



## Midwifery Education in Practice

# Educational videos for practitioners attending Baby Friendly Hospital Initiative workshops supporting breastfeeding positioning, attachment and hand expression skills: Effects on knowledge and confidence



Louise M. Wallace<sup>a</sup>, Yuanying Ma<sup>b,\*</sup>, Li Qian Qiu<sup>b</sup>, Orla M. Dunn<sup>c</sup>

<sup>a</sup> The Open University, UK

<sup>b</sup> Women's Hospital, School of Medicine, Zhejiang University, China

<sup>c</sup> Somerset County Council, UK

## ARTICLE INFO

## Keywords:

Breastfeeding  
Breastmilk expression  
Self-confidence  
BHFI education

## ABSTRACT

UNICEF Baby Friendly Initiative (BFHI) is the global standard for maternity and community services requiring all practitioners to be trained to support mothers in the essential skills of supporting positioning and attachment, and hand expression. These studies aim to rigorously assess knowledge in nurses, midwives, and doctors in these skills, tested before and after watching short videos demonstrating these skills. Practitioners were attending BFHI education, and the video study was additional. In Phase 1 clinicians in England were randomised to one of two videos (practitioner role play or clinical demonstration). The results showed improvements in knowledge and confidence, and a preference for clinical demonstration by mothers and infants. The clinical demonstration video was evaluated in China in Phase 2 where expert trainers viewed the video after completing the BHFI workshop, and in Phase 3 practitioners viewed the video before the BHFI workshop. Phase 2 with expert trainers only showed improvement in knowledge of hand expression but not positioning and attachment. In Phase 3 clinicians showed improved knowledge for both skills. In all Phases there were statistically significant improvements in confidence in practice in both skills.

Viewing short videos increased knowledge, particularly about teaching hand expression, and confidence in both skills.

## 1. Background

The UNICEF Baby Friendly Hospital Initiative (BFHI) is an evidence-based global standard to support breastfeeding in maternity and community services (WHO, 1989, WHO, 2003). BFHI accreditation is marker of excellence in care. A review of 58 studies found that greater adherence to the standards has a “dose dependent” effect on rates and duration of breastfeeding (Perez-Escamilla et al., 2016). A review of six studies of BHFI training interventions showed improved practitioner knowledge (Balogun et al., 2017). The training standard requires all maternity and community practitioners dealing with breastfeeding mothers to be trained to support breastfeeding, including the two essential skills of supporting positioning and attachment (P & A) and teaching hand expression (HE). Training is typically conducted by group educational workshops with a structured format and content of a minimum of 18 h duration. There are no specific requirements for methods of training delivery, including teaching the practical skills. There are organisational, pedagogic and practical challenges with large

numbers of multidisciplinary practitioners, with varied education and expertise (Atchan et al., 2014). Although BFHI workshops in the UK has for many years included the use of approved videos, presentation slides and discussion exercises, at the time of the study only one short video was in use, neither was video used for practice skills education in BFHI workshops in China. The study aimed to evaluate videos designed to teach the two BFHI essential practice skills in two countries (England and China) with low breastfeeding rates, as an adjunct to BFHI workshops.

Breastfeeding rates in the UK are some of the lowest in Europe. The most recent UK Infant Feeding Survey showed that while although 81% of mothers initiated breastfeeding, there was a steep decline in breastfeeding thereafter. Just 57% of infants were being given any breast milk at 6 weeks and the rates of exclusive breastfeeding were even lower (McAndrew et al., 2012). In China the National Programme of Action for Children's Development (NPA) has been setting national targets every ten years since 1990 for exclusive breastfeeding rates at 6 months to achieve improvements in the nation's child health and

\* Corresponding author.

E-mail address: [mayuanying88@zju.edu.cn](mailto:mayuanying88@zju.edu.cn) (Y. Ma).

development. The new target set by the NPA for 2011–2020 was to increase the exclusive breastfeeding rate for infants aged 0–6 months to over 50% (The State Council of People's Republic of China, 2016). Part of the strategy involves supporting all hospitals to achieve BFHI accreditation. In China there are 7036 accredited BFHI hospitals (The National Health and Family Planning Commission of the People's Republic of China, 2015), accounting for almost half of the total number of hospitals accredited worldwide. However, the BFHI standards are not applied in the same way as in England, including allowing formula feed marketing in many services, contributing to low rates of exclusivity in China. A recent cross-sectional survey about breastfeeding rates in China, recruited 14 539 children aged 2 years and younger (0–730 days) from 55 counties in 30 provinces in China. It showed that only 20.8% were exclusively breastfed at 6 months in China in 2013 (Cannon et al., 2016).

The reasons for cessation are complex. Many mothers cite sore nipples, insufficient milk and other common breastfeeding problems as reasons for early weaning, many of which could be prevented by learning effective breastfeeding techniques (McAndrew et al., 2012; Qiu et al., 2009; Qiu et al., 2014; Ouyang et al., 2016). The essential breastfeeding support skills for practitioners are intended to help mothers to establish effective practices from the outset. Correct positioning and attachment (P & A) is important for babies to obtain milk and for mothers to avoid pain and nipple injury (Kronborg and Væth, 2009). Breastmilk expression is important to prevent and overcome difficulties of milk production and to provide flexibility of feeding options, allowing mother and baby separation (Labiner-Wolfe et al., 2008). Breastmilk expression (which may include using breast pumps) in the early days is associated with longer exclusive breastfeeding, (Win et al., 2006), and is also used to stimulate breast milk production when the amount of breast milk seems to be insufficient (Morton et al., 2009).

One reason for less than optimal duration of breastfeeding is that practitioners may not be sufficiently educated to support breastfeeding (Wallace et al., 2009). A UK survey revealed that maternity and health visiting practitioners had recognised but unmet training needs, and they consistently over estimated their knowledge (Wallace and Kosmala Anderson, 2007), while in China, a study with 600 female physicians working with mothers and infants from 10 randomly selected BFHI hospitals in Hubei province showed that 79.3% participants had never received education in breastfeeding support skills (Ouyang et al., 2012).

In the UK, the assessment of the effectiveness of BFHI training has included for many years and currently, a “practical skills review” via a role-played assessment undertaken up to several weeks after the workshop, but there is no test of knowledge of these skills (<https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/training-resources/practical-skills-review-forms/>). Educating practitioners in these skills using a video as an adjunct to the workshop may consolidate knowledge and confidence in practice. To date there are no studies which have both used short videos to educate practitioners in these skills, and tested practitioners' knowledge of what to observe as correct technique by mothers before and after viewing videos specifically designed to educate practitioners.

Learning is not only about gaining factual knowledge; it is also about gaining confidence to apply the skills in practice. A positive association was established between Australian midwives' perceptions of effectiveness of their role in supporting breastfeeding and their objectively assessed knowledge (Cantrill et al., 2003). Bandura's self-efficacy theory suggests that people with higher self-efficacy (self confidence in a behaviour) are more likely to persevere with a specific behaviour in the face of difficulties (Bandura, 1977). Bandura states that mastery is needed to continue pursuing a goal in the face of obstacles and that mastery can be achieved in four ways: 1) personal achievements, 2) vicarious achievements 3) verbal persuasion and 4) emotional arousal. It is likely that breastfeeding support education workshops use verbal persuasion and imparting factual knowledge, whereas videos that demonstrate a skill will additionally use observational learning by

demonstration (Bandura, 2004), and by vicarious achievement where the skill is applied correctly. As the essential breastfeeding support skills involve observation of correct technique and verbally instructing mothers, it is plausible that demonstration of skilled behaviour by mothers with their infants, which affords opportunities for observational learning, will be more effective on immediate learning outcomes of knowledge and self-efficacy than a video of a role play by practitioners with a baby manikin and breast model. The first phase of the study in the UK tests this hypothesis by selecting two videos with comparable factual content and skills demonstration related to the BFHI curriculum (and approved by UK UNICEF BFI assessors), but which differ in the use of educator and learner role play with manikins and breast models versus clinical demonstration by mothers and infants. The next two phases conducted in China tests the effect of the clinical demonstration video (with a Mandarin sound track). The second phase tests the video with national BFHI trainers, the third phase tests the video with practitioners similar to those in the first phase in the UK.

In the study the effectiveness of the videos is evaluated on practitioners' objectively tested knowledge and on their self-reported confidence (self-efficacy) to apply these skills. The videos are evaluated as an adjunct to BFHI educational workshops. The objective of the study is to establish whether knowledge and confidence in practice improve as a result of viewing the videos, since it is likely improvements in both would be required to influence practice.

## 2. Method

### 2.1. Phase 1

**Design:** A randomised quasi-experimental trial comparing the effect of English educator and practitioner role play versus clinical (mother-infant) demonstration training videos.

**Setting:** Phase 1 was conducted after the two-day workshops in National Health Services (NHS) premises for midwives and health visitors in England, between 2011 and 2013, where three hospitals (one tertiary hospital and two local hospitals) delivered around 8000 births in 2013. The workshops were required for any practitioner who would work with breastfeeding mothers in publically funded maternity hospitals and community services.

**Sample:** Mixed groups of midwives, health visitors, doctors and support workers (n = 117).

**Materials:** The UK BFHI video entitled ‘Teaching Breastfeeding Skills’ (TBS) is 18 min long and the ‘Breastfeeding: Essential Support Skills’ (BES) video is 15 min long. Practice knowledge content is similar. The main difference is in how practice skills are demonstrated. The UK BFHI (TBS) video portrays a BFHI education workshop with role-play between a practice educator and practitioners, with very short scenes (about 20% of the video running time) with mothers demonstrating part of the sequence of actions involved in either skill. The UK clinical demonstration (BES) video uses clinical scenarios with a mother demonstrating the complete sequence of actions involved in the skills competently with an expert voice-over.

**Measures:** Closed survey questions were used for gender, age, job type, workplace organisation, recency and type of relevant prior breastfeeding education and clinical qualifications. Knowledge of the two practice skills (P & A, HE) was assessed using a multiple-choice test. Items were drawn from validated and internally reliable measures (Coventry University Breastfeeding Assessment), (Wallace et al., 2009; Weddig et al., 2011), and Neonatal Unit Clinician Assessment Tool (Wallace et al., 2013). The Coventry University Breastfeeding Assessment-Essential Skills (CUBA-ES) consists of six items measuring P & A and six items measuring HE. As items all had only one correct answer and four possible answers were supplied, there is a 25% chance of guessing correctly. So, with a range of scores from 0 to 12, a score of 3 (25%) could be obtained by chance.

Self-efficacy in applying the practice skills was measured using the

Download English Version:

<https://daneshyari.com/en/article/6846218>

Download Persian Version:

<https://daneshyari.com/article/6846218>

[Daneshyari.com](https://daneshyari.com)