Journal Homepage: - www.journalijar.com
INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)
Article DOI:10.21474/IJAR01/5010
DOI URL: http://dx.doi.org/10.21474/IJAR01/5010
ISSN NO. 2320-5407

RESEARCH ARTICLE

BREAST FEEDING PRACTICES AMONGST JANANI SURAKSHA YOJANA BENEFICIARIES, A CROSS SECTIONAL STUDY IN CENTRAL UTTAR PRADESH, INDIA.

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Manuscript Info

Manuscript History

Received: 29 May 2017
Final Accepted: 31 June 2017
Published: July 2017

Abstract

To evaluate the effect of implant platform/abutment design/ crown material combinations on the stress distribution around implant-supported dental restorations. A literature search was made in three databases including PubMed, Cochrane and Web of Science. Inclusion criteria were in vitro studies, switched implant platform versus regular implant platform, titanium implants, internal hex connection and stress values of bone. Two review authors independently screened the articles for inclusion. This was followed by hand searching in the reference lists of all eligible studies for additional studies. Results: the search resulted in 16 eligible studies concerning the effect of platform switching on peri-implant bone stress, however no papers were found studying the effect of different implant platform/ abutment design /crown material complexes on bone stress. From the included studies, platform switching concept can replace conventional platform designs to improve implant survival rate, provided it should be used within its indications.

Introduction:-

Exclusive breast feeding (EBF) plays a very vital role in maintaining the appropriate health and development of infants, as it helps in decreasing the risk for Otitis Media, Respiratory tract infection, Diarrhea, Early Childhood Obesity and many other metabolic diseases[1]. As per the data it has been showed that EBF reduces infant mortality rates by up to 13% in low-income countries[2]. It has been proved that the nutritional deficiencies during first two years of child`s life is crucial for its cognitiveas well as educational development and it also leads to reduced economic productivity[3, 4, 5].World Health Organisation (WHO) also recommends exclusive breast feeding for initial six months and complementary feeding from six months onwards for the overall growth and development of infant[6]. It has been seen that suboptimal exclusive Breast Feeding practices during six years increases the morbidity and mortality of infants[7,8,9].Exclusive Breast feeding means that no other liquid apart from breast milk should be given with an exception of Vitamin A, Minerals and medicines[10]. It has been seen that almost 13% of infant deaths are reduced due to exclusive breast feeding in low income countries[2].

Prelactealfeeding giving food or liquid to a child before initiation of breast feeding has showed a delay on exclusive breast feedingatleast for initial six months[11] and it also interferes with exclusive breast feeding[12, 13, 14].There is a vicious cycle between exclusive breast feeding and prelacteal feeding[15].The Fourth National Family Health Survey (NFHS-4)of India reported that overall 41.6% of children aged under three years were breastfed within one hour of birth, 54.9% of the children aged zero to five months were exclusively breastfed, and 42.7% of the children aged six to nine months received solid or semi-solid food and breast milk[16]. In Indian setup the practice of exclusive breast

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feeding is being followed but the initiation of breast feeding is still sub optimal as the Colostrum is generally being discarded due to superstitions, and various social and cultural beliefs[17].Hence, so as to ensure proper growth and development of child, there is an urgent need for Continuous vigilance over feeding practices and by doing so, necessary policies can be devised for the betterment of Infant health. Therefore, the current study has been conducted to assess the determinants of breastfeeding practices amongst JananiSurakshaYojana Beneficiaries in Central Uttar Pradesh.

Materials and methods:-

Study design:-

The present study is a cross sectional study conducted amongst the women who were admitted at health Centers in three blocks of rural area of Lucknow district.

Sample size:-

Out of nine blocks in Lucknow district, three Blocks were selected by simple random sampling method. One primary health center (PHC) and two community health centers (CHC), which conduct deliveries on routine basis. A sample size of 266 was estimated by taking the prevalence of contraceptive method usage as 37%. The design effect of 1.5 was taken due to multistage sampling procedure. The starting point was chosen randomly. Thus a total of 400 women who delivered in the labor wards of the health centers were interviewed and enrolled. Ethical issues Permission from ethical committee of the institute was taken, and all beneficiaries were explained about the purpose of study. Written informed consent was obtained from these women after explaining in detail about the study.

Data collection:-

A pre tested semi-structured questionnaire was prepared to know the determinants of family planning practices. Pilot testing was done over 40 beneficiaries. Modified UdaiPareek Scale was used to know socio economic status of the mothers.

Data analysis:-

SPSS 20 version was used to analyze the data and results were presented in the form of frequency and percentages.

Results:-

The Initiation of breastfeeding within one hour was significantly associated with the type of family (p=0.04), education of beneficiaries (0.009) and education of husband (0.002).The practice of Colostrum given was significantly associated only with education (p=0.04) of husband.The practice of pre-lacteal feed was significantly (p=0.008) associated with the caste of the beneficiaries.

Discussion:-

In the current study it has been found that the Initiation of breastfeeding within one hour was significantly associated with the type of family (p=0.04), education of beneficiaries (0.009) and education of husband (0.002). **Tatiana O V et al** in Brazil showed a significantly lower rate of breastfeeding in the first hour after delivery among mothers older than 20 years[18]**. Agho et al** of Nigeria also showed that maternal education was directly related to breast feeding practices[19].In the multivariate analysis, the factors significantly associated with cessation of breastfeeding during infancy were the women highest level of education[20]Acharya P et al, Verma A et aland**Ku CM et al** have found that mother's with low educational status initiated early breast feeding thereby suggesting the need of education promotion to change feeding practices[21, 22, 23].While education has positive impact over exclusive breast feeding, a study conducted by **G Hazel et al** showed that increasing education leads to decreasing trends in exclusive breast feeding as the educated women are mostly working[20]. **Hameed N et al, Kayyali M et al, Scott, J.Aet al**, **Hawkins, S.Setal**also showed that education is one of the hindering factor of exclusive breast feeding[24, 25, 26, 27].**Kohan S et al** in her study conducted in Iran found that educated husbands promoted the mothers for exclusive breast feeding[28]**.Abolghasemi N et al** in her study concluded that husbands education was found as significant factor in encouraging their wives for exclusive breast-feeding[29].

In the current study it was concluded that prelacteal feeding was significantly related with caste of the family. Global studies in Tabora, Tanzania, Malawi, Zambia, Nigeria and India revealed thatthe common reasons for early initiation of complementary feeding were inadequate breast milk, and mothers' perception that the child was thirsty[30, 31, 32, 33,34]. Despite being educated, the magnitude of prelacteal feeding is more in Vietnam[35] Nepal[36] and

Uganda[37], **Legesse M et al** conducted a study in 623 women and found that 33% were giving pre-lacteal feeds to their infants, during initials 6 months of birth[38].**Salve D et al** in their study concluded that 42.7% practiced prelacteal feed[39].**Patel A et al**found that delayed initiation Is statistically significant to prelacteal feeding ($P < .001$)[40]. A study in Chandigarh conducted by **Parashar A et al**showed that 48.9% of women were giving pre lacteal feed[41]. Prelacteal feed was also the feeding trend in 80% Kashmiri women as per the study conducted by **Raina SK et al.** [42]**. Madhu *et al***. conducted a study in Karnataka and reported a lower prevalence of prelacteal feeding than the current study (19%)[43].

Conclusion:-

Despite so much of awareness regarding exclusive breast feeding the gap is still there. The practice of mothers giving prelacteal feeds to their babies could be reduced by providing knowledge regarding exclusive breast feeding. EBF promotion programmes should target all mothers, but with special focus on poor and illiterate families. Husbands should also be told regarding beneficial effects of exclusive breast feeding.Finally, intervention studies, including peer counselling are needed to improve EBF among mothers.

Table 1:- Relation between biosocial profile of the beneficiaries and initiation of breast feeding within one hour.

Biosocial profile	**No. Of beneficiaries**	***Initiation of breastfeeding within one hour***				**p-value**
		YES		NO		
Age (yrs)		No.	%	No.	%	
18-24	75	22	29.3	53	70.7	0.49
25-30	142	35	24.6	107	75.4	
31-35	107	36	33.6	71	66.4	
36-40	76	22	28.9	54	71.1	
Religion						
Hindu	313	94	30.0	219	70.0	0.28
Muslim	87	21	24.1	66	75.9	
Caste						
General	79	20	25.3	59	74.7	0.25
OBC	152	39	25.7	113	74.3	
SC/ST	169	56	33.1	113	66.9	
Type of family						
Nuclear	265	85	32.1	180	67.9	0.04*
Joint	135	30	22.2	105	77.8	
Education of beneficiaries						
Illiterate	113	43	38.1	70	61.9	0.009*
Just literate	104	34	32.7	70	67.3	
Primary school	51	9	17.6	42	82.4	
Middle & above	132	29	22.0	103	78.0	
Occupation of beneficiaries						
Unemployed	132	31	23.5	101	76.5	0.20
Farm worker	86	25	29.1	61	70.9	
Unskilled worker	99	36	36.4	63	63.6	
Others	83	23	27.7	60	72.3	
Education of Husband						
Illiterate	108	44	40.7	64	59.3	0.002*
Just literate	99	32	32.3	67	67.7	
Primary school	46	8	17.4	38	82.6	
Middle & above	147	31	21.1	116	78.9	
Occupation of husband						
Unemployed	122	30	24.6	92	75.4	0.46
Farm worker	93	29	31.2	64	68.8	
Unskilled worker	102	34	33.3	68	66.7	
Others	83	22	26.5	61	73.5	

Socio economic status						
III	85	19	22.4	66	77.6	0.27
IV	90	25	27.8	65	72.2	
V	225	71	31.6	154	68.4	

Table 2:-Relation between biosocial profile of the beneficiaries and colostrumsgiven .

Biosocial profile	**No. Of beneficiaries**	***Colostrum given***				**p-value**
		YES		NO		
Age (yrs)		No.	%	No.	%	
18-24	75	65	86.7	10	13.3	0.22
25-30	142	123	86.7	19	13.4	
31-35	107	101	94.4	6	5.6	
36-40	76	67	88.2	9	11.8	
Religion						
Hindu	313	275	87.9	38	12.1	0.17
Muslim	87	81	93.1	6	6.9	
Caste						
General	79	75	94.9	4	5.1	0.13
OBC	152	135	88.8	17	11.2	
SC/ST	169	146	86.4	23	13.6	
Type of family						
Nuclear	265	234	88.3	31	11.7	0.53
Joint	135	122	90.4	13	9.6	
Education of beneficiaries						
Illiterate	113	104	92.0	9	8.0	0.14
Just literate	104	87	83.7	17	16.3	
Primary school	51	44	86.3	7	13.7	
Middle &abobe	132	121	91.7	11	8.3	
Occupation of beneficiaries						
Unemployed	132	114	86.4	18	13.6	0.36
Farm worker	86	77	89.5	9	10.5	
Unskilled worker	99	87	87.9	12	12.1	
Others	83	78	94.0	5	6.0	
Education of Husband						
Illiterate	108	101	93.5	7	6.5	0.04*
Just literate	99	81	81.4	18	18.2	
Primary school	46	40	87.0	6	13.0	
Middle & above	147	134	91.2	13	8.8	
Occupation of husband						
Unemployed	122	107	87.7	15	12.3	0.84
Farm worker	93	85	91.4	8	8.6	
Unskilled worker	102	91	89.2	11	10.8	
Others	83	73	88.0	10	12.0	
Socio economic status						
III	85	74	87.1	11	12.9	0.79
IV	90	80	88.9	10	11.1	
V	225	202	89.8	23	10.2	

Table 3:- Association between biosocial profile of the respondents and pre-lacteal feeding.

Biosocial profile	No. Of beneficiaries	*Pre-lacteal feed given*				p-value
		YES		NO		
Age (yrs)		No.	%	No.	%	
18-24	72	57	79.2	15	20.8	0.11
25-30	132	87	65.9	45	34.1	
31-35	101	63	62.4	38	37.6	
36-40	72	51	70.8	21	29.2	
Religion						
Hindu	296	208	70.3	88	29.7	0.14
Muslim	81	50	61.7	31	38.3	
Caste						
General	74	45	60.8	29	39.2	0.008*
OBC	142	89	62.7	53	37.3	
SC/ST	161	124	77.0	37	23.0	
Type of family						
Nuclear	253	169	66.8	84	33.2	0.33
Joint	124	89	71.8	35	28.2	
Education of beneficiaries						
Illiterate	106	70	66.0	36	34.0	0.62
Just literate	96	69	71.9	27	28.1	
Primary school	49	36	73.5	13	26.5	
Middle & above	126	83	65.9	43	34.1	
Occupation of beneficiaries						
Unemployed	124	89	71.8	35	28.2	0.61
Farm worker	81	53	65.4	28	34.6	
Unskilled worker	91	64	70.3	27	29.7	
Others	81	52	64.2	29	35.8	
Education of Husband						
Illiterate	102	66	64.7	36	35.3	0.29
Just literate	91	65	71.4	26	28.6	
Primary school	43	34	79.1	9	20.9	
Middle & above	141	93	66.0	48	34.0	
Occupation of husband						
Unemployed	114	83	72.8	31	27.2	0.52
Farm worker	87	55	63.2	32	36.8	
Unskilled worker	95	66	69.5	29	30.5	
Others	81	54	66.7	27	33.3	
Socio economic status						
III	77	55	71.4	22	28.6	0.68
IV	86	56	65.1	30	34.9	
V	214	147	68.7	67	31.3	

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