SURVEY ARTICLE

Comparative Study between the Practices of Exclusive Breastfeeding After Normal Delivery and Cesarean Delivery in Paropakar Maternity and Women's Hospital, Thapathali, Kathmandu Nepal

Rachana Aryal¹, Kashyap Kumar Sharma^{2*}

¹ Department of Public Health, Nobel College, Sinamangal, Kathmandu, Nepal ² Central Department of Statistics, Tribhuvan University, Nepal

Received: 29 October 2017Revised: 18 November 2017Accepted: 22 November 2017Published: 25 November 2017

ABSTRACT

Breastfeeding is a special gift from a mother to her baby. If mother is successful in breast feeding during first few days of her baby's life, she is more likely to be successful during the rest of their breastfeeding time. The main aim of this study was to compare the practice of exclusive breastfeeding after normal delivery and cesarean delivery. This study also identified the initiation of breastfeeding within an hour, skin to skin contact between the mother and infant after the delivery and factors influencing for breastfeeding. A descriptive cross-sectional study design was used to collect the data from 300 samples. The total sample was divided into half which is 150 for each of the normal and cesarean deliveries. Inclusive criteria included of 20 to 30 years with the primiparous deliveries visiting the respective hospital for the different purpose were included. A self-administered questionnaire was verbally asked to each of the participants while collecting the data. The mode of delivery is significant with both initiation of breastfeeding within an hour (p < 0.01, chi square= 134.2) and skin to skin contact between mother and infant after delivery (p < 0.01, chi square= 185.9). From this study the perspective of the entire participants towards the breastfeeding is found to be on optimistic. ND is able to initiate the breastfeeding within an hour and can have skin to skin contact as soon as the delivery.

Keywords: Type of delivery, Exclusive Breastfeeding, Breastfeeding practices, Comparison

1 Introduction

Breast milk is best for the baby and the benefits of breastfeeding extend well beyond basic nutrition. In addition to containing all the vitamins and nutrients the baby needs in the first six months of life, breast milk is packed with disease fighting substances that protect your baby from illness. The child takes milk direct from the breast of the mother or expressed in the bottle. The first hour after childbirth is an excellent time to encourage the mother to breastfeed. The infant is typically in alter state and will suckle if put to the breast. For the first-time mothers are in need of reassurance, knowledge, motivation, and confidence building. To help mothers, you need information and skills to educate and counsel them. If mother is successful in breast feeding during first few days of her baby's life, she is more likely to be successful during the rest of their breastfeeding time [1].

* Corresponding author email: statkashyap@gmail.com





Copyright © 2017. The Author(s). Published by AIJR Publisher (India).

This is an open access article under Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) license.

Comparative Study between the Practices of Exclusive Breastfeeding After Normal Delivery and Cesarean Delivery

In first postpartum week, the total amount of milk secreted in 24 hours is calculated to be 60 multiplied by the number of post-partum day and is expected in terms of milliliters. The milk yield on the 4th day is about 60*4=240ml and by the end of second week the milk yield is 120-180ml per feeding. The more the baby sucks on the nipple, the more prolactin is released, resulting in increased milk secretion. The amount of prolactin secreted and hence the milk produced is related to the amount of sucking stimulus, which is the frequency, intensity and duration with which the baby is breast fed. Secretion is a continuous process unless suppressed by congestion or emotional disturbance. Feeds with bottles, incorrect positioning, and painful breast condition are hindering factors [1]. The baby friendly initiative is an international program of the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) [2]. The initiative recognizes hospitals and birth centers have taken steps to provide an optional environment for the promotion, protection and support of breastfeeding. Since the inception of the Baby Friendly Hospital Initiative in 1991, more than 16,000 hospitals and birth centers in more than 125 countries have been assessed and received the prestigious 'Baby Friendly' award [2]. According to WHO, Exclusive Breastfeeding is defined as no other food or drink, not even water, except breast milk (including milk expressed or from a wet nurse) for 6 months of life, but allows the infant to receive ORS, drops and syrups (vitamins, minerals and medicines) [3]. Exclusive breastfeeding for the first 6 months of life is the recommended way of feeding infants, followed by continued breastfeeding with appropriate complementary foods for up to 2 years or beyond.

Normal delivery also known as vaginal delivery is the birth of babies through vagina which is considered to be the natural method. A spontaneous vaginal delivery (SVD) occurs when a pregnant female goes into labor without the use of drugs or techniques to induce labor and delivers the baby in normal manner without forceps, vacuum extraction, or a caesarean. An assisted or instrumental vaginal delivery occurs when a pregnant female goes into labor (with or without the use of drugs or techniques to induce labor) and requires the use of special instruments such as forceps or a vacuum extractor to deliver the baby vaginally. An induced vaginal delivery is a term for a delivery involving labor induction, where drugs or manual techniques are used to initiate process of labor.

Similarly, Cesarean section also known as C-section, is the use of surgery to deliver one or more babies. A caesarean section is often performed when a vaginal delivery would put the baby or mother at risk and some C-section are also performed upon request. The World Health Organization recommends that they should be done based on medical need and in many cases, they are life saving for the mother and baby. A C-section typically takes 45 minutes to an hour. It may be done with a spinal block such that the woman is awake or under general anesthesia. The average length of a hospital stay for a normal vaginal delivery is 36-48 hours or with an episiotomy (a surgical cut to widen the vaginal canal) 48-60 hours, whereas a C-section is 72-108 hours. The C-section takes longer to heal from about six weeks than vaginal birth [4].

2 Material and Methods

Descriptive cross-sectional study design was used to collect the data from 300 sample size. A tablet or mobile has been used for data collection and storage using database software the Kobo toolbox platform. Consent was taken from participant by informing them purpose of the study. The total samples were divided into half which is 150 for each of the normal and cesarean deliveries. Inclusive criteria included of 20 to 30 years with the primiparous deliveries visiting the respective hospital for different purpose were included. Self-administered questionnaire was verbally asked to each of the participants while collecting the data. The sample size was calculated using the following equation.

$$n = \frac{NZ^2 P(1-P)}{(N-1)e^2 + Z^2 P(1-P)}$$

Where,

e = Allowable error (5%)

Z = Level of significance (1.96 at 5% level of significance)

N = Total number of female provided from hospital in May and June 2017 is 670+702=1372

n =Sample Female (300)

P = Probability (0.5)

The study only focused on mothers who delivered their babies from mid of April till the mid of June 2017 and who were exclusively breastfeeding their babies.

3 Results

From different study designs that could be used for the data collection, descriptive cross-sectional study design is chosen for this study. This type of research design does not require follow-up, therefore, less costly and less time intensive than other designs. For analysis of the data descriptive statistics including mean, frequencies and other statistical measures to analyze quantitative data collected. The qualitative data collected from interviews were based for the influencing factors and practice of breastfeeding. This study is carried out in Paropakar Maternity and Women's Hospital of Thapathali, Kathmandu, Nepal. The data

for the study were collected from OPD, Vaccination department, Ward (ANC A- ANC B), Nutrition department, Library, Statistics department and emergency dept. The total sample size for the study is 300 which are selected from 1372 primi parous deliveries in mid-April to mid-May and mid-May to mid-June 2017. The data is collected equally with mothers of Normal Deliveries (ND) and Cesarean Deliveries (CS). For which the total sample size of ND and CS is 150 each respectively as shown in Figure 1.

The participants of the study were within the hospital from age 20 years to 30 years who had primi parous deliveries only. All the participants of ND had single child while only three out of 150 CS participants had twins. Table 1 illustrates that the study included a total of 32% of Brahmin, 30.3% of Others (Gurung, Limbu, Jantati, and Madhesi), 23.3% of Chhetri and 14.3% of Newar.

The majority of the participants were Hindu with 76% followed by Buddhist with 12%, Christian 7.3% and Muslim 4.7% as shown in Table 2.

3.1 Comparing Normal Delivery (Nd) and Cesarean Delivery (Cs)

3.1.1 Education Status

The descriptive information of education status of the participants is displayed in the Table 3. Table 3 shows that out of 150 participants of normal delivery 80.7% could read and write and 19.3% couldn't read and write. Similarly, the 150 participants of cesarean delivery 91% could read and write and 8.7% couldn't read and write.



Figure 1: Method of delivery

Table 1: Ethnicity of the participant

Ethnicity	Frequency	Percent
Brahmin	96	32
Chhetri	70	23.3
Newar	43	14.3
Others	91	30.3
Total	300	100

Table 2: Religion of the participants

Religion	Frequency	Percent
Hindu	228	76
Buddhist	36	12
Christian	22	7.3
Muslim	14	4.7
Total	300	100

Comparative Study between the Practices of Exclusive Breastfeeding After Normal Delivery and Cesarean Delivery

3.1.2 Education level

The descriptive information of education level of the participants is displayed in the Table 4.

Table 3: Education status of the participants					
Methods of delivery	Education status Frequency Percen				
	Can read and write	121	80.7		
	Cannot read and write	29	19.3		
Normal delivery	Total	150	100		
	Can read and write	137	91.3		
	Cannot read and write	13	8.7		
Cesarean delivery	Total	150	100		

Table 4 shows that out of the total participant who could read and write, 33.3% of primary level, 24% have studied above SLC and 23.3% up to SLC among ND. In the same way, among CS 36% have studied above SLC, 34% of primary level and 21.3% up to SLC.

3.1.3 Employment status

The descriptive information about employment status of the participants is displayed in Table 5. Table 5 illustrates the employment status with maximum participants of both normal and cesarean deliveries were housewives with 64.7% and 57.3% and few were students with 6% and 2% respectively. 17.3% were selfemployed and 12% were into

fable 4	: Education	leve
fable 4	: Education	leve

Methods of delivery	Education level	Frequency	Percent
	Primary	50	33.3
	SLC	35	23.3
	Above SLC	36	24
Normal delivery	Total	121	80.7
	Primary	51	34
	SLC	32	21.3
Cesarean delivery	Above SLC	54	36
	Total	137	91.3

 Table 5: Employment status

Methods of delivery	Employment status Frequency		Percent
	Self employed	26	17.3
	Services	18	12
	Student	9	6
	House wife	97	64.7
Normal delivery	Total	150	100
	Self employed	20	13.3
	Services	41	27.3
	Student	3	2
	House wife	86	57.3
Cesarean delivery	Total	150	100

service in ND where as 27.3% were into service and 13.3% were self- employed in CS.

3.1.4 Workplace Providing Private Place to Breastfeed or Express Milk

 Table 6: Workplace providing private place to breastfeed or express milk

	Private place to		
Methods of	breastfeed or express		
delivery	milk	Frequency	Percent
	Yes	128	85.3
	No	22	14.7
Normal delivery	Total	150	100
	Yes	112	74.7
Cesarean	No	38	25.3
delivery	Total	150	100

baby with 85.3% and 74.7% respectively. 14.7% of ND and 25.3% of CS have denied for not having a private place to breastfeed of express the milk for the baby.

The descriptive information of
work area providing private
place to breastfeed or express
the milk for the child is displayed
in Table 6. This Table 6 shows
both the ND and CS
participants accepted having a
private place to breastfeed or
express the breast milk for the

The descriptive information of

3.1.5 The Stay in the Hospital



The descriptive information of participants staying in the hospital is displayed in Figure 2.

Figure 2: The stay in the hospital

Figure 2 illustrates that the maximum participants of ND got discharge within 12-24 hours followed by 1-3 days. Only few got discharge in a week and more than a week respectively. Similarly, the maximum participants of CS got discharge in a week followed by more than a week and 1-3 days accordingly. Nobody of CS got discharged within 12-24 hours.

3.1.6 Initiation of Breastfeeding in the First Hour of Delivery

The descriptive information of initiation of breastfeeding in the first hour of delivery is displayed in Figure 3.





Out of 150 each participants of both deliveries, total 140 ND participants initiated breastfeeding within an hour of delivery but, only 108 CS participants did not initiated breastfeeding within an hour of delivery.

3.1.7 Reasons for Not Initiating Breastfeeding Within an Hour

The descriptive information of reasons for not initiating breastfeeding within an hour is displayed in Table 7. As Table 7 shows the CS participants were higher in not initiating the breastfeeding within an hour the maximum reason was because mother was sick with 34% followed by baby taken away from mother

Table7: Reasons for not initiating breastfeeding within an hour				
Methods of	Reasons for not initiating	Frequenc	Percen	
delivery	breastfeeding within an hour	У	t	
	No milk	1	0.66	
	Mother was sick	5	3.33	
	Baby was taken away from	4	2.66	
	mothers	4	2.00	
Normal delivery	Total	10	6.66	
	No milk	25	16.66	
	Mother was sick	51	34	
	Baby was taken away from			
	mothers	32	21.33	
Cesarean delivery	Total	108	72	

with 21.3% and no milk with 16.7%. Only 6.7% ND participants did not initiate breastfeeding within an hour, the reason was because mother was sick (3.3%) and baby was taken away from mothers (2.7%).

3.1.8 Breastfeeding the Baby for the First Time by the Mother Herself

The descriptive information of breastfeeding the baby for the first time by the mother herself is displayed in Table 8. From the Table 8, 81.3% of ND mothers tried to breastfeed their babies within 1-3 hour after birth for the first time on their own, whereas 36% of CS mothers tried to breast feed their babies within 4-11 hours after birth

Table 8.	R reastfeeding	the haby	for the firs	t time hy the	e mother herself
Lable 0.	Dreusijeeuing	me buby	jor me jus	<i>i iime 0y in</i> e	e moiner nerseij

Methods of	Breastfeeding by the mother	Frequency	%
delivery	herself for the first time		
	1-3 hours after birth	122	81.33
	4-11 hours after birth	18	12
	12-23 hours after birth	6	4
	24 hours or more after birth	4	2.66
Normal delivery	Total	150	100
	1-3 hours after birth	32	21.33
	4-11 hours after birth	54	36
	12-23 hours after birth	25	16.66
Cesarean	24 hours or more after birth	39	26
delivery	Total	150	100

followed by 26%, 21.3% and 16.7% with 24 hours or more after birth, 1-3 hours after birth and 12-23 hours after birth.

3.1.9 Skin to Skin Contact with the Baby After Birth

The descriptive information about skin to skin contact of mother and baby after birth is displayed in Figure 4.

In normal delivery 96.7% of mothers had skin to skin contact with the baby after birth whereas, in cesarean delivery 81.3% did not had a chance for skin to skin contact with the baby after birth.



Figure 4: Skin to skin contact with the baby after birth

3.1.10 **Received Hospital Staff's Help for Feeding their Baby**

The descriptive information about the help received from hospital staff for feeding the baby is displayed in Table 9. From Table 9, 88.7% and 83.3% of participants of ND and CS received the help for feeding the baby from hospital staff respectively.

Table 9. Received hospital staff shelp for feeding their baby			
Methods of delivery	Help from	Frequency	Percent
	hospital staff for		
	feeding the baby		
	Yes	133	88.66
	No	17	11.33
Normal delivery	Total	150	100
	Yes	125	83.33
	No	25	16.66
Cesarean delivery	Total	150	100

Table 9. Received hospital staff's help for feeding their haby

3.1.11 Help by the Staff Regarding Feeding

The descriptive information about how useful the help received from hospital staff was, for feeding the baby is displayed in Table 10. As shown in Table 10, 62% and 54% of the ND and CS participants found the help of feeding from the hospital staff found very useful.

Table 10: The help by hospital staff regarding feeding.

Methods of	Usefulness of hospital	Freque	Perc
delivery	staffs' help for feeding	ncy	ent
	Very useful	93	62
Normal	Not useful	40	26.66
delivery	Total	133	88.66
	Very useful	82	54.66
Cesarean	Not useful	43	28.66
delivery	Total	125	83.33

3.1.12 Baby Fed Anything other than Breast Milk after Starting Breastfeeding

 Table 11: Baby fed anything other than breast milk after
 starting breastfeeding Methods of Fed anything other Frequen Perce

The descriptive information if baby fed	Methods of	Fed anything other	Frequen	Perce
anything other than breast milk and fed	delivery	than breast milk to	cy	nt
items to the baby is displayed in Table 11		baby		
and Figure 5 accordingly. Table 11		Yes	23	15.33
illustrates that 84.7% of ND participants	Normal	No	127	84.66
did not feed and 56% of CS participants fed	delivery	Total	150	100
other than breast milk after they had started		Yes	84	56
breastfeeding.	Cesarean	No	66	44
In the same way from Figure 5 below	delivery	Total	150	100

In the same way, from Figure 5 below

shows that Formula and glucose was fed to the babies other than breast milk of ND and of CS, with highest preferences to formula feeding.



Figure 5: Fed items to the baby

Comparative Study between the Practices	f Exclusive Breastfeeding After Normal Deliver	rv and Cesarean Deliverv
Comparative String sein een tise 1 ratifiees		

3.1.13 Developed Breast Problems

The descriptive information of developing cracked nipples/breast abscess/ any other breast problems and if they stopped breastfeeding after the problems or not are displayed in Table 12 and Table 13 respectively.

Methods of delivery	Developed any breast problem	Frequency	Percent
	Yes	109	72.66
	No	41	27.33
Normal delivery	Total	150	100
	Yes	105	70
	No	45	30
Cesarean delivery	Total	150	100

 Table 12: Developed cracked nipples/breast abscess/ any breast problem

Table 12 shows the participants of both ND and CS developed cracked nipples/ breast abscess/ any breast problems with 72.7% and 30% respectively. Similarly, the Table 13 shows that, 88% and 80% of ND and CS mothers did not stop breastfeeding even after the breast problems. But 12%

Table 13.	Ston	breast	feeding	during	hreast	problems
Table 13.	SiOp	Ureusi	Jeeung	unning	Ureusi	provients

Methods of delivery	Stop breastfeeding during breast problems	Frequency	Percent
	Yes	18	12
Normal	No	132	88
delivery	Total	150	100
	Yes	30	20
Cesarean	No	120	80
delivery	Total	150	100

and 20% of them stopped breast feeding due to various breast problems.

3.1.14 Express the Breast Milk for the Baby to Taken when the Mother is Away

 Table 14: Express the breast milk for the baby to take when the mother is away.

 ods of
 Express the breast
 Frequency
 Percent

The descriptive information about expressing the breast milk for the baby to take when the mother is away is displayed in Table 14. Table 14 shows the majority of participants of both normal delivery and cesarean delivery did not practice the method of expressing the breast milk in the

Methods of delivery	Express the breast milk for the babyFrequency		Percent
	Yes	45	30
Normal	No	105	70
delivery	Total	150	100
	Yes	43	28.66
Cesarean	No	107	71.33
delivery	Total	150	100

bottle if the baby is unable to suck the milk directly from mother's breast. Only around 30 percentages of both the deliveries practiced the method expressing the breast milk.

3.1.15 Measurement of the Breast Milk Before Feeding the Baby

Table 15: Measurement of the breast milk before feeding the baby

The descriptive information about measuring the breast milk before feeding the baby is displayed in Table 15. This Table shows only 24% and 37.3% of ND and CS participants measure the breast milk before feeding their babies. Rests of other

Tuble 10. Heasthement of the oreast must before feeding the budy					
Methods of delivery	Measurement of breast milk before feeding the	Measurement of breastFrequencynilk before feeding the			
	baby				
	Yes	36	24		
	No	114	76		
Normal delivery	Total	150	100		
	Yes	56	37.33		
Cesarean	No	94	62.66		
delivery	Total	150	100		

participants do not measure the breast milk.

3.1.16 Milk on Average that was Fed to the Baby

The descriptive information about an average ml of milk fed to the baby is displayed in Table 16. Table 16 illustrates that the maximum participants of both the deliveries did not know about the average milk fed to the baby. 16%, 9.3% and 1.3% said 45ml, 30ml, and 15ml respectively of ND. 20.6%, 18% and 4% said 45ml, 30ml and 15ml respectively of CS.

Table 10: Milk on average that was fea to the baby					
Methods of delivery	Fed milk on average	Frequency	Percent		
	15ml	2	1.33		
	30ml	14	9.33		
	45ml	24	16		
	don't know	110	73.33		
Normal delivery	Total	150	100		
	15ml	6	4		
	30ml	27	18		
	45ml	31	20.66		
	don't know	86	57.33		
Cesarean delivery	Total	150	100		

Table 16: Milk on average that was fed to the baby

3.2 Opinion of Participants Towards Breastfeeding

The descriptive information about the opinion of participants of normal delivery and cesarean delivery towards breastfeeding is displayed in Table 17 and Table 18 respectively.

	Table 17. Opinion of ND participants				
Opinions	Agree	Neutral	Disagree		
	(%)	(%)	(%)		
Benefits of breastfeeding are limited for a specific	12.66	25.33	62		
period.					
Breast feeding is more convenient than formula	84.66	13.33	2		
feeding.					
Breastfed babies are healthier than formula fed	83.33	14.6	2		
infants.					
Formula fed babies are more likely to gain weight	40	32.66	27.33		
more quickly than breastfed infants.					
Breast milk is cheaper than formula.	96.66	2.66	0.66		
Breast milk is ideal food for babies.	92.66	6	1.33		
Breast feeding can enhance intimacy between	93.33	6	0.66		
mother and infant.					
If mother intend to resume work, formula feeding	65.33	24.66	10		
is a better choice.					
Women should not breastfeed in public places	7.33	36.66	56		
(such as restaurants).					
It is better to avoid breastfeeding to prevent	2	20.66	77.33		
physical changes in mother's body.					

 Table 17: Opinion of ND participants

The above Table 17 shows the majority of ND participants find breast milk cheaper and as an ideal food for the baby with around 96 and 92% respectively. They also prefer breastfeeding to be much more convenient, healthier and is able to improve the bond of mother and a child. Very less participants agree with the opinion that breastfeeding is limited for specific duration and has negative impact physically. Similarly, Table 18 below majority of CS participants also found breast milk more convenient, healthier, cheaper and ideal food for the baby. While higher percent of participants have also agreed, formula feeding is better choice if mother intends to resume work.

Table 18: Opinion of CS participants				
Opinions	Agree (%)	Neutral (%)	Disagree (%)	
Benefits of breastfeeding are limited for a specific period.	22.66	16.66	60.66	
Breast feeding is more convenient than formula feeding.	90	4	6	
Breastfed babies are healthier than formula fed infants.	88.66	8.66	2.66	
Formula fed babies are more likely to gain weight more	50.66	21.33	28	
quickly than breastfed infants.				
Breast milk is cheaper than formula.	94	2.66	3.33	
Breast milk is ideal food for babies.	80	4	16	
Breast feeding can enhance intimacy between mother and	95.33	4	0.66	
infant.				
If mother intend to resume work, formula feeding is a better	76.66	16	7.33	
choice.				
Women should not breastfeed in public places (such as	10.66	25.33	64	
restaurants).				
It is better to avoid breastfeeding to prevent physical changes	1.33	8	90.66	
in mother's body.				

Comparative Study between the Practices of Exclusive Breastfeeding After Normal Delivery and Cesarean Delivery

3.3 Relationship between the Modes of Delivery and Initiation of Breastfeeding within an Hour

The descriptive information about the association between the mode of delivery and initiation of breastfeeding within an hour is displayed in Table 19.

Mode of delivery	Initiation of breas hour of th	Total	P-value	
	Yes (%)	No (%)		
Normal delivery	140 (93.3)	10 (6.7)	150	
Cesarean delivery	42 (28.0)	108 (72.0)	150	
Total	182 (60.7)	118 (39.3)	300	< 0.01

Table 19: Relationship between the modes of delivery and initiation of breastfeeding within an hour

The above Table 19 depicts the association between the mode of delivery and initiation of breastfeeding within an hour of birth. Among the participants of normal delivery 93.3 percent initiated breastfeeding within an hour of delivery and 72.0 percent participants of cesarean delivery did not initiate breastfeeding within an hour of delivery. There was significant association between the modes of delivery and initiation of breastfeeding within an hour of birth (chi square= 134.2, p < 0.01).

3.4 Relationship between the Modes of Delivery and Skin to Skin Contact between the Mother and Infant After Delivery

Table 20: Relationship between the modes of delivery and skin to skin contact between the mother and infant after delivery

The descriptive information about the association between the mode of delivery and skin to skin contact between the mother and infant after the delivery is displayed in Table 20. The Table 20 depicts the association between the mode of delivery and skin to skin contact between mother and infant after delivery. Among the

Mode of delivery	Skin to skin contact between mother and infant after delivery		Total	P -value
	Yes (%)	No (%)		
Normal delivery	145 (96.7)	5 (3.3)	150	< 0.01
Cesarean delivery	28 (18.7)	122 (81.2)	150	
Total	173	127	300	

participants of normal delivery 96.7 percent were able to have skin to skin contact with each other where as in cesarean delivery 81.2 percent participants did not have skin to skin contact with each other.

There was significant association between the modes of delivery and skin to skin contact between the mother and infant after delivery (chi square= 185.9, p < 0.01)

4 Discussion

In working as housewives, most of the participants accepted for having a private place to breastfeed or express the breast milk for their babies. Total 14.7% and 25.3% of ND and CS did not have a suitable place for breast feeding or express the milk. The utmost participants of normal delivery stayed in the hospital for 12-24 hours following with 1-3 days. In case of C-section none of them got discharged as soon as ND and stayed for a week and more than a week.

If we compare the initiation of breastfeeding within an hour and the skin to skin contact between mother and baby after birth, almost all of the ND participants had an opportunity to practice both while the participants of CS were not offered any of it. The reason for not practicing were because mother is sick and unable to hold the baby, baby is taken away from mother and there is less or no production of breast milk soon to feed the child. As the mothers of ND were able to feed their babies within 1-3 hours after birth while most of the C-section participants took at least 4-11 hours to feed their breast milk on their own. This might be due to the unfavorable health condition due to the suture. According to the overall participants, the hospital staff were very active in helping to teach the different ways of feeding the baby which is very useful for most of them and few didn't find it useful. In addition, 78% CS participants fed formula to their babies after they had started breastfeeding while 84.7% of ND participants did not feeding anything other than breast milk to their babies. This can be the major drawback for the practice of exclusive breastfeeding. Beside on third of the total sample all of the participants developed either of the breast problems such as cracked nipples or abnormal nipples or breast abscess. Despite of the breast problems, determined mothers did not stop breastfeeding their babies. But then again, the few mothers could not bear the pain and did stop feeding breast milk and chose the formula. The practice of expressing the breast milk and measuring the breast milk before feeding the baby is very less among both the deliveries participants. The presumption of the average milk fed by our participants was found to be 45ml and 30 ml whereas maximum participants denied knowing.

From this study the perspective of the entire participants towards the breastfeeding is found to be on optimistic. They strongly agreed that the benefits of breastfeeding weren't for a limited period and is convenient, healthier, cheaper than formula. They also agreed with the opinion of breast milk being an ideal food for the baby. The maximum numbers of participants were neutral and disagreeing with the statement of not feeding the baby in public places and avoid breastfeeding to prevent any physical changes in mother's body. Similarly, they also agreed with the sentence that formula feed babies are more likely to gain weight more quickly than breastfeed babies and if mother intend to resume work, formula feeding is a better choice for the baby. These could be the drawing factors for the encouragement of formula feeding.

This indicates that the babies who have been fed formula besides breastfeeding cannot be considered as exclusively breastfeed. Applying chi square test, it was found that the mode of delivery is significant with both initiation of breastfeeding within an hour (p < 0.01, chi square= 134.2) and skin to skin contact between mother and infant after delivery (p < 0.01, chi square= 185.9)

From an article of Baby Friendly Hospital Practices: Cesarean Section is a Persistent Barrier to Early Initiation of Breastfeeding [5] confirmed that cesarean section is a significant barrier to the implementation of Baby Friendly Hospital Initiative (BFHI) Step 4 and that hospital practices were amenable to changes that enabled its implementation regardless of the mode of delivery. Similarly, our study also found out that the participants of cesarean section were not practicing the BFHI step 4. In our study, only the two methods; Normal and Cesarean, deliveries were compared by means of the study duration of six months. Applying chi square test, there is a significant association between the mode of delivery and initiation of breastfeeding within an hour (p < 0.01). Which means the initiation of breastfeeding within an hour for cesarean delivery is less significant than normal delivery.

As reviewed from the study of Factors Associated with Early Initiation of Breastfeeding among Nepalese Mothers: Further Analysis of Nepal Demographic and Health Survey, 2011 [6] mentioned that two in every three mothers had initiated breastfeeding within one hour of childbirth. The factors associated with the early initiation of breastfeeding were the place of delivery, maternal education and occupation, baby's size at birth and developing regions. Where as in our study the factors associated with the early initiation of breastfeeding is found to the method of delivery. Breastfeeding awareness campaigns or counseling through Nepal's existing strong network of FCHVs, and health workers to pregnant women focusing on less educated, unemployed, and those from the central region may be helpful to improve early initiation of breastfeeding. This study used the data from the Nepal Demographic and Health Survey 2011, which is a nationally representative study.

5 Conclusion

As relating the findings with Normal Deliveries and Cesarean Deliveries itself, it has been found that the practice of exclusive breastfeeding is higher among normal deliveries than c- sections. Normal delivery was able to initiate the breastfeeding within an hour and can have skin to skin contact as soon as the delivery. The significance relation (P < 0.01) between both the method of delivery with the initiation of breastfeeding within an hour and skin to skin contact between mother and infant after delivery accepted our alternative hypothesis and rejected the null hypothesis. There are various factors influencing for breastfeeding an infant. The perspective of the entire participants towards the breastfeeding is found to be on optimistic. Exclusive breastfeeding has always been considered as an ideal food for the baby up to six months after birth. The participants of this study also have a positive opinion towards breastfeeding. They agree on the fact of breastfeeding being more convenient, healthier, ideal and cheaper than formula feeding. The maximum participants have also agreed with the statement that formula fed infants are likely to gain weight more quickly than breastfed infants.

Limitation of the study

Our study has several marked limitations as only small number of patients is studied of the age from 20-30 years, of May and June 2017. To suggest an ideal management, it comes unclear in any field if the sample sizes taken are minimum. Despite of the growing number of the articles in the literature discussing the practice of exclusive breastfeeding after the deliveries, no researches has yet been reached regarding the management of the problems.

Acknowledgement

It is my great privilege to acknowledge with deep sense of gratitude, the contribution and support given by all the participants from Paropakar Maternity and Women's Hospital, Thapathali. I would also like to show my gratefulness to the Research Team of the respective hospital for the allowance to carry out my research.

How to Cite this Article:

Aryal, R., & Sharma, K. (2017, November 25). Comparative Study between the Practices of Exclusive Breastfeeding After Normal Delivery and Cesarean Delivery in Paropakar Maternity and Women's Hospital, Thapathali, Kathmandu Nepal. *Advanced Journal of Social Science*, *1*(1), 40-52. https://doi.org/https://doi.org/10.21467/ajss.1.1.40-52

References

- [1] Subedi, D. (2014). Breastfeeding. *Midwifery Nursing Part 3* (pp. 265-310). Jamal, Kathmandu: Medhavi Publication.
- [2] Tuitui, R. (2010). Physiology of Lactation. *Manual of Midwifery Part 3* (pp. 64-68). Bhotahity, Kathmandu: Vidyarthi Pustak Bhandar.
- [3] Adejuyigbe, E. A. (2017). Department of Maternal, Newborn, Child and Adolescent Health. World Health Organization (pp. 1-12). Nigeria: World Health Organization. http://apps.who.int/iris/bitstream/10665/208825/1/9789241549684_eng.pdf

- [4] Tuitui, R. (2010). Problems in Breastfeeding. *Manual of Midwifery Part 3* (pp. 95-97). Bhotahity, Kathmandu: Vidyarthi Pustak Bhandar.
- [5] Rowe-Murray HJ1, F. J. (16 May 2002). Baby Friendly Hospital Practices: Cesarean Section is a Persistent Barrier to Early Initiation of Breastfeeding. https://www.ncbi.nlm.nih.gov/pubmed/12000413
- [6] Adhikari, M., Khanal, V., Karkee, R., & Gavidia, T. (2014). Factors associated with early initiation of breastfeeding among Nepalese mothers: further analysis of Nepal Demographic and Health Survey, 2011. *International Breastfeeding Journal*, 9(1), 21. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4260185/

Publish your research article in AIJR journals-

- ✓ Online Submission and Tracking
- ✓ Peer Reviewed
- ✓ Rapid decision
- ✓ Immediate Publication after acceptance
- ✓ Open Access (Articles freely available online)
- ✓ Retain full copyright of your article.

Submit your article at journals.aijr.in