The objective of the paper was to describe the concept Early Breastfeeding Initiation (EBFI). Early breastfeeding initiation (EBFI) is recommended within the first hour following giving birth as a simple strategy in enhancing neonatal health and survival (World Health Organisation [WHO] and UNICEF, 2010; Hailemariam et al., 2015). The value of EBFI lies in colostrum which is the first breast milk to be produced within 72 h following giving birth. Colostrum contains bioactive immune factors that have protective effect against early neonatal infections (American Academy of Paediatrics, 2012; Vijayalakshmi et al., 2015). According to WHO (2010), EBFI is the provision of the mothers’ first breastmilk within an hour following giving birth. This definition entails that the newborn has to receive some colostrum within that hour not just mere being on the breast.

**Problem statement**

Despite the clear definition by WHO on EBFI, some variations still exists across board on what exactly EBFI initiation is. Debes et al. (2013) define early...
breastfeeding as initiating breastfeeding within 24 h of birth. More so operational variations still exist on the attributes or characteristics of EBFI making it difficult to measure the concept for quality. This time to initiation variation gap leads to unstandardized operation as well as loopholes for continued escalating neonatal deaths. Evidence drawn from a meta-analysis study of 67 developing countries, proven that EBFI prevents neonatal sepsis and hypothermia that are major causes of neonatal deaths (Mullany et al., 2008). Describing the concept, EBFI will help bridge the variation gap with regards to description or practice.

Justification of the study

The [WHO] stands as a template body of excellence in all matters related to health hence its principles are to be aligned with. Outstanding deviations from stated standards with regards to EBFI have detrimental effects to neonatal health during the critical period following birth. Describing what EBFI is, by explain its attributes will help in standardising operations in the maternity units.

Purpose of the study

The purpose of the study was to describe the concept EBFI by stating and explaining its antecedents and attributes for the purpose of being able to measure it and also to evaluate performance towards reducing neonatal deaths.

Objective

The objective of the study was to describe the concept EBFI by assigning measurable attributes or characteristics.

METHODOLOGY

Walker and Avant concept analysis model was used to guide the study. A literature review of 39 articles was conducted between the years 1999 to 2016 in a period of two weeks from the 1st to the 15th of July 2016. The following search engines were used: Cochrane database, Journal of human Lactation, Pubmed and MEDLINE. Sixteen studies that met the inclusion criteria were considered for defining, describing the concept of interest and also in the discussion.

Inclusion and exclusion criteria

Inclusion criteria were based on the subject topic: Early breastfeeding or early initiation, factors associated with EBFI, consequences of delayed breastfeeding, EBFI and neonatal outcomes or definition of EBFI.

The excluded studies described breastfeeding in general without specifying any antecedents or attributes in the interactional process of EBFI. These articles stressed on breastfeeding in the context of HIV in a bid to prevent mother to child transmission (MTCT) and also more on the structural process of breastfeeding at programme level. Such processes included items in the ten successful steps to breastfeeding like having a breastfeeding policy in place without spelling out what exactly constitutes EBFI.

Search terms were applied with various Boolean operators based on the core concept: Early Breastfeeding Initiation or Timing of Breastfeeding. Such terms as early skin to skin contact (ESSC), proper position and attachment, sucking and colostrum were also used.

RESULTS

39 Articles were reviewed (Figure 1). All selected articles to some extent assisted in defining the concept of interest (WHO, 2010; Debes et al., 2013). Some variations did exist on how EBFI was defined, but it gave a platform for discussion and to pave away for concept description. Eighteen articles were dropped for several reasons: Six articles described breastfeeding in general without specifying any antecedents or attributes in the interactional process. These articles stressed on breastfeeding in the context of HIV in a bid to prevent mother to child transmission (MTCT) and also more on the structural process of breastfeeding at programme level. Such processes included items in the ten successful steps to breastfeeding like having a breastfeeding policy in place without spelling out what exactly constitutes EBFI (Hoddinott et al., 2014, Sayer et al., 1995, Kalies et al., 2005, UNICEF and WHO, 2010; Trickey and Newburn, 2014; Wagh et al., 2013).

Seven articles focussed more on the knowledge, attitudes and practices regarding value placed on colostrum the first breast milk and its composition (Joshi et al., 2012; Goyal et al., 2011; Abudul Ameer et al., 2008; Hall and Aagaard, 2008; Waldenstrom, 2008; Palmer et al., 2010; Health People, 2010). Four articles focussed on prelacteal feeds (Praveen et al., 2014; Rajesh and Renuka, 2014; Exavery et al., 2015; Hailemariam, 2015). Four articles had inputs on the definition of EBFI (WHO, 2010; Debes et al., 2013; Mbada et al., 2013; Yalan, 2016). These articles were found useful in clarifying the definition of EBFI and attributes involved.

Five articles described the determinants of EBFI which assisted in identifying antecedents in the interactional process of EBFI (Dewey, 2001; Montigny and Lacharite, 2005; Nice and Luo, 2010; Patel et al., 2015; Khanal et al., 2015). The main antecedents highlighted in all articles were the maternal age, mode of delivery, knowledge on the benefits of EBFI, parity and baby’s condition at birth. Four of the five articles mentioned above dealt with issues surrounding breastfeeding and were considered appropriate for this paper. One article (Moran, 1999) however, showed no elements of actual breastfeeding, but focussed on modesty to breast feeding and was not included in this concept paper. Three other papers
DISCUSSION

EBFI has been inconsistently defined within the same health profession. The inconsistent definition of EBFI has resulted in variations in the timing of breastfeeding following giving birth. Early breastfeeding initiation is defined as provision of the mothers’ breast milk to the baby within an hour following birth (WHO, 2010). According to Debes et al. (2013), early breastfeeding entails initiating breastfeeding within 24 h following birth. These two definitions though they are in agreement on the provision of breast milk to the newborn, their time to initiation differ greatly. The variation in time to initiation makes it a challenge to standardise operations in maternity units.

Despite the appropriate timing of breastfeeding initiation following birth by WHO, both definitions do not closely tie the attributes of EBFI (early skin to skin contact, proper positioning and attachment, rooting and a strong suckling reflex as well as colostrum transference into the baby’s mouth) in the interactional process in the achievement EBFI.

Attributes according to Walker and Avant (2005), are those traits or characteristics which make it possible to measure a concept objectively. According to Walker and Avant (2005), attributes make it possible to measure if an event has really taken place. In the context of this study, it would be very questionable if someone claims to have initiated breastfeeding early without tangibly stating presence of these attributes.

According to Mbada et al. (2013), EBFI goes beyond mere putting the baby to the breast rather a combination of putting the baby to the breast and the actual transference of colostrum into the baby’s mouth followed by swallowing. All the attributes should come into play in the interaction process of achieving effective EBFI. In view of this, Walker and Avant (2005), speaks of a model, borderline and a contrary case. A model case is when all the EBFI attributes are present within a time frame of an hour following birth. The model case is the ideal standard if neonatal mortality is to be averted. In a systematic review on EBFI, Nepal initiated breastfeeding within an hour and reduced neonatal deaths by 19% (Mullany et al., 2008). Variations in defining EBFI makes us have either boarder line or contrary cases where critical attributes of EBFI will be partially present or even missing.

Contrary cases was seen as rounds were made in the maternity units, involving delivery of the baby onto the mother’s chest, and subsequent interruption of skin to skin contact because the baby has been dressed and laid besides the mother. The baby is set for breastfeeding, but the mother is fast asleep without even facing the baby. Four to six hours later, the mother starts to initiate breastfeeding. In some cases, if the in-laws are around at time of giving birth, the baby can be given either water with sugar or ordinary milk to stop it from crying. According to Yalan (2016) cultural beliefs have bearing effects on EBFI and some of the effects compound negatively on neonatal health and survival.

If a cross checking of this case is done with the delivery record under the section "Breastfeeding initiated within an hour", that section is usually ticked yes. In view of this, one begins to wonder if EBFI is really known. Poor practice in maternity units with regards to EBFI has costed the public due to preventable neonatal deaths (Mullany et al., 2008, Tawiah-Agyemang et al., 2008;
Oddy, 2013). Early breastfeeding initiation is evidenced by skin to skin contact maintenance (Dennis, 2002). In view of this, dressing the baby soon after births interrupts this process. Ideally, the baby’s skin should be in contact with that of its mother and both covered with a warm blanket. According to Klaus and Kennel (2008) and Debes et al. (2013), skin to skin contact facilitates the Breast Crawl Behaviour. In their studies they cited that breast crawl behaviour enables every newborn that is placed on the mothers’ abdomen or chest following birth to search for the breast.

For effective EBFI, antecedents should also be taken into consideration for they can impact negatively to early initiation. Antecedents are incidents that occur prior the prevailing concept (Walker and Avant, 2005). In the context of this study, these include: Maternal age and experience, knowledge, attitudes, mode of delivery, gestational age and wellness of the mother - baby pair. According to Orun et al. (2010) mode of delivery especially vaginal interacts positively with EBFI as opposed to operative delivery where the woman experience some degree of stress, discomfort and altered level of consciousness as in the case of effects of general anaesthesia. Stressful stimuli as a result of either operative or prolonged deliveries interfere with EBFI by inhibiting oxytocin release thereby milk production (Montgomery, 2014; Seid et al., 2013; Moore et al., 2016). According to Amin et al. (2011), increased maternal age and multiparty were found to be positive predictors or attributes for EBFI. In view of this, midwives have the responsibility of predicting those women who are likely to face challenges in EBFI and offer practical support accordingly.

Conclusion

The concept was chosen for analysis for the purpose of standardizing operations in terms of timing and measuring EBFI. A lot of studies have been carried out in view of delayed BFI, but no study that has been conducted to describe EBFI and explaining its antecedents and attributes. Taking into cognisant the attributes of EBFI and applying them in the maternity unit has a potential of averting neonatal deaths by a significant percentage (Lamberti et al., 2011).

Conflicts of Interests

The authors have not declared any conflict of interests.

REFERENCES

Patel A, Buccher S, Pusdekar Y, Esami F, Krebs NF, Goudar SS, Chomba E, Garces A, Pasha O, Saleem S, Kodkany BS, Liechty EA,


