e.g. income, employment, health etc.). A low score (e.g. 1) indicates great deprivation whilst a higher score indicates the least deprivation (e.g. 32,482). For the purposes of the present study, the IMD scores (ranging between 1 and 32,482) were categorised into four quartiles to give an overview of the kinds of areas in which the Children's Centres were located (Table 2).

Given most concept analyses adopting fieldwork draw on the views of healthcare practitioners in clinical settings (e.g. Ohlen and Segesten, 1998; Hermansson and Martensson, 2011), accessing parents through their attendance at social community groups is likely to bring a different dimension to the analysis; for instance compared to parents attending a health visitor appointment or other clinical settings. Parents were recruited if they were a mother or a father in a breast feeding couple within the past three years; over 18 years of age; able to give informed consent, and; able to understand and speak English coherently.

The first phase focus groups (four in total) lasted one hour on average and were conducted during October–November 2011. They comprised two single-sex groups of fathers (N=4) and two single-sex

# **Theoretical Phase**

- Identifying the concept;
- Comprehensive and systematic literature search;

# Analytical Phase (initial)

- Analysing data;
- Identifying attributes, antecedents,& consequences;

# **Analytical Phase (final)**

 Identify implications including those for the further development of the concept.

# Field-work Phase 1

 Expansion/validation of literature findings through qualitative fieldwork;

# Field-work Phase II

Validation of the concept through qualitative fieldwork;

Fig. 1. Our adapted analytical framework for concept analysis combining elements of Rodger's evolutionary approach (1989) with Schwartz-Barcott and Kim's (1993) hybrid model of concept development.

 Table 1

 Selected articles for analysis from comprehensive literature search.

Author and year	Type of paper/Method	Sample*	Setting	Country
Anderson et al. (2010)	Empirical (telephone interviews)	N=21 low income fathers/father-figure	N/A	USA
Arora et al. (2000)	Empirical (postal questionnaire)	N=123 mothers	N/A	USA
Avery and Magnus (2011)	Empirical (focus groups)	N=121 (n=81 mothers; n=40 fathers)	No data	USA
Binns and Scott (2002)	Empirical (interviews)	N=566 mothers	Hospital	Australia
Chang et al. (2012)	Empirical (questionnaire)	N=339 ( $n=181$ women of which 3.9% were mothers;	University	USA
		n=88 men. Of which 3.4% were fathers)		
Chen et al. (2010)	Empirical (questionnaire)	N=1699 fathers in own homes	Home	Taiwan
Condon and Ingram (2011)	Empirical (focus groups)	N=51 (n=34 staff; n=17 mothers)	Community centres	UK
Datta et al. (2012)	Empirical (telephone interviews)	N=18 (n=4 mothers; n=14 fathers)	N/A	UK
Deave and Johnson (2008)	Empirical (interviews)	N=20 fathers	Home	UK
Earle (2000)	Empirical (interviews)	N=19 mothers	Home	UK
Earle (2002)	Empirical (interviews)	N=19 mothers	Home	UK
Engebretsen et al. (2010)	Empirical (focus groups)	N=81 (n=43  women;  n=38  men)	Hospital	Uganda
Flacking et al. (2010)	Empirical (database research)	N=51,671 fathers	N/A	Sweden
Fletcher et al. (2008)	Empirical (RCT)	N=105 fathers	N/A	Tasmania
Gamble and Morse (1993)	Empirical (telephone interviews)	N=14 fathers	Home	Canada
Hauck et al. (2007)	Empirical (intervention)	N=318 (n=195 control group of breast feeding	Hospital	Australia
Henderson et al. (2011)	Empirical (focus groups)	mothers; $n=123$ mothers in intervention group) $N=28$ fathers, expectant fathers, potential fathers	Homes/community	UK
Landanii et al. (2010)	Formisian ( acception of a circ)	N 172 (n 122 mothors n 10 fethors)	centres	Finland
Laanterä et al. (2010)	Empirical (questionnaire)	N=172 (n=123 mothers; n=49 fathers)	N/A	
Lovera et al. (2010)	Empirical (evaluation; structured	N=302 (n=200 mothers; n=102 fathers)	N/A	USA
Manage de et el (2012)	interviews)	N. 6001	II	A 11 -
Maycock et al. (2013)	Empirical (RCT)	N=699 couples	Hospital	Australia
Pisacane et al. (2005)	Empirical (RCT)	N=560 (n=280 mothers; n=280 fathers)	University	Italy
Pollock et al. (2002)	Empirical (questionnaire)	N=100 men	Hospital	USA
Pontes et al. (2009)	Empirical (interviews)	N=20 (n=9 mothers; n=7 fathers; n=4 non-fathers)	Home	Brazil
Rempel and Rempel (2004)	Empirical (questionnaire)	N=530 (n=317 expectant mothers; n=213 male partners)	Hospital	Canada
Rempel and Rempel (2011)	Empirical (interviews)	N=21 fathers	Home	Canada
Sahip and Molzan Turan (2007)	Empirical (interviews)	N=102 expectant fathers	Workplace	Turkey
Schmidt and Sigman-Grant (2000)	Empirical (group discussions)	N=32 (n=17 mothers; n=17 fathers)	N/A	USA
Scott et al. (2001)	Empirical (questionnaire)	N=1059 mothers	N/A	Australia
Scott et al. (2004)	Empirical (questionnaire)	N=108 expectant couples	Hospital/clinic	UK
Shaker et al. (2004)	Empirical (questionnaire)	N=108 expectant couples	Hospital/clinic	UK
Sherriff et al. (2009)	Empirical (interviews)	N=8 fathers	Home	UK
Sherriff et al. (2011)	Empirical (interviews)	N=8 fathers	Home	UK
Stremler and Lovera (2004)	Empirical (evaluation)	N/A	Various	USA
Susin and Giugliani (2008)	Empirical (clinical trial)	N=586 families (n=201 control; n=192 mothers only	Hospital	Brazil

Table 1 (continued)

Author and year	Type of paper/Method	Sample*	Setting	Country
		intervention; $n=193$ mothers and fathers intervention)		_
Taspınar et al. (2012)	Empirical (questionnaire)	N=203 fathers	Hospital	Turkey
Tohotoa et al. (2009)	Empirical (focus goups, interviews, questionnaire)	N=76 (n=48 mothers; n=28 fathers)	Homes & community centres	Australia
Tohotoa et al. (2011)	Empirical (evaluation)	N=342 fathers	Hospital	Australia
Torres de Lacerda et al. (in press)	Empirical (interviews)	N=10 (n=5  mothers; n=5  fathers)	Home	Brazil
Wilkins et al. (2012) Wolfberg et al. (2004)	Empirical (questionnaire) Empirical (clinical trial)	N=866 mothers N=59 expectant fathers	N/A Hospital	UK USA

<sup>\*</sup> Figures are indicative for whilst most are provided by the authors of the papers in question, in some cases the samples were not clearly stated and thus we have approximated where necessary.

**Table 2**Empirical data sample including Index of Multiple Deprivation (IMD) ranking for venue location.

Parent	Format	Index of Multiple Deprivation (IMD) ranking for venue location	Phase one N	Phase two N	Total N
Mothers	Focus Group 1	10,067 Band 2 (8120-16,241)	6	5	11
	Focus Group 2	16,683 Band 3 (16,242-24,361)	4	4	8
Totals	-		10	9	19
Fathers	Focus Group 1	17,612 Band 3 (16,242-24,361)	2	2	4
	Telephone interviews	N/A	2	1	3
	Focus Group 2	7917 Band 1 (1–8120)	2	0	2
	Telephone interviews	N/A	0	2	2
Totals	•	•	6	5	11

groups of mothers (N=10: Table 2). It was intended to recruit up to a maximum of five participants per group (20 parents in total) to ensure adequate opportunity for each person to contribute. Although this target was reached for mothers, it was not possible to recruit the target numbers for fathers. In some ways this was not surprising given it is generally well known that fathers can be more difficult to recruit than mothers (e.g. Macfadyen et al., 2011). Consequently, to maximise opportunities for fathers to participate, focus groups were single-sex and same-sex facilitated, as our experience indicates that men (and indeed women) often feel less able to contribute in mixed sex groups when talking about breast feeding. Despite these measures only two fathers participated in each focus group (three initially in the first group but one had to leave and so was followed up with a telephone interview at a later date). Nevertheless the discussion in each group lasted for over 50 minutes and the fathers clearly stimulated each other's thinking, leading to new insights. Other fathers who were unable or unwilling to take part in the focus groups were offered flexibly timed (e.g. evenings, weekends) one-to-one interviews in person or by telephone. In total, two telephone interviews were conducted as part of this offer during phase one (Table 2).

In phase one, an interview schedule (informed by the literature review) acted as an aide memoire to ensure coverage of the same kinds of questions whilst maintaining flexibility in the discussions. The topics were: most recent experiences of breast feeding; antenatal issues: birth issues; stopping breast feeding; breast feeding in front of others; partners overall response to breast feeding; response to artificial milk feeding; anything you would have done differently to support breast feeding, and; consequences of (father) support.

Phase two of data generation took place during January–March 2012. A further three focus groups were conducted with the same parents who had also participated in phase one. Each group lasted one hour on average and comprised one single-sex group of fathers (N=2) and two single-sex groups of mothers (N=8). It was not possible to convene a second single-sex group of fathers as some

expressed a preference to be interviewed by telephone. Consequently, three telephone interviews were conducted (Table 2).

Focus group participants were presented with a first stage thematic analysis drawn from the initial literature review and the interview data from the first set of focus groups. The content was grouped into thematic areas and depicted graphically on a poster to aid accessibility. Parents were asked to think about whether the content under each thematic heading corresponded to what had been discussed in their group and whether it stimulated any new thinking. Parents also commented on whether the content reflected the thematic headings. The telephone interviews with fathers were conducted using a similar process but with the researcher describing the thematic areas and content to the interviewees.

# Primary data analysis

Data were recorded, transcribed, and analysed thematically. This method was used as it feeds appropriately into a concept analysis rather than a qualitative theory (Howitt and Cramer, 2010). Nvivo was again used to support the analytical process and provide a consistent system for cataloguing the data set. Data were inspected through iterative listening and reading to ensure accurate transfer of information between the audio and transcription. This facilitated familiarity with the data, allowing the beginnings of an interpretative process. In doing so, a preliminary coding structure was devised as emerging themes, ideas, and topics relevant to the aims of the study were identified in one transcript and then applied and 'tested' in the next; new codes (and redundant ones) were included/excluded as needed. To enhance credibility of the analytical process, data were analysed by the third author and then subsequently confirmed by the first and second authors who read through the transcripts, verified the coding, and the organisation of the data into themes.

**Ethics** 

Ethical approval for this study was granted by the Faculty of Health and Social Science's Research Ethics and Governance Committee at the University of Brighton and from West Sussex County Council. Participants provided written informed consent, and were offered a £15 'thank you' voucher for their travel and participation time.

#### Findings: attributes, antecedents, consequences

Analysis and synthesis of the literature and primary data from focus groups and interviews with the parents of breast fed infants, revealed five essential defining characteristics (attributes) of father support: knowledge about breast feeding; positive attitude to breast feeding; involvement in the decision-making process; practical support, and; emotional support. These attributes together with their antecedents and consequences are presented below (see also Table 3).

Knowledge about breast feeding

#### Attribute

The need for fathers to be knowledgeable or informed about breast feeding including how best to support their breast feeding partner has been proposed by several authors examining the role of the father in promoting breast feeding (e.g. Sahip and Molzan Turan, 2007; Fletcher et al., 2008; Susin and Giugliani, 2008; Pontes et al., 2009; Chen et al., 2010; Laanterä et al., 2010; Rempel and Rempel, 2011; Sherriff and Hall, 2011; Tohotoa et al., 2011; Torres de Lacerda et al., in press) and is also supported by empirical data from the present study. Pisacane et al. (2005) report that fathers are poorly informed about the advantages of breast feeding, and that fathers may hold concerns that are not addressed by health professionals which may impact negatively on continuance. Chang et al. (2012) report that men are less knowledgeable about breast feeding and more positive about artificial milk than women, whilst both Tohotoa et al. (2009) and Sherriff et al. (2009) report that fathers want greater relevant information and practical advice about breast feeding (e.g. management of common problems) that is specifically targeted for them, in order to know the best ways to help their breast feeding partner.

# Antecedents

The literature and our primary data suggest three key events are likely to be necessary to the interactive process of father support including: relevant information; consistency, and; accessible delivery. Relevant information about breast feeding (and how fathers can support it) is necessary and should be available at times that avoid working hours, specifically assist fathers in 'learning the role' and challenge misconceptions and myths (e.g. Deave and Johnson, 2008; Fletcher et al., 2008; Laanterä et al., 2010; Pontes et al., 2009; Sherriff and Hall, 2011; Tohotoa et al., 2011). In a recent randomised control trial (RCT) of 699 couples, Maycock et al. (in press) demonstrate that following exposure to a two-hour antenatal breast feeding promotion intervention and postnatal support for fathers, the breast feeding rate for the intervention group was significantly greater than the control at six weeks (81.6% versus 75.2%; see also Wolfberg et al., 2004; Pisacane et al., 2005). Such findings suggest that (expectant) fathers can be influential advocates for initiating breast feeding, playing a critical role in encouraging a woman to breast feed. Moreover, Tohotoa et al. (2011) and her colleagues have also demonstrated that relevant and timely information targeted at fathers perinatally can help reduce anxiety, increase problem solving capabilities, develop an awareness of potential breast feeding difficulties, infant developmental milestones, and maternal postnatal depression. Supporting this notion, parents from our own study commented:

Fathers need to be taught how to give [breast feeding] support and to learn what mothers need. (M6, mother of 3, MFGJ-1) There's a common misunderstanding that you only need to

have [breast feeding] advice in the first few weeks [after birth] but you come across things at different stages – like when your milk production goes down or like now we are struggling as he is still feeding every two hours in the night which is not something that I would have expected. (M2, mother of 1, MFGV-1)

However, there is a considerable degree of disparity and inconsistency of information and advice given to parents from health professionals regarding breast feeding across different settings and roles such as hospitals, birthing units, community midwives, health visitors and so on (Hauck et al., 2007; Sherriff and Hall, 2011). Fathers may therefore have an important part to play in ensuring continuity of advice, for example by offering informed assistance to the mother in lessening confusion over inconsistent advice from health professionals.

Finally, both the literature and our data show that the way information relating to breast feeding is delivered is likely to be instrumental in enabling fathers to feel confident to ask questions and discuss sensitive or difficult issues (e.g. Pollock et al., 2002; Tohotoa et al., 2011). In one focus group, a father proposed that antenatal classes with parallel single-sex sessions on breast feeding (with a male facilitator for the fathers' session) would be useful as it was felt that the importance of their roles would be acknowledged and that they were able to discuss their fears and concerns openly without risk of judgement, shame or embarrassment:

It [separate sessions for fathers on breast feeding] could be useful because it would stop the stigma about dads coming forward in the sessions... it [antenatal class] did make you feel you might get some eye-rolling from the other mothers if you said something stupid... so it wasn't just the professionals you would feel insecure around... 'I better not raise that just in case I sound like a stupid man'. (F2, father of 2, FFGJ-1)

# Consequences

Both the literature and primary data suggest that fathers being knowledgeable about breast feeding have the potential to increase continuance of breast feeding. Findings from RCT studies show that targeted educational interventions for fathers can be associated with higher rates of breast feeding (Maycock et al., in press; Pisacane et al., 2005; Susin and Giugliani, 2008). Sherriff et al. (2009) found that fathers, and mothers, often expect breast feeding to go 'naturally' and were surprised when difficulties emerged. Thus, it is likely that being informed means that parents are able to manage their expectations of breast feeding more realistically, and reduce (father) anxieties in relation to concerns about the mother's welfare (e.g. nipple pain, mastitis, confidence, guilt, and stress) and the baby's weight gain.

Positive attitude to breast feeding

# Attribute

A positive attitude to breast feeding refers to cognitive, affective and behavioural dimensions. Unsurprisingly, this attribute overlaps considerably with all other attributes identified in this study. The literature demonstrates parental attitudes are strong predictors of initiation, continuation, and the duration of breast feeding (e.g. Rempel and Rempel, 2004; Scott et al., 2004; Shaker et al., 2004; Wilkins et al., 2012; see also Pollock et al., 2002; Laanterä et al., 2010; Avery and Magnus, 2011). Scott et al. (2001) for example found that women who perceived their partners to favour breast feeding were significantly more likely to breast feed

Table 3

<b>Antecedents</b> (events that occur prior to the occurrence of father support)	<b>Attributes</b> (essential defining characteristics of father support)	<b>Consequences</b> (events that occur as a result of father support)
<ul> <li>Relevant information – about breast feeding (and how to support it) is available to fathers in a timely manner (antenatally and postnatally) and targeted specifically to their needs to assist in 'learning the role'</li> <li>Consistency – information provided by health professionals to mothers and fathers is consistent across different settings and roles (e.g. hospitals, birthing units, community midwives, health visitors etc.)</li> <li>Accessible delivery – the way information is delivered enables fathers to feel confident to ask questions and discuss sensitive or difficult issues</li> </ul>	Knowledge about breast feeding including how best to support their breast feeding partner	<ul> <li>Continuance of breast feeding</li> <li>Increased knowledge of: the benefits, process, and common difficulties (and management) of breast feeding; and how fathers can support their breast feeding partner</li> <li>Reduced father anxiety about breast feeding in relation to (1) the mother (e.g. concerns about pair and stress) and (2) weight of the baby vis à vis quantity of milk received by the infant</li> <li>Advocacy/promotion of breast feeding to others (e.g. other fathers)</li> <li>Informed assistance to the mother in lessening confusion over inconsistent advice from health professionals</li> <li>Management of breast feeding expectations (pre ar postnatally)</li> <li>Ability to challenge negative perceptions of breast feeding from others (e.g. in public)</li> <li>Active and informed involvement in discussions withealth professionals</li> </ul>
<ul> <li>Parents – a positive aspiration to want to breast feed in the home and/or in public</li> <li>Attitudes of others – positive attitudes of immediate and extended family, peer groups, and influential others</li> <li>Professional – health (and other) professionals acknowledging the role and contribution of the father in supporting breast feeding</li> <li>Supportive cultures – cultures that normalise breast feeding in public (e.g. work places, shops, cafes, etc.)</li> </ul>	Positive attitude towards breast feeding	<ul> <li>Initiation and continuance of breast feeding</li> <li>Confidence and empowerment to breast feed in puble</li> <li>Ability to challenge negative perceptions of breast feeding from others (e.g. in public)</li> <li>Health professionals engaging with fathers in relation to child health and well-being</li> <li>Cultural acceptance of breast feeding as a normal arbeneficial activity</li> </ul>
<ul> <li>Validation of the mothers' feeding decision – by the father regarding mode of feeding</li> <li>On-going involvement in decision-making regarding feeding – sustained involvement in discussions regarding breast feeding duration and alternative methods of feeding</li> </ul>	Involvement in the decision-making process regarding feeding from initiation of breast feeding to introducing alternative methods of feeding	<ul> <li>Initiation and continuance of breast feeding</li> <li>Confidence and empowerment of the mother in maintaining breast feeding and overcoming commo difficulties including the negative attitudes of other</li> <li>Transition into a societal model of eating with othe (e.g. family)</li> </ul>
<ul> <li>Accepting, learning, and implementing the support role – knowledge and acceptance of the practical role in supporting breast feeding including all other aspects of childcare that do not involve breast feeding (e.g. bathing, play etc.).</li> <li>Meeting the needs of the mother – anticipation (or directed by mother) and willingness to meet the practical needs of the mother</li> <li>Parental leave – if viable/applicable – uptake of parental leave and/or additional annual leave to maximise flexibility in providing support</li> </ul>	Practical support for breast feeding	<ul> <li>Continuance of breast feeding</li> <li>Willingness and ability to participate (and contribut to all other aspects of childcare <i>other</i> than breast feeding (e.g. play, changing, bathing etc.)</li> <li>Development of closeness and intimacy between th father and infant</li> <li>Confidence and knowledge to anticipate and meet th mother's needs (e.g. fetching the baby for feeds, getting water for the mother, conducting great domestic duties)</li> <li>Provision of practical advice and support to the mother in overcoming common breast feeding problems</li> </ul>
• 'Being there' – where possible the father is physically present for the mother or available via other means (e.g. by telephone and/or social media such as Skype,	Emotional support for breast feeding	<ul> <li>Continuance of breast feeding</li> <li>Feelings of pride and satisfaction in the achievement of successful breast feeding</li> </ul>

- nt of successful breast feeding
- Development of closeness and intimacy between mother and infant
- Development of intimacy between mother and father
- Increased confidence of the mother in sustaining breast feeding
- Management of breast feeding expectations
- Increased self-esteem and reduced feelings of psychological and emotional anxiety and isolation

at discharge from hospital than women who perceived their partners to either prefer artificial feeding or to be ambivalent about how their infant was fed. Similarly, Rempel and Rempel

• Affection and encouragement – by the father to the

kindness/affection, and appreciation of the mother's

mother including non-sexual contact, acts of

change in identity and role and its potential

Facebook etc.)

implications

(e.g. isolation)

(2004, p. 92) demonstrated that men's beliefs about whether their partner should breast feed 'predicted the strength of their partners' breast feeding intentions, over and above the women's own breast feeding reasons, and they predicted breast feeding behaviour over and above the women's intentions'. The authors point out that such findings reveal the importance of focusing on partners' beliefs when predicting and intervening in health behaviour decisions.

#### Antecedents

Four key antecedents appear to be necessary for the attribute of 'positive attitude to breast feeding' including: a positive aspiration from mothers and fathers to want to breast feed in the home and/ or in public; health professionals acknowledging the role and contribution of the father in supporting breast feeding; positive attitudes of others such as immediate and extended family, peer groups, and influential others, and; supportive cultures or settings where attitudes to breast feeding are played out (e.g. in public places such as cafes, restaurants and work places) that normalise breast feeding in public. In terms of parental attitudes, several authors have found that whilst most men/fathers generally have positive (or at the very least neutral) attitudes towards breast feeding (e.g. Avery and Magnus, 2011; Taspınar et al., 2012), some groups of parents, such as younger parents or those living in low income areas have less positive attitudes (see also Engebretsen et al., 2010). Henderson et al. (2011) for instance highlighted how some low-income men's sexual perceptions of breasts combined with media representations of breasts as key sexual sites, are likely to represent significant obstacles to breast feeding (see also Earle, 2002). Supporting the literature, some parents in our study sometimes also expressed such concerns:

My other half's friends were quite negative about it, 'you don't want her to breast feed it will ruin her boobs'. He was very matter of fact. (M1, mother of 1, MFG|-1)

Laanterä et al. (2010) and Avery and Magnus (2011) found that whilst both mothers and fathers attitudes to breast feeding were broadly favourable, attitudes to breast feeding in public was less so. Latterly, the latest Infant Feeding Survey (McAndrew et al., 2012) figures indicates that in England 59% of mothers breast feeding initially were more likely to have breast fed in public. Breast feeding in public was associated with mothers of second or later babies, mothers who were older or who lived in the least deprived areas or were in a high socio-economic group. However, Earle (2002) found that whilst acknowledging 'breast is best', most women perceived breast feeding in public as being 'out of place' in modern Western society, which she suggests is partly due to the tension between the sexual objectification of women's bodies and their role as a natural method of infant feeding (see also Berry and Gribble, 2008; Tohotoa et al., 2011). In our study some parents reflected this view but importantly also drew attention to unsupportive cultures and settings around for those who did want to feed their infants in public manifested by negative interference from others, and a lack of appropriate facilities:

We ...went into a chemist and asked if they had a place we could breast feed. They said 'no but there are chairs by the window'... we sat down and she... was feeding nicely. A woman came in ...and as she walked out the door she... said 'this is disgusting, you shouldn't be sitting here it's not right' – then she walked out. (F1, father of 2, FFG]-1)

We were told that there are public toilets you can use [to breast feed in]... My wife said 'I am not going to sit on a public toilet feeding my baby...would you take your dinner into a public toilet?' (F1, father of 2, FFGJ-1)

Professional staff attitudes were also an important antecedent in the literature and primary data. In terms of the former, several authors have drawn attention to a lack of engagement with fathers in mainstream services e.g. Sure Start, maternity services, with staff often not viewing engagement with fathers as a priority (e.g. Condon and Ingram, 2011; Page et al., 2008; Sherriff et al., 2012). In the primary data, fathers and mothers raised a range of issues relating to the attitudes of health professionals, for example in terms of fathers being ignored, provision to fathers being inadequate or conflicting, ignorance of male depression, feelings of excessive pressure to breast feed from professionals, as well as positive experiences too. One father commented about the need for health professionals to engage with fathers explicitly:

If dad's there ... then he needs to be addressed as well ... in the meeting I was in the other day we spoke a lot about even simple things like letters being addressed to both parents. (F2, father of 2, FFGI-1)

# Consequences

A positive attitude to breast feeding with respect to father support is likely to lead to breast feeding initiation and continuance, for example through confidence to breast feed in public and challenge negative perceptions from peers, health professionals and others. Recent changes to legislation protecting mothers rights to breast feed in public (Equality Act, 2010), together with father support is likely to contribute to a cultural shift in thinking towards acceptance of breast feeding as a normal and beneficial activity. However, it is vital that health professionals step-up their attempts to engage meaningfully with fathers in relation to child health and well-being as well as recognise their key role in supporting breast feeding.

Involvement in decision-making to breast feed

# Attribute

Involvement in decision-making from initiation to introducing alternative methods of feeding appeared repeatedly in the literature and primary data as a key attribute of father support (e.g. Arora et al., 2000; Earle, 2000, 2002; Laanterä et al., 2010; Lovera et al., 2010; Schmidt and Sigman-Grant, 2000; Wolfberg et al., 2004). In Rempel and Rempel's (2011) study whilst all fathers felt the mother had the final say regarding the decision to, and stop, breast feeding a number of fathers were still involved in decisions about whether and how long to breast feed (see also Avery and Magnus, 2011). Both in Sherriff et al.'s (2009) and Datta et al.'s (2012) studies, fathers perceived their roles to be one of validating and supporting whatever feeding decision the mother made, often irrespective of their own views. Parents in our study confirmed these findings:

It's completely [her] decision [to breast feed]. I would agree with her in whatever she wanted to do…if she had wanted to bottle feed it wouldn't have worried me. (F3, father of 1, FFGV-T1)

#### Antecedents

Both the literature and our primary data suggest that validation of the mothers' infant feeding decision and having an on-going involvement or sustained input into discussions regarding breast feeding duration and alternative methods of feeding, are important antecedents of father support. Whilst fathers often report that they do not see themselves as being influential in their partner's feeding decisions, it is clear that mothers feel partner support is crucial (e.g. Schmidt and Sigman-Grant, 2000) particularly in the form of validation both in the initial decision and in the on-going decision regarding mode of feeding as circumstances change:

My partner would never have put pressure on me to stop breast feeding, if I chose to stop... he would not have pressured me – and that was helpful. (M1, mother of 1, MFGV-1)

It [the decision to breast feed] is a choice you have to make over and over as you face different challenges... (M3, mother of 1, MFGV-1)

On-going decision making by the mother regarding mode of feeding can be influenced considerably by the father. Anderson et al. (2010) for example, found that fathers' roles not only appeared to encompass validation of their partner's decision through justifications, but that they are also an important gatherer of second opinions from others and filter of information in supporting the decisions ultimately reached by the mother. Similarly, one father commented:

There were times when my wife was thinking of stopping breast feeding. It was then we could sit down and discuss whether she really wanted to because I had access to other information and I wanted her to make an informed decision. (F3, father of 1, FFGJ-1)

In contrast, concerns by the father about the welfare of the mother and baby such as worries about not being able to measure how much milk the baby is taking, cracked nipples and mastitis, and emotional pain such as stress, guilt, frustration, and anxiety experienced by them and their partner, can be instrumental in the shared decision to move to artificial milk (e.g. Sherriff et al., 2009; Tohotoa et al., 2009):

I said to her' just give up'. A friend of mine she tried for a few days it didn't work for her and she stopped... [my wife] was more determined to persevere with it than me ...I could see the agony she was in. (F1, father of 1, MFGU-1)

Several fathers also drew attention to staged support for breast feeding decisions according to the age of the child, and wanting more information about weaning:

We both decided that we would stop [breast feeding] when the little-un decided ...we've seen the TV programmes where 9–10 year olds come home and go straight to mum's breast. Now I support breast feeding, but not at 9 and 10 years it isn't right. (F1, father of 2, FFGJ-1)

# Consequences

Positive father involvement, validation and support regarding the mothers' feeding decision is likely to assist continuance. Indeed, Tohotoa et al. (2009) found that involvement and commitment to the decision to breast feed sometimes meant fathers becoming breast feeding advocates whereby they would be there and protect and defend parenting decisions against negative or unhelpful interference such as extended family who encouraged artificial milk or undermined the mother's efforts (see also Pontes et al., 2009). This notion is supported by our data.

# Practical support

# Attribute

Fathers' provision of practical support for their breast feeding partners has been presented in several papers examining the role of the father in promoting breast feeding (e.g. Pollock et al., 2002; Deave and Johnson, 2008; Susin and Giugliani, 2008; Pontes et al., 2009; Sherriff et al., 2009; Rempel and Rempel, 2011; Tohotoa et al., 2011) and is supported by data from the present study. In general, the literature confirms that greater efforts should be made by health professionals in their practices to involve fathers in breast feeding as the concept of father support (and its consequences) is not obvious to many men or practitioners. Stremler and Lovera (2004) and Lovera et al. (2010, p. 1701) suggest that educational programmes need to be developed that target fathers

specifically as a means of not only increasing breast feeding knowledge among fathers, but also potentially increasing breast feeding duration among mothers. Indeed, Sherriff et al. (2009) argue that programmes giving practical guidance on how fathers might provide support to their partner in breast feeding in ways other than actually feeding the child as these may not always be obvious, particularly for first time fathers. In our study, a mother characterised the extensive kinds of practical support fathers can provide that *do not* involve feeding the infant:

Offering practical support to a breast feeding mum is different to offering support to a formula feeding mum ...to help a breast feeding mum requires more imagination and willingness to want to help. Most people see helping with the baby as fun time, they will take it and give it a bottle and that's fun **for them** [our emphasis]. With a breast feeding mum giving the baby a bottle isn't an option – it's taking them for a walk, doing the housework while you [the mother] feed the baby or other jobs that you don't have the time or the energy to do while your breast feeding. (M4, mother of 1, MFGI-1)

#### Antecedents

Three antecedents appear to be central to the attribute of 'practical support': accepting, learning, and implementing the support role; meeting the needs of the mother and; parental leave. Accepting, learning, and implementing the support role refers to knowledge and acceptance of the fathers' practical role in supporting breast feeding including *all* other aspects of childcare and domestic tasks including opportunities to bond that *do not* involve breast feeding (e.g. bathing, playing, clothing, storytelling, changing, taking for walk, fetching water for the mother):

If we have to stop somewhere to breast feed, I'll find somewhere ...help cover her up, make sure she has water. I'll get up in the night and bring the baby to her. (F2, father of 2, FFGJ-1)

Despite most fathers accepting, learning, and implementing a practical support role to their breast feeding partner, both in the literature and in our data, some fathers still report feeling 'left out', helpless, and concerned over a perceived lack of bonding opportunity with the infant: (e.g. Pontes et al., 2009; Sherriff and Hall, 2011):

There were times when I felt, not jealous, but helpless. (F2, father of 2, FFGJ-1)

She fed him before she went out... but ...there was nothing I could do to calm him down ...when she's there he smells her – he knows her breasts are there ...I can't comfort that way. He knows I'm not her, I don't want you I want my Mum. (F1, father of 2, FFGJ-2)

With regards meeting the needs of the mother, both in the literature (e.g. Sherriff et al., 2009) and in our data, mothers often expressed frustrations at their partner's inability to anticipate their support needs around breast feeding. Whilst fathers reported a willingness to learn and accept the role of a supportive partner, many reported that the notion of support, what he needed to do, was not always obvious to them:

If you need any sort of help just tell me what I've got to do. (F2, father of 2, FFGJ-1)

That would be helpful [information on how to support their partner] ...because you haven't a clue what to do anyway. (F1, father of 2, FFGJ-2)

In a large cohort study in Sweden, Flacking et al. (2010) found that infants whose fathers took paternity leave during the year of the infant's birth, were breast feed to a higher extent compared to

fathers who had not taken paternity leave. Moreover, the lower the socio-economic status (SES) of the father, the shorter breast feeding periods were likely to be than fathers who had a higher SES status. In the UK context paternity leave is considerably shorter and less flexible than the Swedish system meaning that for low income fathers and their families, taking parental leave may be financially unviable.

#### Consequences

Fathers' providing practical support to their breast feeding partners is likely to assist breast feeding continuance particularly if supported by carefully designed and evaluated intervention programmes which prepare fathers to offer the emotional and practical support required by their partners (e.g. Maycock et al., in press). Learning how to anticipate the mother's support needs, and provision of practical support may also help to reduce some fathers feelings of 'being left out' and confirm that bonding with the infant is not compromised by contributing to *all* other aspects of childcare *other* than breast feeding (e.g. play, changing, bathing and so on). However, without appropriately flexible and financially sensitive paternity leave policies, for some fathers the level of support they can offer their breast feeding partner may be limited.

## **Emotional** support

#### Attribute

The role of fathers to anticipate and provide support for the physical and emotional needs of the breast feeding mother such as affection, reassurance, and encouragement is clear in the literature and in our data. Indeed Avery and Magnus (2011) propose that fathers' empathy for their partners during the breast feeding experience was critical to success. Concern by mothers that the father-infant bonding would be undermined by the breast feeding choice is also highlighted by Gamble and Morse (1993). They reported that some fathers are willing to put on hold developing their own relationship with their infants so as not to interfere with the breast feeding relationship. However, Chen et al. (2010) found that fathers of breast fed infants reported lower Health-Related Quality of Life (HRQL) scores than fathers of infants who had been bottle fed. They attribute this to insufficient opportunities to develop a relationship with their infant, but propose that attention should be paid to helping father's understand how they can be more involved in caring for their children in other ways. Anderson et al. (2010) found that fathers offered emotional support to the infant, through play and activities to make the infant happy, but they also talked about offering emotional support to the mother through 'being an advocate' or if mothers need to release pent up emotion.

# Antecedents

Antecedents for emotional support are: 'being there' and; affection and encouragement. 'Being there' involved the father being present both emotionally and when possible, physically available to the mother or being accessible via other means, by telephone and/or social media.

We had lots of Skype conversations so he could see the feeding even though he wasn't there with us.(M3, mother of 1, MFGJ-1) As a father you are called upon for emotional support that is not related to childcare. Breast feeding for my wife was a very emotional thing so I understood I should be there to support her through her emotions. (F3, father of 1, FFGJ-T2)

In our study, the emotional support of 'being there' was important and came to the fore in situations where mothers needed fathers to act as advocates.

I'm not good at standing up for myself. I would have gone out of my mind if he didn't stand up for me.(M3, mother of 1, MFGJ-1) What I want is for you to make a decision for me cos I can't think straight. (M4, mother of 1, MFGJ-2)

Affection and encouragement reflects support by the father to the mother, which includes non-sexual contact, acts of kindness and affection, and appreciation of the mother's change in identity and role and its implications for example, isolation.

'It's nice to have a cuddle or a kiss but nothing sexual required... to have the emotional support...if you're freaking out about the baby...they're there [the father] – 'well let's just Google that it might just be something really simple'. (M3, mother of 1, MFGV-1)

Acts of affection are so important because you lose your whole identity as a mother – you stop work you are suddenly at home with the baby and its isolating ...to still feel you're wanted as a mother and as partner that's amazing ...it's a really big thing. (M3, mother of 1, MFG|-2)

#### Consequences

The data suggests that fathers being able to anticipate and provide emotional support for mothers may be an important factor in the continuance of breast feeding. Sherriff et al. (2009) for example report fathers' satisfaction and pride in their partners' breast feeding attempts, and in the achievement of successful breast feeding. In the current study, mothers report reduced feelings of anxiety and isolation due to fathers acknowledging and supporting their emotional needs sometimes by just 'being there' when needed. They also remarked on the increased intimacy between them and their partner.

# Discussion

Empirical evidence demonstrates that the father is a primary source of support to the breast feeding mother and can influence and/or contribute to decision-making regarding initiation, continuance, maternal breast feeding confidence, and weaning (e.g. Binns and Scott, 2002; Earle, 2002; Sherriff et al., 2009; Swanson and Power, 2005). However, to date, there has been no attempt in the literature to define what is meant by this support. The purpose of the present study was to analyse the concept of 'father support' in relation to maternity services and broader health settings, aimed at clarifying its meaning to enable comprehension and application in practice, education, and research. As far as we are aware, this study is the first of its kind and offers an important contribution in terms of identifying key antecedents, attributes, and consequences of father support. Such findings provide a potentially useful foundation for the development of a theoretical model of optimal breast feeding that takes into account father support, as well as identifying potential key entry points (e.g. antecedents) to help practitioners engage with fathers in supporting their breast feeding partner. However, we also recognise that our participants were selected on the basis of being part of a breast feeding couple and therefore were perhaps more likely to value father support. Not all women will value father support and we are mindful that research is required into alternative forms

One limitation of this concept analysis is that during the second phase of the study involving parental validation, detailed consequences of father support relating to breast feeding were not portrayed as we had assumed that the ultimate consequence was the continuance of breast feeding. However, further analysis during the second phase of data generation (both empirical and of recently published papers), we were able to identify further

more nuanced consequences (e.g. confidence to breast feed in public and anticipate the mother's needs) which were not presented to, and therefore were not validated by, the focus groups. Nevertheless, although validation by parents would have been useful, lack of it does not necessarily devalue the findings given the consequences of father support are becoming increasingly documented in the literature (e.g. Maycock et al., in press).

A further possible limitation of this study is that although it draws upon literature from other countries, the analysis does not take into account possible cultural similarities and diversities with regards what constitutes father support. Likewise our analyses arguably represents an individualistic conceptual approach or framework in that broader potential influences on antecedents and attributes are not necessarily addressed, for example such as gendered, socialised, and cultured beliefs about women's bodies and breasts, and or socio-economic and/or material influences. However, it is important to acknowledge that to do so was beyond the scope of the present study. It would therefore be useful for further research to engage with partners in other countries (particularly those with higher rates of breast feeding than the UK) in order to test an international model of father support relating to breast feeding which could build on and expand the findings reported here, paying particular attention to the potential wider influences on the concept of father support.

#### Conclusion

Analysis of father support indicates that it is an important concept regarding the initiation and continuance of breast feeding and confirms the concept's relevance in the midwifery and broader health care and health promotion context. By integrating existing research evidence from the literature and conducting new primary research and conceptual work, this study has contributed to clarifying the meaning of father support in relation to breast feeding and provides an important starting point for the development of theoretical and practical model of optimal breast feeding that takes into account father support. Furthermore, the identification of attributes and their antecedents of father support may assist health practitioners to reflect on their current working practices and service delivery models, and in doing so, help them to engage meaningfully with fathers in supporting their breast feeding partner. Such entry points also offer important educational opportunities for student midwives and other health professionals, as well as research possibilities to explore the potential efficacy of interventions designed to increase breast feeding initiation and continuance.

# Conflict of interest statement

No conflict of interest has been declared by the authors.

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## **Author contributions**

The first author was involved in the conceptual design of the study, prepared the first and subsequent, and final drafts of the manuscript, conducted the interviews and focus groups with fathers, and corroborated on the data analysis. The second author was involved in the conceptual design of the study, co-facilitated

the focus groups with mothers, corroborated on the data analysis, and commented on drafts of the manuscript. The third author cofacilitated the focus groups with mothers, conducted the data analysis for the study, and assisted in preparing the final manuscript for submission.

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