

IYCF Practices Among Mothers of Young Children in Chandigarh, UT: Optimal or Suboptimal

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Abstract

Background: Optimal infant and young child feeding (IYCF) practices of mothers are key elements for growth and development of children. Objectives: 1) To evaluate infant and young child feeding (IYCF) practices of mothers in Chandigarh. 2) To investigate risk factors of suboptimal IYCF practices. Methodology- It is a community based study. A stratified two-stage random sample design was adopted. Mothers willing to participate in the study were taken as study unit. Results- Among all 726 mothers surveyed, there were 304(44.3%) mothers who gave no pre lacteal feed (PLF) to their babies, 365(53.1%) started complementary feeding (CF) timely, 582(84.7%) fed colostrums, and only 159(23.1%) adopted Exclusive Breastfeeding (EBF) without water for six months. Mothers of age group 18-21 years were recorded highest (47.6%) who had not given any pre-lacteal feed. Pre lacteal feed was not adopted by 77(49.0%) mothers of High Socio Economic Group. Only 365 (53.1%) mothers adopted optional practice. Based on risk analysis significant risk factors of giving prelacteal feed were found to be age of mother (RO=0.62, P=0.03), educational level of mother (RO= 0.60, P=0.01) and gender of child (RO= 0.71, P=0.03). . Duration of stay in Chandigarh (RO=1.14, P=0.05) educational level of mother (RO= 2.25, P=0.004) and marital duration (RO=0.92 P=0.002) were found to be significant correlates of colostrums feeding. Conclusion- Present study concludes that IYCF practices in the study area are not satisfactory.

Keywords: IYCF, Pre-lacteal feed, Exclusive breast feeding, Colostrum Feeding

I. INTRODUCTION

Proper nutrition of children leading to adequate growth and good health is the essential foundation of human development. Child malnutrition tremendously affects development outcomes. The Global Strategy for Infant and Young Child Feeding (IYCF) was adopted at the 55th World Health Assembly in May 2002, and the UNICEF executive board adopted the strategy in September 2002, bringing a unique global consensus on issues

related to optimal infant and young child feeding and sets out targets for improving child survival through enhancing optimal infant and young child feeding¹.

Results of studies²⁻⁹ on IYCF practices have indicated that inappropriate feeding practices can have profound consequences for the growth, development, and survival of infants and children, particularly in developing countries. Optimal infant and young child feeding implies that every child gets the best possible start to life through exclusive breastfeeding for the first six months (starting within one hour of birth) and continued breastfeeding for two years or beyond, along with adequate and appropriate complementary feeding beginning after six months¹⁰. Mothers have little information about nutrition, exclusive breastfeeding, complementary feeding. According to National Family Health Survey (NFHS-3) report¹¹, about 50% children less than six months of age are exclusively breastfed; only 53% children below three years of age were given timely complementary feeding at age 6-8 months. Also, most mothers (57%) gave their last born child something to drink other than breast milk in the three days after delivery.

Majority of infant deaths can be averted promoting proper breast-feeding practices. Medical and public health experts advocate breast-feeding as the best method of feeding young infants for a wide variety of reasons. Breast-feeding improves growth and development of children and also has some significant effects on mothers. Certain social factors are responsible for prevailing under-nutrition like customs, misbeliefs, taboos etc. Some socio-cultural beliefs/barriers and misconceptions restrict mothers from utilizing their knowledge regarding infant feeding practices in actual practice. Lack of knowledge and practice regarding optimal infant and young child feeding (IYCF) might also be a reason for this. It constitutes a major component of child caring practices apart from socio-cultural, economic and demographic factors. Promotion of Optimal IYCF practices is essential for attaining and maintaining proper nutrition, health, and development of children and should be considered a key priority

for child survival strategy¹². Need for educating mothers for promotion of proper infant-feeding practices and other aspects of childcare has also been felt in several other studies¹³⁻¹⁹. The National Guidelines on Infant and Young Child Feeding point out that malnutrition among children occurs almost entirely during the first two years of life and is virtually irreversible after that. Recently, the effect of IYCF recommendations on the growth of infants and young children has been attempted in rural Bangladesh²⁰. WHO and UNICEF recognize well the importance of breast feeding on maternal and child health. Baby Friendly Hospital Initiative (BFHI) is also an important step in this direction. Despite global efforts for improving maternal and child health and specific efforts like Integrated Child Development Services (ICDS), malnutrition among children remains a significant problem in India.

Growing urbanization and rapidly changing lifestyle may endanger the breast-feeding behavior of mothers in cities like Chandigarh. There is lack of literature on IYCF among mothers in Chandigarh. There is also an urgent need of protecting optimal breast feeding practices. Present survey attempts to find status of IYCF practices urban, rural and slum community of Chandigarh.

II. MATERIAL AND METHODS

Present community based longitudinal study was conducted in urban rural and slum community of Chandigarh. Practices of mothers regarding IYCF were investigated in ten clusters including six randomly selected urban sectors, two slums and two rural areas.

Study Units:

Mothers of children below three years of age willing to participate in the study and satisfying the inclusion criteria served as study units/respondents.

Inclusion Criteria:

1. Mothers having children below three years of age.
2. Mothers willing to participate in the study.

Sample Design:

A stratified two-stage random sample design was adopted. At the first stage, from the sampling frame available, a sample of primary stage units (PSU), was selected randomly with probability proportional to size (PPS) in rural and urban and slum strata. A sample of ten clusters as PSU including six urban sectors, two slums and two villages was covered. At the second stage, a sample of households as second stage units were selected within each selected PSU of an optimum size with proportional allocation. All study units within selected households were interviewed to obtain the desired information.

Optimum Sample Size:

Power analysis was done to calculate optimum sample size for the baseline survey of the study. Following formula with approximation for large population was used:

$$Z^2_{1-\alpha/2} (1-P)$$

$$N_{opt.} = \frac{Z^2_{1-\alpha/2} (1-P)}{\epsilon^2 P},$$

where,

P = Anticipated population proportion

1 - α = Confidence Coefficient

ϵ = Relative precision, and

Z(.) is the value of standard normal variate

Optimum sample size of mothers was calculated on the basis of various key parameters of breastfeeding behaviour of mothers. In the pilot survey, key parameters of breastfeeding behaviour of mothers were observed as 58% initiating breastfeeding within 6 hours, 57% giving colostrum, 60% not giving prelacteal feed (PLF) and only about 55% exclusive breast feeding rate for six months. Optimum sample size for mothers calculated on the basis of these key parameters, assuming 5% relative precision and 95% confidence coefficient varied up to 722 Accordingly, a sample of an optimum size of 726 mothers was selected in the baseline survey.

Study Design:

Data Collection Tools:

Mothers of selected children who were willing to participate in the study were interviewed for collecting information on selected socio-demographic characteristics: age of children, caste, religion, socio-economic status (SES), educational status of mother; IYCF practices: initiation of breastfeeding, feeding of colostrum, exclusive breastfeeding (EBF) up to 6 months, complementary feeding, feeding of colostrums, etc Non-respondents arising due to any reason in the study were replaced by new participants selected at random. Respondents were interviewed in privacy to collect the desired information using pre-designed, pre-tested interview schedules House-to-house survey was conducted for this purpose. Field problems faced during data collection were solved time to time.

Optimality of IYCF practices was assessed in terms of not giving any pre lacteal feed (PLF), optimal timings for start of complementary feeding (6-9 months), Colostrum Feeding and Exclusive Breastfeeding (EBF) for six months.

Ethical Considerations:

Ethical Guidelines for biomedical research on human participants issued by ICMR (2006)⁹ were followed and confidentiality of responses was ensured. Approvals by Institutional Research Committee and Institutional Ethics Committee (IEC) to undertake the project was granted.

III. DISCUSSION

The study was conducted with the purpose of studying IYCF status of mothers. Exclusive Breastfeeding practice (six months) was only 21.9 % in this study. Timely start of Complementary Feeding during 6-9 months was found to be very low, only 50.3% mothers practiced it and 14.0% mothers started Complementary Feeding prior to six months of age which is not desired. Pre-lacteal feeding was found to be significantly associated with educational status of mother and gender of the child.

Colostrums feeding was found to be significantly associated with educational status of mothers and marital duration. Children who were fed colostrum were more likely to be normal as compared to those who were not fed colostrum. There were 44.4% malnourished children in case of colostrum feeding by their mothers as compared to 49% among those who were not fed colostrum. Migratory population (With stay less than 1 year in Chandigarh) illiteracy of mother and higher marital duration were found to be significant risk factors of deprivation of children from colostrums. Age of mother below 21 years, higher age of mother at delivery were found to be significant risk factors of not feeding colostrums to babies by mothers.

Prelacteal feeds were practiced by 58.2% mothers in our survey. In some studies reported earlier this percentage is found quite high as even 97.7% in another study²³. There are several other studies reporting high prevalence of giving prelacteal feeds²⁴. There are some studies reporting high prevalence of giving prelacteal feeds^{24,26,27}. Prelacteal feeding was about 36.1% in an Urban Community of Mumbai as reported by Kulkarni, Anjenaya and Gujar (2004)²⁸. Prelacteal feeding was found to be significantly associated with educational status of mother and gender of the child in this survey.

Exclusive breastfeeding practice (six months) was not so common and only 21.9 % in the study area. According to National Family Health Survey (NFHS-3) report¹¹, about 50% children less than six months of age are exclusively breastfed; only 53% children below three years of age were given timely complementary feeding at age 6-8 months. Khokhar et al (2003)²⁹ found exclusive breast feeding by 35.2% mothers in Urban Slums of Delhi. Exclusive breast feeding for six months was found to be significantly associated with age at marriage and rest of the characteristics were not found the

significant correlates for this practice. Age of mother, educational level of mother and gender of child came out to be significant correlates of PLF to be given. Male children of educated mothers above 21 years of age were at higher risk of receiving prelacteal feeding.

Complementary feeding during 6-9 months was found to be very low in this survey and only 50.3% mothers practiced it and 14.0% mothers started complementary feeding prior to six months of age. According to National Family Health Survey (NFHS-3) report¹¹, only 53% children below three years of age were given timely complementary feeding at age 6-8 months. Timely start of complementary feeding was found to be significantly associated with age of mother in this survey.

IV. CONCLUSIONS AND SUGGESTIONS

Present study concludes that IYCF practices in the study area are not satisfactory and several socio-demographic factors particularly low educational status of mother came out to be significant correlate of IYCF practices adopted by mothers. Optimal IYCF practices can be promoted by enhancement of female literacy and some other community based efforts to bridge the gaps existing between knowledge and practice of mothers.

BIBLIOGRAPHY

- [1] Status of Infant and Young Child Feeding, Delhi, Breastfeeding Promotion Network of India (BPNI), 2003.
- [2] Kumar D, Goel NK, Mittal PC, Misra P. Influence of infant-feeding practices on nutritional status of under-five children. *Indian J Pediatr* 2006;73:417-21.
- [3] Hop LT, Gross R, Giay T, Sastroamidjojo S, Schultink W, Lang NT. Premature complementary feeding is associated with poorer growth of Vietnamese children. *J Nutr* 2000;130:2683-90.
- [4] Victora C G, Smith P G, Vaughan P J, Nobre L C, Lombardi C et al. Infant feeding and deaths due to diarrhea- A case-control study. *Am J Epidemiol* 1989;129:1032-41.
- [5] WHO Collaborative Study Team. Effect of breastfeeding on infant and child mortality due to infectious diseases in less developed countries: a pooled analysis. *Lancet*.2000;355:451-55.
- [6] Diaz S, Herreros C, Aravena R, Casado ME, Reyes MV, Schiappacasse V. Breast-feeding duration and growth of fully breastfed infants in a poor urban Chilean population. *Am J Clin Nutr* 1995;62:371-6.
- [7] Eckhardt CL, Suchindran C, Gordon- Larsen P, Adair LS. The association between diet and height in the post infancy period changes with age and socio-economic status in Filipino youths. *J Nutr* 2005;135:2192-8.
- [8] Bloss E, Wainaina F, Bailey BC. Prevalence and predictors of under-weight, stunting and wasting among children aged 5 and under in Western Kenya. *J Trop Pediatr* 2004;50:260-70.
- [9] Mamiro PS, Koesteren P, Roberfried D, Tatala S, Opsomer AS, Van Camp JH. Feeding practices and factors contributing to wasting, stunting, and iron-deficiency anaemia among 3-23 month old children in Kilosa District, rural Tanzania. *J Health Popul Nutr* 2005;23:222-30.
- [10] The Global Strategy for Infant and Young Child Feeding, WHO/UNICEF, 2003.)

[11] National Family Health Survey2006-07, International Institute for Population Sciences, Mumbai, India, ORC Macro, Maryland, USA, Oct. 2000.

[12] Gupta A. Infant and Young Child Feeding An ‘Optimal’ Approach, Economic and Political Weekly, August 26, 2006.

[13] Kumar D, Agarwal N, Swami HM. Socio-demographic correlates of breast-feeding in urban slums of Chandigarh. Indian J Med Sci 2006; 60:461-466.

[14] Jeesson UC, Richard J. Factors influencing breastfeeding behavior. Indian Pediatr 1989;26: 997-1002.

[15] Kumar S, Nath LM, Reddaiah VP. Factors influencing prevalence of breastfeeding in a resettlement colony of New Delhi. Indian J Pediatr 1989;56:385-91.

[16] Swami HM, Bhatia V, Bhatia SPS. Breast-feeding practices in peri-urban community of Chandigarh, Indian J. Prev. & Soc. Med., Vol. 33, No. 1&2, 2002.

[17] Caulfield LE, Huffman SI, Piwoz EG. Intervention to improve intake of complementary foods by infant 6-12 months of age in developing countries. Impact on growth and on the prevalence of malnutrition and potential contribution to child survival. Food Nutr Bull 1999;20:183-200.

[18] Sachdev HPS, Krishna J, Puri RK, Satya-narayana L, Kumar S. Water supplementation in exclusively breastfed infants during summer in the tropics. Lancet 1991; 337(8747): 929-933.

[19] Brennan L, McDonald J, Shlomowitz R. 2004. Infant feeding practices and chronic child malnutrition in the Indian states of Karnataka and Uttar Pradesh. Economics and Human Biology, 2: 1, 139-158.

[20] Sethi V, Kashyap S, Seth V, 2003, Effect of nutrition education of mothers on infant feeding practices Indian Journal of Pediatrics: 70, 6, 463-6.

[21] Kapur D, Sharma S and Agarwal KN. Dietary Intake and Growth Pattern of Children 9- 36 months of Age in an Urban Slum in Delhi. Indian Pediatrics 2005, 42:351-356.

[22] Gareth Jones, Richard W S, Robert E B, Zulfiqar A Bhutta, Saul S Morrus et al. How many child deaths can we prevent this year? Lancet 2003;362: 65-71.

[23] Bhardwaj N, Hasan SB and Zaheer M. Breast-feeding and weaning practices – A rural study in Uttar Pradesh. The Journal of Family Welfare – Vol. 37, 1991, pp. 23-29.

[24] Kumari S, Saili A, Jain S, Rhargava Uma, Gandhi G et al. Maternal attitude and practices in initiation of newborn feeding. Indian Journal of Pediatrics – Vol. 55, 1988, pp. 905-911.

[25] Singh S, Bhasin SK, Ingle GK and Raut DK. Pattern of breast-feeding practices in a rural community from Haryana. Journal of Tropical Pediatrics –Vol. 36, December 1990, pp.334- 335.

[26] Singhania RU, Kabra SK and Bansal A. Infant feeding practices in educated mothers from upper socio-economic status. Indian Pediatrics – Vol. 27, June 1990, pp. 591-593.

[27] Srivastava SP, Sharma VK and Kumar V. Breast-feeding pattern in neonates. Indian Pediatrics – Vol. 31, September 1994, pp. 1079-1082.

[28] Kulkarni RN, Anjenaya S, Gujar R. Breast feeding practices in an Urban Community of Kalamboli, Navi Mumbai. Indian J Community Med 2004;29:179-80.

[29] Khokhar A, Singh S, Talwar R, Rasanja SK, Badhan SR, Mehra M. A study of malnutrition among children aged 6 months to 2 years from a resettlement colony of Delhi. Indian J Med Sci 2003; 57:286-9.

Table-1: Optimal Iycf Practices By Socio- Demographic Characteristics Of Mothers

Age of mother	Base	PLF (Not Given) N=304	Optimum timing for CF N=365	Colostrum Feeding N=582	EBF for six months N=159
Below 18	2	0	1(50.0%)	2(100.0%)	
18-21	307	146(47.6%)	150(48.9%)	261(85.0%)	71(23.1%)
22- 25	363	152(41.9%)	207(57.0%)	305(84.0%)	83(23.4%)
26-30	15	6(40.0%)	7(46.7%)	14(93.3%)	5(33.3%)
Age at marriage					
Below 18	94	47(50.0%)	50(53.2%)	73(77.7%)	16(17.0%)
18-21	510	219(42.9%)	278(54.5%)	439(86.1%)	120(23.5%)
22- 25	83	38(45.8%)	37(44.6%)	70(84.3%)	23(27.7%)
Duration of Stay Chandigarh in years					
Up to 1	567	249(43.9%)	298(52.6%)	474(83.6%)	138(24.3%)
1-2	30	13(43.3%)	14(46.7%)	27(90.0%)	4(13.3%)
2-3	36	16(44.4%)	19(52.8%)	31(86.1%)	7(19.4%)
3- 4	21	13(61.9%)	15(71.4%)	18(85.7%)	4(19.0%)
4-5	33	13(39.4%)	19(57.6%)	32(97.0%)	6(18.1%)

SES					
Low	383	170(44.4%)	209(54.6%)	323(83.3%)	84(21.9%)
Middle	147	57(38.8%)	82(55.8%)	128(87.1%)	33(22.4%)
High	157	77(49.0%)	74(47.1%)	131(83.4%)	42(26.7%)
Age at Previous Delivery					
Below 18	74	25(33.8%)	40(54.1%)	62(83.8%)	12(16.2%)
18-21	348	161(46.3%)	188(54.0%)	295(84.8%)	85(24.4%)
22- 25	259	116(44.8%)	135(52.1%)	219(84.6%)	59(22.7%)
26-30	6	2(33.3%)	2(33.3%)	6(100.0%)	3(50.0%)
Birth Spacing					
Not applicable/ No Response	353	149(42.2%)	193(54.7%)	303(85.8%)	86(24.3%)
12-24	75	41(54.7%)	29(38.7%)	52(69.3%)	20(26.6%)
25-36	212	95(44.8%)	123(58.0%)	186(87.7%)	40(18.8%)
37-48	43	17(39.5%)	20(46.5%)	37(86.0%)	12(27.9%)
48 and above	4	2(50.0%)	0	4(100.0%)	1(25%)
Age of Youngest child in months					
Below 6	205	99(48.3%)	16(7.8%)	168(82.0%)	61(29.7%)
6-9	136	60(44.1%)	93(68.4%)	123(90.4%)	22(16.1%)
10-12	86	35(40.7%)	68(79.1%)	72(83.7%)	19(22.0%)
13-24	208	87(41.8%)	155(74.5%)	174(83.7%)	43(20.6%)
25-36	52	23(44.2%)	33(63.5%)	45(86.5%)	14(26.9%)
Family Type					
Joint	399	169(42.4%)	214(53.6%)	337(84.5%)	92(23.0%)
Nuclear	287	135(47.0%)	151(52.6%)	245(85.4%)	67(23.3%)
Extended	1	0(0%)	0	0	
Education of Respondent					
Illiterate	107	55(51.4%)	62(57.9%)	81(75.7%)	24(22.4%)
Primary	58	33(56.9%)	24(41.4%)	48(82.8%)	20(34.4%)
Middle	86	37(43.0%)	49(57.0%)	78(90.7%)	15(17.4%)
High School	102	37(36.3%)	56(54.9%)	92(90.2%)	21(20.5%)
Intermediate	115	46(40.0%)	60(52.2%)	98(85.2%)	30(26.0%)
Graduate	117	51(43.6%)	62(53.0%)	100(85.5%)	25(21.3%)
PG	87	38(43.7%)	44(50.6%)	76(87.4%)	22(25.2%)
Professional	15	7(46.7%)	8(53.3%)	9(60.0%)	2(13.3%)

Education of Husband					
Illiterate	47	20(42.6%)	27(57.4%)	39(83.0%)	8(17.0%)
Primary	51	28(54.9%)	26(51.0%)	42(82.4%)	11(21.5%)
Middle	88	46(52.3%)	51(58.0%)	68(77.3%)	15(17.0%)
High School	130	51(39.2%)	67(51.5%)	114(87.7%)	32(24.6%)
Intermediate	139	53(38.1%)	77(55.4%)	121(87.1%)	36(25.8%)
Graduate	138	66(47.8%)	68(49.3%)	117(84.8%)	35(25.3%)
PG	60	24(40.0%)	33(55.0%)	54(90.0%)	18(30.0%)
Professional	34	16(47.1%)	16(47.1%)	27(79.4%)	4(11.7%)
Occupation					
Housewife	629	280(44.5%)	336(53.4%)	533(84.7%)	146(23.2%)
Service	33	11(33.3%)	14(42.4%)	28(84.8%)	8(24.2%)
Business	1	1(100%)	1(100.0%)	1(100%)	1(100.0%)
Labourer	6	3(50.0%)	4(66.7%)	5(83.3%)	0
Skilled Worker	4	1(25.0%)	2(50.0%)	2(50.0%)	0
Others	14	8(56.1%)	8(57.1%)	13(92.9%)	4(28.5%)
Occupation of husband					
Unemployed	3	2(66.7%)	2(66.7%)	3(100%)	0
Service	223	99(44.4%)	110(49.3%)	191(85.7%)	49(21.9%)
Business	101	48(47.5%)	62(61.4%)	82(81.2%)	34(33.6%)
Labourer	126	66(52.4%)	70(55.6%)	100(79.4%)	30(23.8%)
Skilled worker	81	28(34.6%)	46(56.8%)	73(90.1%)	15(18.5%)
Others	153	61(39.9%)	75(49.0%)	133(86.9%)	31(20.2%)
Duration since Marriage					
No Response	144	62(43.1%)	66(45.8%)	117(81.3%)	36(25.0%)
Up to 1	317	135(42.6%)	175(55.2%)	287(90.5%)	75(23.6%)
2-5	189	89(47.1%)	101(53.4%)	147(77.8%)	37(19.5%)
6-9	30	13(43.3%)	19(63.3%)	25(83.3%)	8(26.6%)
10 and above	7	5(71.4%)	4(57.1%)	6(85.7%)	3(42.8%)
Overall	687	304(44.3%)	365(53.1%)	582(84.7%)	159(23.1%)

Table-2: Logistic Regression Of Risk Factors Of Giving Plf

Variable	B	Sig.	Exp(B)	95.0% C.I.for EXP(B)	
				Lower	Upper

X ₁	-.479	.036	.619	.396	.969
X ₂	.295	.288	1.343	.779	2.316
X ₃	.048	.819	1.049	.696	1.581
X ₄	.218	.224	1.243	.875	1.767
X ₅	.140	.435	1.151	.809	1.636
X ₆	.278	.231	1.320	.838	2.080
X ₇	-.023	.894	.977	.694	1.376
X ₈	-.514	.014	.598	.397	.901
X ₉	-.184	.535	.832	.465	1.488
X ₁₀	.154	.375	1.166	.830	1.639
X ₁₁	-.342	.029	.710	.522	.965
X ₀	.147	.710	1.158		

Table-3: Logistic Regression Of Risk Factors Of Not Feeding Colostrum

Variable	B	Sig.	Exp(B)	95.0% C.I.for EXP(B)	
				Lower	Upper
X ₁	-.171	.582	.843	.459	1.548
X ₂	-.131	.733	.878	.414	1.860
X ₃	.666	.047	1.947	1.009	3.756
X ₄	-.249	.327	.780	.474	1.282
X ₅	.409	.105	1.506	.918	2.469
X ₆	.134	.668	1.144	.620	2.111
X ₇	.291	.240	1.338	.823	2.175
X ₈	.810	.004	2.248	1.296	3.898
X ₉	-.039	.923	.962	.433	2.135
X ₁₀	-.707	.002	.493	.312	.778
X ₁₁	.101	.641	1.107	.723	1.693
X ₀	-2.219	.000	.109		

Table-4: Logistic Regression Of Risk Factors Of Improper Complementary Feeding

Variable	B	Sig.	Exp(B)	95.0% C.I.for EXP(B)	
				Lower	Upper
X ₁	.818	.000	2.266	1.442	3.561
X ₂	-.559	.044	.572	.332	.985
X ₃	.211	.315	1.235	.818	1.863
X ₄	-.167	.347	.846	.597	1.199
X ₅	-.138	.442	.871	.613	1.238
X ₆	-.484	.038	.616	.390	.973

X ₇	-.027	.879	.974	.692	1.370
X ₈	.107	.609	1.113	.739	1.676
X ₉	-.018	.951	.982	.552	1.748
X ₁₀	.054	.756	1.055	.751	1.482
X ₁₁	.208	.184	1.231	.906	1.672
X ₀	.155	.692	1.168		

Table-5: Logistic Regression Of Risk Factors Of No Ebf

Variable	B	Sig.	Exp(B)	95.0% C.I.for EXP(B)	
				Lower	Upper
X ₁	-.206	.354	.814	.526	1.259
X ₂	-.467	.092	.627	.364	1.080
X ₃	.209	.324	1.233	.813	1.869
X ₄	-.131	.462	.878	.620	1.243
X ₅	-.085	.635	.918	.647	1.305
X ₆	.090	.691	1.094	.702	1.707
X ₇	.133	.448	1.142	.811	1.608
X ₈	-.044	.834	.957	.633	1.447
X ₉	.456	.131	1.578	.873	2.854
X ₁₀	.142	.417	1.152	.818	1.623
X ₁₁	-.039	.803	.962	.707	1.308
X ₀	-.471	.236	.625		