



Deposited via The University of Sheffield.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/id/eprint/130970/>

Version: Published Version

Article:

Whelan, B., Relton, C., Johnson, M. et al. (2018) Valuing breastfeeding: Health care professionals' experiences of delivering a conditional cash transfer scheme for breastfeeding in areas with low breastfeeding rates. *SAGE Open*, 8 (2). ISSN: 2158-2440

<https://doi.org/10.1177/2158244018776367>

© The Author(s) 2018. This article is distributed under the terms of the Creative Commons Attribution 4.0 License (<http://www.creativecommons.org/licenses/by/4.0/>) which permits any use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (<https://us.sagepub.com/en-us/nam/open-access-at-sage>).

Reuse

This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

Valuing Breastfeeding: Health Care Professionals' Experiences of Delivering a Conditional Cash Transfer Scheme for Breastfeeding in Areas With Low Breastfeeding Rates

SAGE Open
April-June 2018: 1–7
© The Author(s) 2018
DOI: 10.1177/2158244018776367
journals.sagepub.com/home/sgo


Barbara Whelan¹, Clare Relton¹ , Maxine Johnson¹, Mark Strong¹, Kate J. Thomas¹, Darren Umney², and Mary Renfrew³

Abstract

Alongside a randomized controlled trial testing the effectiveness of offering a cash transfer scheme (shopping vouchers) to mothers in areas with low breastfeeding rates, qualitative interviews were conducted with health care professionals delivering the scheme to explore their experiences. Health care professionals ($n = 34$; mainly midwives and health visitors) were interviewed in depth. Transcripts from recorded interviews were analyzed using a Framework Analysis approach. There was widespread acceptance of the scheme by health care professionals, with prior concerns regarding bribery and coercion being quickly allayed. Health care professionals reported that the scheme fitted in well with their routine ways of promoting and endorsing breastfeeding. They described their experiences of women's positive reaction toward the scheme and how the scheme encouraged breastfeeding and gave breastfeeding higher value. Health care professionals reported that the incentives helped them engage women and promote and support breastfeeding in areas with low breastfeeding rates.

Keywords

breastfeeding, conditional cash transfers, financial incentives, vouchers, health care professionals, midwives, health visitors

Introduction

The World Health Organization (WHO) recommends that all babies are exclusively breastfed for the first 6 months, yet in the United Kingdom, rates of breastfeeding at 6 to 8 weeks are low. Rollins et al. (2016) recently highlighted the health and economic costs to infants, women and society of not breastfeeding. The use of breast milk substitutes has been associated with an increased risk of poorer health outcomes for infants and women (Stuebe, 2009). There have been considerable efforts both internationally and nationally to promote and support breastfeeding through the adoption of policies such as The Global Strategy for Infant and Young Child Feeding (World Health Organization & UNICEF, 2003) and the Baby Friendly Initiative (UNICEF, 2016). In the United Kingdom, interventions have been introduced to promote and support breastfeeding, for example, breastfeeding education and support by breastfeeding support groups and breastfeeding peer support workers, though these are inconsistently available. Despite these efforts, there has been no cultural shift toward breastfeeding in the United Kingdom (Trickey & Newburn, 2014).

There is interest on the role of conditional cash transfers (CCTs) in increasing breastfeeding initiation and duration. The systematic review of incentives to promote breastfeeding by Moran et al. (2015) identified a range of multicomponent interventions of varying frequency, intensity, and duration including providing access to breast pumps, offering money to attendees of breastfeeding information sessions (Hill, 1987; Wolfberg et al., 2004), offering women gifts combined with home visits from breastfeeding support workers (Thomson, Dykes, Hurley, & Hoddinott, 2012), and offering payments to health care professionals (HCPs) for reaching breastfeeding targets (Hoddinott et al., 2015). However, it was not possible to determine the overall

¹University of Sheffield, UK

²Open University, Milton Keynes, UK

³University of Dundee, UK

Corresponding Author:

Clare Relton, University of Sheffield Faculty of Medicine Dentistry and Health, Regent Court, 30 Regent Street, Sheffield, S10 2GB, UK.
Email: c.relton@sheffield.ac.uk



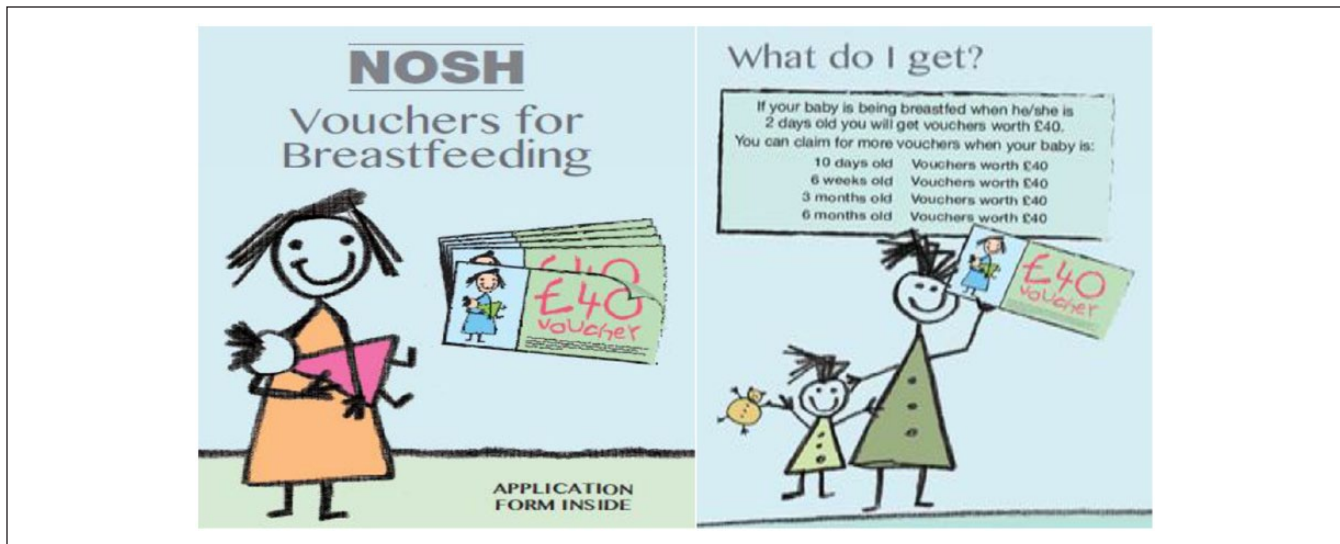


Figure 1. Excerpts from the NOSH vouchers for breastfeeding booklet. NOSH = Nourishing Start for Health.

effectiveness of incentives due to the heterogeneity of the studies identified.

Recently, the Nourishing Start for Health (NOSH) research project developed and tested the effectiveness of a CCT scheme in the form of unrestricted shopping vouchers. The CCT scheme was initially developed with midwives, health visitors, health care commissioners, breastfeeding peer support workers, and local women (Whitford et al., 2015), and the resulting NOSH scheme offered unrestricted shopping vouchers worth £200 paid in five £40 installments at time points based on infant age: 2 days, 10 days, 6 to 8 weeks, 3 months, and 6 months. Receipt of vouchers was conditional on mothers signing a form stating that “my baby is receiving breast milk,” and a countersignature from a HCP against the statement “I have discussed breastfeeding with mum today” (Figure 1). HCPs had the option of confidentially notifying the research team if they had any concerns that a mother was claiming vouchers but not providing breast milk, without those claims being jeopardized (Relton et al., 2016).

The pretrial development stage of the NOSH research project explored the views of women and HCPs on the hypothetical acceptability of offering shopping vouchers to women in areas with low breastfeeding rates and on practical aspects of the design of the scheme (Whelan et al., 2014; Whitford et al., 2015). At this stage, HCPs tended to focus on the ethics of the scheme, being concerned that women might feel bribed or coerced into breastfeeding (Whelan et al., 2014), the potential negative impact of CCTs on either their relationship with women or their professional integrity, and responsibility toward women in their care.

Despite these concerns, once the scheme was developed, key stakeholders including midwives and health visitors agreed to test the NOSH CCT scheme in three small areas

with low breastfeeding rates (Relton et al., 2014). Although the launch of this field test provoked considerable media and social media attention, much of it negative (Giles, Holmes, McColl, Sniehotta, & Adams, 2015; Relton, Umney, Strong, Thomas, & Renfrew, 2017), the scheme was found to be acceptable to the majority of mothers and HCPs in the feasibility study (Relton et al., 2014). After the feasibility study, the NOSH scheme was evaluated in a large area-based randomized controlled trial (RCT) with 10,010 women in areas with low breastfeeding rates in the United Kingdom (Relton et al., 2016). During the trial, a total of 2,154 mothers claimed vouchers and 528 HCPs signed voucher claim forms (Relton, Strong, et al., 2017). Alongside this trial, qualitative interviews were conducted with 34 HCPs to explore their experiences of delivering the CCT scheme.

Method

Study Context and Setting

We report qualitative data collected from HCPs involved in delivering the NOSH scheme as part of a cluster RCT of the scheme in five districts: Sheffield, North Derbyshire, Doncaster, Rotherham, Bassetlaw (Relton et al., 2016). A total of 46 of the 92 trial clusters (electoral wards) with breastfeeding rates <40% at 6 to 8 weeks were randomized to the scheme.

Participants and Recruitment

Participants were purposively sampled from 528 HCPs actively involved in the delivery of the scheme (co-signing application and claim forms). Qualitative individual and group interviews were conducted with HCPs with most

experience of the scheme (those who had signed the most application and claim forms). In addition, we interviewed four HCPs employed 1 day a week each to disseminate information about the scheme with their infant feeding service colleagues in the latter half of the trial. The HCPs were contacted by the researcher (B.W.) to organize a telephone or in-person interview. Care was taken to recruit a mixed sample of HCP roles from each of the five districts where the trial was conducted. Interviews were conducted until no new perspectives about the scheme emerged.

In total, 34 HCPs took part in an individual interview or one of three group interviews ($n = 6$). This included midwives ($n = 13$), health visitors (including one student health visitor; $n = 15$), a nursery nurse ($n = 1$), breastfeeding support worker ($n = 1$), and HCPs employed part-time by the research team ($n = 4$). Two of the individual interviews and all three of the group interviews were conducted in person at a place convenient to the HCPs. Remaining interviews ($n = 26$) were conducted by telephone. All interviewees were given an information sheet about the study prior to being interviewed and had the opportunity to ask any questions prior to signing a consent form.

Data Collection

The individual and group interviews were conducted while the intervention was being trialed (between October 2015 and July 2016). Interviews ranged from 16 min to 90 min and were audio recorded and transcribed. Three individual interviews were not audio recorded either because of the interviewee's preference ($n = 2$) or problems with the recording equipment ($n = 1$). Interview length was determined by the interviewees and group interviews were longer than individual interviews. Interview topic guides were developed based on those used in the feasibility study.

Data Analysis

Analysis was informed by the principles of Framework (Ritchie & Lewis, 2014). Framework analysis allows for the systematic analysis of qualitative data and enables the emergence of a priori and emergent themes which are grounded in the data. The analysis consists of five distinct phases: familiarization with the data, construction of an initial thematic framework, indexing and sorting the data, reviewing data extracts, and data summary and display (Ritchie & Lewis, 2014). Initially, two of the researchers (B.W. and M.J.) read the same four transcripts and independently developed a preliminary thematic framework which they then compared, contrasted, and reconciled where necessary. Coding then continued in an iterative manner with the thematic framework being adapted as coding continued. The main themes and subthemes that emerged were shared and discussed with C.R. and K.J.T. and were then summarized in framework matrices. Finally, explanatory narratives were produced and

linkages between themes were identified. NVivo 10 software (QSR International, 2012) was used to enable data organization and retrieval.

Ethics

National Research Ethics (NRES; 13/WM/0299) was obtained for this study. The trial is registered with the ISRCTN registry, number 44898617.

Results

Helping HCPs to Promote and Endorse Breastfeeding

There was widespread acceptance by HCPs. The main theme arising from the interviews was that the scheme was “helping HCPs to promote and endorse breastfeeding.”

I suppose it was nice in that you were able to sort of say to people here's something that you can get for doing what you're doing. It felt like a bit like a recognition that they were doing something really worthwhile and it was positive. (PG3 Health Visitor, Bassetlaw)

While negative views were sometimes expressed, these related to the trial design (random allocation of the areas where the scheme was being trialed) rather than the scheme itself. HCPs (and the women they worked with) often felt it was unfair that the scheme was offered in some areas but not others.

Within the main theme—that of the scheme “helping HCPs to promote and endorse breastfeeding”—other aspects of the scheme were discussed: women's positive reaction toward the scheme overriding HCP's concerns about CCTs; the scheme being a way of encouraging breastfeeding through affirmation, reward, and giving breastfeeding higher value; and the scheme facilitating the relationship between women and their HCP. Each of these is discussed in more detail below.

Women's Reactions Overriding HCP's Concerns About CCTs

Some HCPs commented that before the scheme they had not been in favor of it, but once they saw women's positive reactions to it, their concerns about the scheme dissipated.

I did think at first a payment, but it was a nice reward, especially listening to the mums and listening to the mums talk about what they were doing with their payments, vouchers, incentive, rewards. (27P Health visitor, Derbyshire)

But when they've got there [to six months] it's been like 'wow, I've done this.' I don't know whether the vouchers made them feed for that long but it's made them feel rewarded at the end and

they felt quite positive about it. They've not felt like they've been paid to breastfeed, they felt like they've been rewarded for what they've done. (PG2 Midwife, Bassetlaw)

For others, when they listened to women talk about how they were spending their vouchers, they felt good about the women receiving an incentive or reward for breastfeeding.

People did tell me bits that they'd bought and they were thrilled with it. I'd always ask if they'd spent them and they'd tell me they had and they were really pleased with it because there's not a lot of money in the early days of having a baby. (15P Health Visitor, Derbyshire)

While one health visitor thought at first that women might feel pressurized to breastfeed if they were struggling financially, in practice they saw no evidence that this was the case.

At first I was a little bit concerned that you know, it just might kind of put pressure on people, you know, they might, if they were struggling financially and things they might really put pressure on themselves and things like that but in practice I didn't really find that. It was just a bit of a thought I had you know before. (12P Health Visitor, Bassetlaw)

Engaging, rewarding, and giving breastfeeding higher value. Generally, HCPs felt that the scheme fitted in well with their routine ways of promoting breastfeeding. Some described how they used the scheme "as a way of getting in there" to discuss breastfeeding in a more "diplomatic way" and made their discussions with pregnant women easier. They emphasized that the first two vouchers (when the infant was 2 days old and 10 days old) encouraged women to "give breastfeeding a go."

If you discuss even offering that first feed after delivery and then you introduced the NOSH (scheme) and if you breastfeed for 2 days then you can be part of this scheme and you know you'll get these vouchers and people were really interested; what are these vouchers? Where can we use them? Are they just for the baby? So like they were really, they'd become a bit more engaged I suppose. (18P Health Visitor, Doncaster)

HCPs discussed how the scheme "added value" to breastfeeding and thus helped them in promoting breastfeeding.

I think it was really positive for the parents to receive this money so they could be recognised for the value of their breastfeeding. It gave it higher value, you know what I mean? Because you've given it a financial value, because we talk about the health benefits as well but it makes a difference to some mums and they enjoyed treating themselves or whoever with whatever they got. So I thought it did add, it added a value to it. (15P Health Visitor, Derbyshire)

NOSH was regarded by some HCPs as a way of encouraging women to continue breastfeeding, through affirmation and reward.

When the mothers were asking us to sign the NOSH vouchers and they were still breastfeeding we'd, it was like "well done,

excellent, you're doing great." It was just one more affirmation that they're doing really well and that we're proud of them. (13P Midwife, Sheffield)

Some discussed how they would miss the scheme when the trial was finished as it had been a positive thing to offer to women.

I probably will miss it a little bit, in that it was always nice to be able to say, you know this is something because you're doing it. It was nice to have that positive thing to sort of recognise what they were doing I suppose. (PG3 Health visitor, Bassetlaw)

Impact on Relationships

There were no reported negative effects of the scheme on the relationship between HCPs and women. Indeed, the scheme was often mentioned as helping the relationship between women and their HCP, helping them engage with those communities which were wary of HCPs and therefore difficult to interact with. One health visitor described how

in some circumstances it were kind of like a good thing even to get us in the door sometimes. (18P Health visitor, Doncaster)

Another aspect of the scheme which HCPs felt facilitated a positive relationship between HCPs and women was that women were required to ask their HCP to countersign each of their claim forms for the vouchers. This provided the opportunity for engagement between the HCP and woman and enabled the HCP to give support if needed.

I think it works well. It gives them like you say, it makes them contact a health professional so it's giving them that bit of support and even if they just pop in to a group to get a signature, at least they've popped in and they've seen how the group's running and "oh I might come back next week then." So it's helped with that ongoing support. (PG2 Health Visitor, Bassetlaw)

A breastfeeding peer support worker reported that some women had engaged more with antenatal classes about breastfeeding because of the scheme.

Some of them you see had heard about it and then came to an antenatal because they were kind of thinking "oh well if I do that then I'll have a bit of extra money and I might try it." (14P Breastfeeding peer support worker, Bassetlaw)

How Do We Know Women Are Really Breastfeeding?

Prior to the scheme beginning, some HCPs had expressed concerns that the scheme might be "open to manipulation" with women claiming that they were breastfeeding when they were not. During interviews, a few HCPs reported that they were occasionally unsure that a woman was

breastfeeding, but the majority said they were confident that women told the truth. They reported that they could assess whether or not the mother was breastfeeding through a conversation with the mother, because they had knowledge of each mother's personal circumstances and an ongoing relationship with the mother.

I accepted, you know that relationship with the mum if she's saying that she's breastfeeding and we talk about breastfeeding and you can get a sense can't you when you speak to people, the sort of information they're giving out. I never got a sense where I felt I had to report it that I signed a form and I didn't think that they were still breastfeeding. (25P Health Visitor, Sheffield)

I didn't know how it would be monitored with regards to parents saying that they were breastfeeding and actually not knowing whether they were or not cause they could tell fibs. But it's worked alright with us. (33P Health Visitor, Rotherham)

Discussion

Offering CCTs for health-related behaviors is controversial, and the positive consequences of CCTs have received little consideration to date (Thomson et al., 2014). Our research found that CCTs positively influenced social interactions and relationships between HCPs and women. Prior to the scheme running, some HCPs reported that they had concerns that women would feel bribed or coerced into breastfeeding. However, once HCPs were involved in delivering the scheme, these concerns were dispelled. HCPs reported that the scheme helped them promote and endorse breastfeeding and fitted in well with their routine ways of promoting breastfeeding. Although a few HCPs reported being occasionally unsure that a baby was being breastfed, the majority said they were confident that they could assess whether or not a woman was breastfeeding. HCPs also discussed their experience of women's widespread positive reaction toward the scheme; the scheme being a way of encouraging breastfeeding through affirmation, reward, and giving breastfeeding higher value; and the scheme facilitating the relationship between women and their health care provider.

Strengths

This is the first study of HCPs' lived experience of offering one specific CCT scheme to women for breastfeeding. Prior to this study, all studies of CCTs for breastfeeding have been embedded within a broader support or education program, usually with the CCT being conditional on participation in the program rather than breastfeeding (Moran et al., 2015). There has been increasing recognition within the literature of the dearth of qualitative studies exploring the acceptability of CCTs and experience of delivering CCTs (Giles, Robalino, Sniehotta, Adams, & McColl, 2015; Moran et al., 2015), particularly among HCPs who would be involved in

implementing such schemes if CCTs for breastfeeding become more commonplace. The positive feedback provided by HCPs involved in this scheme therefore provides a useful evidence base for future studies.

Limitations

In this article, we do not report on women's perspectives of the NOSH scheme; however, these views have been sought as part of the wider study (Relton et al., 2016) and are reported in a separate article (Johnson et al., 2018). We aimed to interview HCPs involved in delivering the NOSH scheme, and our recruitment strategy was based on those with most experience of the scheme—those who had signed the most application and claim forms. We did not speak to those with less experience of the scheme, and we recognize that these HCPs maybe did not agree with the premise of the scheme or promote the scheme as enthusiastically as their colleagues who were more active. While this could cause bias in our findings, those interviewed were directly asked to discuss what they knew of their colleagues' experience of delivering the scheme, and there were very few cases where they mentioned other members of staff not agreeing with the scheme and not promoting it.

When the CCT scheme was hypothetical, HCPs expressed concern about the potential impact of CCTs on their relationship with women, and their professional integrity and responsibility toward women (Whelan et al., 2014). They worried that the scheme might be perceived as being bribery or coercion to breastfeed, which are commonly voiced perceptions (and criticisms) of CCTs for health-related behavior change (Ashcroft, 2011; Marteau, Oliver, & Ashcroft, 2009). In contrast, this study of HCPs lived experience of delivering a CCT scheme has shown that these concerns did not arise in practice. Instead, HCPs spoke favorably about CCTs for breastfeeding, reporting that the CCTs enabled them to encourage and support women to breastfeed. They reported that some women had engaged more with breastfeeding support services as a consequence of the scheme (e.g., attending antenatal classes on breastfeeding), thus providing further opportunities for HCPs to provide support for women to breastfeed. This confirms the findings of Thomson et al. (2012) on how incentives can facilitate connections and relationships—helping forge connections between HCPs and the women they support. Similar findings have been reported in research on CCTs for smoking cessation in pregnancy (Mantzari, Vogt, & Marteau, 2012) with women who were offered CCTs becoming more engaged with support services.

Prior to the scheme being offered, HCPs had discussed their concerns that to claim the vouchers some women might falsely claim that they were breastfeeding (and thus compromise the HCP–mother relationship, particularly if the HCP challenged the claim (Whelan et al., 2014). Again, the hypothetical possibility of gaming when CCTs are offered for health-related behaviors is often discussed (Giles, Sniehotta, McColl, & Adams, 2016). However, the majority of HCPs involved in

delivering the NOSH scheme who we interviewed did not raise any concerns about this. Instead, they described being confident in their relationship with mothers and in their knowledge of how each mother was feeding her baby. Similar findings have been described in a recent trial of CCTs to stop smoking in pregnancy (Tappin et al., 2015).

Although some HCPs commented that they had not been in favor of the scheme before it began, once they saw women's positive reactions to it, their concerns about the scheme were quickly allayed. This change in attitude toward the intervention among women and HCPs when the intervention is delivered in practice is an example of what Wells, Williams, Treweek, Coyle, and Taylor (2012) describes as a "dynamic context." Although the majority of women are aware of the importance of breastfeeding (Smyth, 2012), society and social relationships play key roles in both supporting and protecting women who breastfeed (Rollins et al., 2016).

Asch and Rosin (2016) describe how social support and social interventions can positively influence health-related behaviors by transforming unhealthy behaviors (which are often performed solo and unwitnessed, e.g., forgetting to take medication, overeating, not exercising) into healthy behaviors which are witnessed and actively encouraged, and where healthy behavior change goals are shared and healthy behaviors are rewarded. The act of breastfeeding is not an activity that is welcomed in public in most parts of the United Kingdom (which presented challenges for the question of how to verify breastfeeding); however, despite this HCPs reported that this CCT scheme helped them encourage and reward breastfeeding, and made discussions about breastfeeding easier, particularly in communities where breastfeeding is not the norm and where breastfeeding is a taboo or difficult topic.

The trial reported that the offer of an area-level CCT in the form of shopping vouchers was associated with a statistically significant (and potentially policy relevant) increase in breastfeeding prevalence at 6 to 8 weeks among women living in areas with low breastfeeding rates (Relton, Strong, et al., 2017). Some women might doubt their ability to breastfeed, but affirmation and encouragement from their HCP can help them feel supported to breastfeed (Schmied, Hons, Beake, & Sheehan, 2011). Many HCPs reported that this CCT afforded them the opportunity to engage, promote, and support breastfeeding through affirmation and giving breastfeeding a higher value. Thus, it is possible that the CCT scheme's role in helping HCPs encourage the healthy behavior change (breastfeeding until 6-8 weeks) may have been one of the mechanisms by which the increase in breastfeeding rates was achieved.

The UNICEF UK Baby Friendly Initiative's recent Call to Action for breastfeeding discussed the need to "change the conversation" about breastfeeding (UNICEF, 2016). Our findings indicate that for many HCPs, the scheme helped to change the conversation that they had with women about breastfeeding, adding another dimension to promoting breastfeeding by giving it a "higher value" and drawing what might

otherwise be a difficult topic of conversation into an open and actively encouraged norm. Moran et al. (2015) stated that "incentives are a new and emerging field and it is important to avoid premature conceptual closure when the evidence base is uncertain." Our research indicates that it is important that the discussion regarding CCTs for breastfeeding continues.

Conclusion

This study was conducted alongside a large area-based randomized control trial testing the effectiveness of offering CCTs in areas with low breastfeeding at 6 to 8 weeks. Despite some prior concerns, HCPs reported that the incentives helped them in engaging women in conversations about breastfeeding, and in promoting and supporting breastfeeding.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was funded by the Medical Research Council (MR/J000434/1) via the National Prevention Research Initiative Phase 4 Award.

ORCID iD

Clare Relton  <https://orcid.org/0000-0001-8530-5011>

References

- Asch, D. A., & Rosin, R. (2016). Engineering social incentives for health. *The New England Journal of Medicine*, *375*, 2511-2513.
- Asheroft, R. E. (2011). Personal financial incentives in health promotion: Where do they fit in an ethic of autonomy? *Health Expectations*, *14*, 191-200. doi:10.1111/j.1369-7625.2011.00664.x
- Giles, E. L., Holmes, M., McColl, E., Sniehotta, F. F., & Adams, J. M. (2015). Acceptability of financial incentives for breastfeeding: Thematic analysis of readers' comments to UK online news reports. *BMC Pregnancy and Childbirth*, *15*(1), Article 116.
- Giles, E. L., Robalino, S., Sniehotta, F. F., Adams, J., & McColl, E. (2015). Acceptability of financial incentives for encouraging uptake of healthy behaviours: A critical review using systematic methods. *Preventive Medicine*, *73*, 145-158.
- Giles, E. L., Sniehotta, F. F., McColl, E., & Adams, J. (2016). Acceptability of financial incentives for health behaviour change to public health policymakers: A qualitative study. *BMC Public Health*, *16*, Article 989. doi:10.1186/s12889-016-3646-0
- Hill, P. D. (1987). Effects of education on breastfeeding success. *Maternal-Child Nursing Journal*, *16*, 145-156.
- Hoddinott, P., Thomson, G., Morgan, H., Crossland, N., MacLennan, G., Dykes, F., . . . Campbell, M. K. (2015). Perspectives on conditional cash transfers to health service providers for increasing breast feeding and smoking quit rates

- during pregnancy: A mixed methods study. *BMJ Open*, 5(11). doi:10.1136/bmjopen-2015-008492
- Johnson, M., Whelan, B., Scott, E., Relton, C., Thomas, K. J., Strong, M., & Renfrew, M. (2018). Valuing breastfeeding: A qualitative study of women's experiences of a financial incentive scheme for breastfeeding. *BMC Pregnancy and Childbirth*, 18(1), Article 20. doi:10.1186/s12884-017-1651-7
- Mantzari, E., Vogt, F., & Marteau, T. M. (2012). The effectiveness of financial incentives for smoking cessation during pregnancy: Is it from being paid or from the extra aid? *BMC Pregnancy and Childbirth*, 12, Article 24. doi:10.1186/1471-2393-12-24
- Marteau, T. M., Oliver, A., & Ashcroft, R. E. (2009). Changing behaviour through state intervention. When does an acceptable nudge become an unacceptable shove? *British Medical Journal*, 337, a2543. doi:10.1136/bmj.a2663
- Moran, V., Morgan, H., Rothnie, K., MacLennan, G., Stewart, F., Thomson, G., . . . Hoddinott, P. (2015). Incentives to promote breastfeeding: A systematic review. *Pediatrics*, 135, 2014-2221. doi:10.1542/peds.2014-2221
- QSR International. (2012). NVivo 10 for Windows. Australia: Author.
- Relton, C., Strong, M., Renfrew, M., Thomas, K., Burrows, J., Whelan, B., . . . Walters, S. (2016). Cluster randomised controlled trial of a financial incentive for mothers to improve breast feeding in areas with low breastfeeding rates: The NOSH study protocol. *BMJ Open*, 6(4), e010158.
- Relton, C., Strong, M., Thomas, K., Whelan, B., Walters, S. J., Burrows, J., . . . Renfrew, M. J. (2017). Do conditional cash transfers improve 6-8 week breastfeeding prevalence? The Nourishing Start for Health (NOSH) trial, an area-based cluster randomised controlled trial in England. *JAMA Pediatrics*, 172(2). doi:10.1001/jamapediatrics.2017.4523
- Relton, C., Umney, D., Strong, M., Thomas, K., & Renfrew, M. J. (2017). Challenging social norms: Discourse analysis of a research project aiming to use financial incentives to change breastfeeding behaviours. *The Lancet*, 390(Suppl. 3), S75.
- Relton, C., Whelan, B., Strong, M., Thomas, K., Whitford, H., Scott, E., & van Cleemput, P. (2014). Are financial incentives for breastfeeding feasible in the UK? A mixed methods field study. *The Lancet*, 384(S5). doi:10.1016/S0140-6736(14)62131-0
- Ritchie, J., & Lewis, J. (2014). *Qualitative research practice: A guide for social science students and researchers* (2nd ed.) (L. J. Ritchie, Ed.). London, England: Sage.
- Rollins, N. C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J. C., . . . The Lancet Breastfeeding Series Group. (2016). Why invest, and what it will take to improve breastfeeding practices? *The Lancet*, 387, 491-504.
- Schmied, V., Hons, M. A., Beake, S., & Sheehan, A. (2011). Women's perceptions and experiences of breastfeeding support: A metasynthesis. *Birth*, 38, 49-60. doi:10.1111/j.1523-536X.2010.00446
- Smyth, L. (2012). The social politics of breastfeeding: Norms, situations and policy implications. *Ethics and Social Welfare*, 6, 182-194. doi:10.1080/17496535.2012.682506
- Stuebe, A. (2009). The risks of not breastfeeding for mothers and infants. *Reviews of Obstetrics and Gynecology*, 2, 222-231.
- Tappin, D., Bauld, L., Purves, D., Boyd, K., Sinclair, L., MacAskill, S., . . . De Caestecker, L. (2015). Financial incentives for smoking cessation in pregnancy: Randomised controlled trial. *British Medical Journal*, 350, h134. doi:10.1136/bmj.h134
- Thomson, G., Dykes, F., Hurley, M., & Hoddinott, P. (2012). Incentives as connectors: Insights into a breastfeeding incentive intervention in a disadvantaged area of North-West England. *BMC Pregnancy and Childbirth*, 12, 22. doi:10.1186/1471-2393-12-22
- Thomson, G., Morgan, H., Crossland, N., Bauld, L., Dykes, F., & Hoddinott, P. (2014). Unintended consequences of incentive provision for behaviour change and maintenance around childbirth. *PLoS ONE*, 9(10). doi:10.1371/journal.pone.01113220
- Trickey, H., & Newburn, M. (2014). Goals, dilemmas and assumptions in infant feeding education and support. Applying theory of constraints thinking tools to develop new priorities for action. *Maternal & Child Nutrition*, 10, 72-91.
- UNICEF UK. (2016). *Call to action on infant feeding in the UK*. Retrieved from <https://www.unicef.org.uk/babyfriendly/babyfriendly-resources/advocacy/call-to-action/>
- Wells, M., Williams, B., Treweek, S., Coyle, J., & Taylor, J. (2012). Intervention description is not enough: Evidence from an in-depth multiple case study on the untold role and impact of context in randomised controlled trials of seven complex interventions. *Trials*, 13, Article 95. doi:10.1186/1745-6215-13-95
- Whelan, B., Thomas, K. J., van Cleemput, P., Whitford, H., Relton, C., Strong, M., . . . Relton, C. (2014). Healthcare providers' views on the acceptability of financial incentives for breastfeeding: A qualitative study. *BMC Pregnancy and Childbirth*, 14, 355. doi:10.1186/1471-2393-14-355
- Whitford, H., Whelan, B., van Cleemput, P., Thomas, K., Renfrew, M., Strong, M., . . . Relton, C. (2015). Encouraging breastfeeding: Financial incentives. *Practical Midwife*, 18, 18-21.
- Wolfberg, A. J., Michels, K. B., Shields, W., O'Campo, P., Bronner, Y., & Bienstock, J. (2004). Dads as breastfeeding advocates: Results from a randomized controlled trial of an educational intervention. *American Journal of Obstetrics and Gynecology*, 191, 708-712.
- World Health Organization & UNICEF. (2003). *Global strategy for infant and young child feeding*. Geneva, Switzerland: World Health Organization.

Author Biographies

Barbara Whelan has a PhD in breastfeeding and drama.

Clare Relton is a senior research fellow and a senior lecturer in clinical trials. She has expertise is conducting pragmatic trials - including public health trials.

Maxine Johnson has a background in nursing and oncology. She specializes in qualitative evaluations of health care from both the patient and the provider perspective.

Mark Strong is a reader in public health decision making, and an academic public health doctor and a statistician.

Kate J. Thomas is a social scientist and health services researcher of many years standing, and has an honorary chair in health services research at the University of Sheffield.

Darren Umney has a background in film, art and the media and holds a visiting research fellow.

Mary Renfrew is a professor of mother and infant health, a leading health researcher and a midwife.