ISSN: 2582-0745 Vol. 1, No. 03; 2018

PRACTICES OF HEALTH WORKERS REGARDING EARLY BREASTFEEDING INITIATION IN CHIPINGE DISTRICT, ZIMBABWE.

Gladys Mugadza¹, Mathilda Zvinavashe¹, Felicity, Zvanyadza Gumbo¹, Babill Stray-Pedersen²

¹University of Zimbabwe College of Health Sciences, Zimbabwe

²University of Oslo, Norway

ABSTRACT

Despite Early Breastfeeding Initiation being a natural process for any woman who has given birth, it is the timing of breast feeding that really matters for neonatal health and survival. Soon after giving birth, the mother experiences mental, emotional and physical changes that may interfere with early breastfeeding initiation (EBFI Support of nurses and midwives soon after birth is critical for a satisfactory timely initiation of breastfeeding within an hour of giving birth as recommended by World Health Organisation [WHO].

Objective: To determine Health workers practices regarding early breastfeeding initiation (EBFI).

Materials and methods

A descriptive observational study was conducted among 200 delivering mothers to determine practice of nurses and midwives regarding EBFI within the first hour of birth. Early breast feeding initiation was defined as the actual giving of the first breastmilk within an hour of birth (WHO, 2010). An observational checklist was used to assess such factors as maintenance of early skin to skin contact, helping mothers to latch baby on breast and giving of relevant education within the first hour of birth.

Results

At time of baby expulsion, 168 (84%) of the infants were delivered onto the mother's abdomen and 100 (50 %) managed to receive colostrum within an hour of birth. While 84% of the infants had initial skin to skin contact at time of birth, a smaller number 18(9%) had maintained skin contact for an hour as 182(91%) of the babies were dressed immediately after birth.

Discussion

Interrupted early skin to skin contact and lack of practical support from health workers impacted negatively on timely initiation of breastfeeding.

Conclusion

Provision of EBFI education and practical support to mothers in the immediate post - partum period is the prime duty of the nurse- midwife.

Key Words: Early breastfeeding initiation, Health workers, Practice

1. INTRODUCTION

Despite breastfeeding initiation being a natural process for any woman who has given birth, it is the timing of breast feeding that really matters for neonatal health and survival and this should

ISSN: 2582-0745 Vol. 1, No. 03; 2018

happen within an hour of giving birth. In view of this, the support of nurses and midwives soon after birth is critical for a satisfactory timely initiation of breastfeeding within an hour of giving birth as recommended by World Health Organisation [WHO] [1]. Soon after giving birth, the mother experiences mental, emotional and physical changes that may interfere with early breastfeeding initiation (EBFI) [2]. The purpose of the study was to determine the practices of health workers regarding the timely initiation of breastfeeding. Health workers in the context of this study were those nurse- midwives working in maternity labour ward for a period not less than 6 months. Early breastfeeding initiation refers to the actual giving of the breast colostrum (First breast milk to the newborn within an hour of giving birth [1].

1.1Significance of Early breastfeeding initiation

The value of EBFI lies in colostrum which is the first breast milk to be produced within 72 hours of giving birth. This entails that failing to capitalise on the immunologic and nutritional benefits of colostrum has detrimental effects on the newborn even though the mother will later exclusively breastfeed [3]. It is very critical for nurse midwives to acknowledge that colostrum cannot be equated to the rest of the breast milk that the baby will receive later in the course of lactation period. Equipping mother with these critical facts will help them refraining from prelacteal feeds. Colostrum is critical for neonatal health and survival especially in the first week to 28 days of life. Colostrum is renowned for its nutritional and immunologic components that are critical in preventing such neonatal adverse outcomes as sepsis, severe jaundice, hypothermia and hypoglycaemia [4]. The first three days up to 28 days of life are core in the life of the newborn as it is the period of adaptation to extra uterine life. Nurse midwives are expected to be knowledgeable of the unique benefits of colostrum and to possess such skills and attitudes that promote EBFI. Early breastfeeding initiation is advocated as a simple strategy for improving neonatal outcomes during the critical 7 to 28 days of life. Scientific evidence has proven that EBFI within an hour has a potential of reducing neonatal mortality by 22 % [4].

1.2Nurse- midwife role

The nurse midwife plays a pivotal role in EBFI support as she is the first point of contact with mothers during pregnancy, labour, delivery, immediate post-partum period and thereafter. The immediate post-partum period is quite overwhelming for the woman and support from nurse midwives is very critical [5]. First time mothers usually face challenges on initiating breastfeeding and would require guidance and practical support [6]. With such factors as maternal age, knowledge, attitude, experience, mode of delivery and maternal baby wellness having a bearing effect on EBFI, effectiveness and success of EBFI depends solely on the nurse-midwife [7].

1.3Gaps in the area of study

Zimbabwe is a breastfeeding nation and a member of the BFHIP with more than 75% of its hospital institutions declared BFH. Baby Friendly Hospitals' principles are anchored on initiating breastfeeding within 30 minute to an hour following giving birth. Despite this declaration by Zimbabwe as a breastfeeding nation with more than 75 % of its high volume centres being BFH, coupled by an increase in Antenatal care attendance and increased institutional deliveries, the

ISSN: 2582-0745 Vol. 1, No. 03; 2018

EBFI rate is 58 % far below the 90 % recommended by WHO. With increased neonatal adverse outcomes and mortality at 29 /1000 live births, there is an assumption that Health workers' (nurses and midwives) practices have a contribution that needs to be investigated.

There is limited literature on practices of nurses and midwives regarding EBFI regionally and nationally. Most studies were conducted on breastfeeding in general studying participants as opposed to the health care provider. Investigating the nurse midwives' perceptions on EBFI will help unearth gaps in practice among health professional and provide a platform for strengthening EBFI within an hour of birth and thereafter. Empirical evidence

has revealed that inadequate knowledge and incompetence regarding support on breastfeeding among nurse professionals have contributed to breastfeeding failure [8, 9]. The purpose of the study was to determine nurse- midwives practices on EBFI at three sites in Chipinge district so as to improve neonatal care and outcomes in the first week of life.

2.MATERIALS AND METHODS

A descriptive cross sectional observational study was conducted between the month of February to May 2017 at three high volume sites baby friendly hospitals in Chipinge District after obtaining informed consent from the District Medical officer and potential study participants. While nurses and midwives were aware of a bigger research going on in the maternity unit, they did not know key elements that were being observed from second stage of labour to an hour after birth. Three research assistant nurses independent from the observed facilities were trained on recruitment and observation process using a designed checklist. Data was obtained at appoint in time over a span of an hour from second stage of labour.

The research observers only focussed on the events that transpired at time of second stage of labour to an hour post- delivery without commending or intervening. Observation was done on mothers who had singleton births, where mother and baby had no intra-partum or post- partum complications that potentiates interference with EBFI. All mothers who had assisted deliveries, sustained perineal tears or any form of intrapartum or post- partum complications were regarded as invalid cases for analysis even though they had consented to participate in the study. All babies that had any problem or sickness at birth invalidated the observation process and were excluded. A total of 200 mother baby pairs were observed over a period of four months at three high volume sites with an average of fifty mother baby pairs per month.

3. DATA ANALYSIS

Data was analysed using Stata software version 15.0 to calculate the mode, mean, frequencies and percentage. Descriptive statistics were used to infer data.

4. RESULTS

Following obtaining of informed consent, a total of 200 mothers were observed during the delivery process up to an hour post-delivery. The age range was of the observed mothers was 15 - 45 with 62(31%) being first time mothers and 138(69%) being para 2 or more. At time of baby

ISSN: 2582-0745 Vol. 1, No. 03; 2018

expulsion, 168 (84%) of the infants were delivered onto the mother's chest. While 168 (84%0 of the neonates had initial skin contact at birth, a smaller number 18(9%) had maintained skin contact for an hour as 182(91%) of the babies were dressed immediately after birth.

Table 1Maternal demographics, practice regarding EBFI (N= 200)

Maternal Age	Frequency	Percentage
15-19	47	23.5
20-29	99	49.5
30-45	54	27
Parity		
Para 1	Frequency	Percentage
Para 2 or more	62	31
	138	69
Baby delivered onto the mother's chest	Frequency	Percentage
Yes	168	84
No	32	16
Skin contact maintained throughout the third stage of		
labour	38	19
Yes	162	81
No		
Early skin to skin contact maintained thereafter	18	9
Yes	182	91
No		
Mother receives practical support to initiate breastfeeding	7	3.5
early Yes	193	96.5
No 188(94)		
Mother helped to properly attaches baby to the breast	70	35
Yes	130	65
No		

5.DISCUSSION

The purpose of the study was to determine the practices of health workers regarding EBFI. Findings revealed that the majority of the neonates, who were delivered normally, were placed onto their mother's chest at birth. The placing of the baby onto the mother's chest at birth facilitates early skin to skin contact (ESSC). Early skin to skin contact is one of the critical attribute in EBFI [3]. The facilitation of EBFI by ESSC is based on the breast crawl theory [10]. Maintenance of Early skin to skin contact facilitates production of oxytocin that stimulates flow and ejection of breast milk. The breast crawl behaviour is anchored on the intrinsic capabilities that are governed by newborn neuro and motors sensory function to search for the breast and initiate breastfeeding.

ISSN: 2582-0745 Vol. 1, No. 03; 2018

While nurse midwives in this study ensured ESSC at time of birth, it was not maintained over a span of an hour as it was interjected by such activities like managing the third stage of labour, taking baseline observations on the neonate and the mother as well as cleaning of the mother. Early skin to skin contact was not also maintained as the neonates were dressed soon after the baseline observations. The interruption of ESSC led to interference with EBFI as the newborns were quickly removed from their mother's chest. The findings of the study are consistent with other recent studies [11]. In a similar study, findings revealed that drying of the newborn at birth and maintenance of ESSC do not only enhance EBFI but also allow colonisation of the newborn skin with maternal flora which facilitates olfactory learning and enhances intake of colostrum. In the same study, dressing of the newborn immediately after birth inhibit ESSC and removes vernix Casiosa thereby retarding the breast crawl reflex [12]. If dressing should be done on a newborn, it should just cover the head only to prevent heat loss as the head constitutes a larger surface area of the infant's body.

In this study, mothers attempted to put babies on the breast, but a small number 70 (35%) managed to properly position their babies to the breast while 130(65%) could not really properly latch their babies to the breast. Proper latching of the newborn to the breast refers to the mother's ability to put herself and the newborn in a way that allows it to reach the breast easily [13]. Attributes of good baby latching of the baby to the breast include a fully open mouth with bigger portion of the areolar inside, chin of the baby against the breast, visible jaw movements with chicks round and full and visible swallowing with pauses in between sucks [13].

Few mothers 7(3.5%) received practical support on initiating breastfeeding while 193(96.5%) did not get any assistance on initiating breastfeeding early. The nurses and midwives were somehow committed with such tasks like documentation of the delivery process and preparation of the labour ward. Mothers did not receive even the simplest advice regarding EBFI hence they did not initiate breastfeeding within the prescribed hour. In one study, mothers reported lack of support as they were told that breastfeeding is a natural process that the woman inherently acquires by virtue of having a baby and most mothers gave up breastfeeding due challenges of positioning and latching the baby to the breast [14, 15]. An observational study done in Finland, midwives working in maternity units portrayed lack of competence regarding breastfeeding for they could not resolve the simplest breastfeeding challenges [16].

The mothers that received education and practical support in this study were not fully addressed as the nurses and midwives were somehow in a hurry. Though the piece of information they gave was accurate, it was not adequate to address the needs of the mothers especially the first time mothers. These findings are consistent with some studies conducted regarding breastfeeding. In a similar study, education given to mothers regarding breastfeeding was not adequate and somehow contradictory leading to lack of confidence to continue breastfeeding following hospital discharge [17]. In one cross sectional study conducted in Phnom Penh Cambodia, lack of knowledge regarding breastfeeding by health workers was one of the major reasons for breastfeeding failure [18]. The nurses-midwives in this study though were not ignorant about EBFI, did not avail themselves fully to assist the mothers in the first hour of birth.

ISSN: 2582-0745 Vol. 1, No. 03; 2018

The nurse midwife is expected to portray confidence and positive attitude in order to appreciate the significance of EBFI. Provision of breastfeeding education, counselling and support to mothers in the immediate post - partum period is the prime duty of the nurse- midwife [19]. Positive perceptions and attitude of nurse midwives regarding EBFI can uncover negative myths that have detrimental outcomes to the neonate [20]. Negative perceptions by nurse midwives and lack of support at time of giving birth may promote prelacteal feeds. In one study conducted in United States among health professionals revealed a significant discrepancy between Baby Friendly Hospitals Initiative Program (BFHIP) goal and practice [21, 22]. In the same study, prelacteal feeds had a higher rank than breastfeeding.

The United Nations Children's Fund (UNICEF) in collaboration with Baby Friendly Organisations (BFO), aimed at improving infant feeding soon after birth and thereafter [1]. Zimbabwe is a breastfeeding nation as evidenced by embracing the Baby Friendly Hospital Initiative Programme (BFHIP). The BFIHP was launched in 1990 for the purpose of improving EBFI within 30 minutes to an hour following giving birth. To date, 15 000 health facilities in 134 countries were awarded the status of being BFH with Zimbabwe being a member [23]. The mandate of BFHIP is to enhance quality infant feeding practices immediately after birth by equipping health professionals working in maternity units with knowledge and skills to support EBFI and thereafter [23]. The core value of BFHIP is anchored and expressed in the ten steps to successful breastfeeding which is the template guide for institutions and nurses in promoting EBFI [1, 25, 20]. It is expected that EBFI should be in tandem with the 90% target recommended by (WHO).

A comment passed on by Centre for Disease Control (CDC) stated that BFHIP has a task of promoting breastfeeding initiation and duration, but only 3 % of the Hospitals are practicing as evidenced by escalating neonatal mortality [26]. The majority of health institutions participated in prelacteal and formula feeds. Acknowledging practices of nurse-midwives regarding EBFI is critical for the purpose of improving infant feeding practice at birth [27.28]. At time of giving birth, the mothers expect nurse midwives to offer them practical advice and support as well as sound advice on how to feed their babies soon after birth [29,30,31].

6.CONCLUSION

The purpose of the study was to determine the practices of nurse- midwives regarding EBFI within the immediate post –partum period. Findings revealed a gap in practice regarding adherence to EBFI principles and offering of practical support to the mothers specially the first time mothers. While babies were delivered onto the abdomen of the mother to enhance ESSC for facilitation of EBFI, the skin to skin contact was interruptedand never maintained as a result of such procedures like weighing the baby, measuring head circumference and weight, cleaning of the mother and repairing of perennial lacerations if any. More so, babies were dressed soon after birth which was a major contributing factor to lack of maintenance of ESSC which is one of the critical attribute for EBFI. In hospital training on EBFI and periodic refresher courses on the significance of EBFI among nurse- midwives will be helpful in reminding them on the need to help mothers initiate breastfeeding early.

ISSN: 2582-0745 Vol. 1, No. 03; 2018

Acknowledgement

Our sincere appreciation to the Institutional Ethical Review Board, Medical Research Council of Zimbabwe, the Provincial Medical Director and District Medical Officer, Chipinge for approving this study to go on and the participants for consenting to participate in the study.

Conflict of Interest

The research study was conducted for the purpose of improving practice of nurse-midwives regarding EBFI for positive neonatal outcomes in the first week of life. No profit of any form was linked to the conducting of this study.

REFERENCES

- 1. World Health Organisation. Exclusive breastfeeding for Six months best for babies. Geneva: WHO, 2010.
- 2. Kreshen, R., Suhaimat, A., Jalamdeh, F., and Barclay, L. The effect of postnatal education and support program on breastfeeding among primiparous women: A randomised controlled trial, *International Journal of Nursing Studies*. 48 (11), 2011, 1058-1065.
- 3. Mugadza, G., Zvinavashe, M., Gumbo, F.G., Stray-Pedersen, B., Haruzivishe, C. Early breastfeeding initiation, Concept Paper, *International Journal of Nursing and Midwifery*, 8 (10), 2016, 81-85.
- 4. Edmond, K.M., Zandoh, C., Quigley, A., Amenga-Etengo, S., Owusu-Agyei, S., Kirkwood, BR. Delayed Breastfeeding Initiation Increases Risk of Neonatal Mortality, *Pediatrics*, 117 (3), 2006, 380-386.
- 5. Lamberti, LM., Walker, C.L.F., Noiman, A., Victora, C., Black, R.E. Breastfeeding and the risk for diarrhoea morbidity and mortality, *Bio-Medical Central Public Health*, 11(15), 2011.
- 6. Evcimen, Y. & Sudak, D. Postpartum depression. Primary Care Update for OB/GYNS, 10 (5), 2003, 210 -216.
- 7. Hall, W. & Hauck, Y. Getting it right: Australian Primiparas'views about breastfeeding: A quasi- experimental study, *International Journal of Nursing Studies*, (44), 2007, 786-795.
- 8. Mullany, L.C. et al. Breast-feeding patterns, time to initiation, and mortality risk among Newborns in Southern Nepal, *J Nutr.* (138), 2008, 599-603.
- 9. Taveras. E., Li, R., Grummer Strawn, L., et al. Opinions and practices of clinicians associated with continuation of exclusive breastfeeding, *Pediatrics*, 113(4), 2004, 283-290.
- 10. Klaus, M.H., Kennel, J.H. Care of the parents in 'Care of the high-risk neonate 5th ed. New York: Saunder's Company; 2001.
- 11. Khanal, V., et al. Factors associated with early breastfeeding initiation in Western Nepal, *International Journal Environment Research Public Health*, 12(8), 2015, 9562–9574.
- 12. Kramer, M.S. et al. Breastfeeding and child cognitive development: new evidence from a large randomized trial, *Arch Gen Psychiatry*, 65 (5), 2008, 578-84.

ISSN: 2582-0745

Vol. 1, No. 03; 2018

- 13. Senarath, U., Siriwardena, I., Godakandage, S.S.P., Jayawickrama, H., Fernando, D.N., Dibley, M.J. Determinants of breastfeeding practices: An analysis of the Sri Lanka demographic and health survey 2006–2007, *Maternal. Child Nutrition.* (8), 2012, 315–329.
- 14. Queensland Government. Policy Statement and Guidelines. Safe Infant Care to reduce the Risk of Sudden Unexpected Deaths in Infancy, 2008.
- 15. Fraser, D., & Cullen, L. Postnatal management and breastfeeding, Current Obstetrics and Gynaecology, (16), 2006, 65-71.
- 16. Wambach, K. & Cohen, S. Breastfeeding experiences of urban adolescent mothers, Journal Pediatric Nursing, 24(4), 2009, 1747.
- 17. Laitila, A. Early Support needs of Finnish families with small children, Journal of advanced nursing, 41(16), 595-606.
- 18. Sasaki, Y., Ali, M., Kakimoto, K., Saroeun, O., Kanal, K., & Kuroiwa. Predictors of early breastfeeding in early infancy: A Survey Report from Phnom Penh, Cambodia, *Journal of Pediatric Nursing*, (25), 2010, 463-469.
- 19. Dewey, K.G., Nommsen-Rivers, L.A., Heinig, M.J., Cohen, R.J. Risk factors for suboptimal infant breastfeeding behaviour, delayed onset of lactation, and excess neonatal weight loss, *Pediatrics*, *112*(*3 Pt 1*), 2003, 607-619.
- 20. Mannel, R., Martens, P. & Walker, M. Core curriculum for lactation, *International Lactation consultant Association*, 3rd Edition, 2013.
- 21. O'Brien, M., Buikstra, E. & Hegney, D. The influence of psychosocial factors on breastfeeding duration, *Journal of Advanced Nursing*, 63(4), 397-408.
- 22. Nichols. Schutte. & Brown. The impact of self- efficacy intervention on short term breastfeeding outcomes, *Health Education and behaviour*, (36), 397-408.
- 23. Debes, A.K.; Kohli, A.; Walker, N.; Edmond, K.; Mullany, L.C. Time to initiation of
- 24. Breastfeeding and neonatal mortality and morbidity: A systematic review, *BMC Public Health*, *13*, *(3)*, 2013, 1471-2458.
- 25. Dykes, F. 'Supply and Demand': breastfeeding as labour, *Social Science and Medicine*, (60), 2005, 2283-2293.
- 26. Craig, J.H. & Dietsch, E. Too scary to think about first time mothers 'perceptions of the usefulness of antenatal breastfeeding education, *Women and Health*, (23), 2010, 160-165.
- 27. American Academy of Pediatrics, Committee on Fetus & Newborn. Standards and Recommendations for Hospital Care of Newborn Infants, Full Term and Premature. *American Academy of Pediatrics*, 1 (10), 2014, 23-67.
- 28. Zimbabwe National Statistics Agency (ZIMSTAT). Zimbabwe Multiple Indicator Cluster Survey 2014 Final Report, 2015, Harare, Zimbabwe.
- 29. Mbada., et al. Knowledge, attitude and techniques of breastfeeding among Nigerian mothers from a semi-urban community, *BMC research notes*, *6*(1), 2013, 552.
- 30. Patel, A., Banerjee, A., Kaletwad, A. Factors associated with prelacteal feeding and timely initiation of breastfeeding in hospital-delivered infants in India, Journal of Human Lactation, (29), 2013, 572–578.

Rogers, N., Abdi, J., Moore, D., et al. Colostrum avoidance, prelacteal feeding and late breast-feeding initiation in rural Northern Ethiopia, *Public Health Nutr*, (14), 2011, 2029–36.