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# **Lactating Women and Oral Health**

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# **Contents**

Abstract	3
Introduction	4
Materials and Methods	5
Statistical Analysis	6
Results	6
Discussion	8
Conclusion	10
References	11

#### **Abstract**

The Present study was done to Compare gingival and dental heath indices between Lactating and non – Lactating woman during first ten months after Child birth By determine prevalence of dental Caries, plaque and Calculus.

The Sample Consist of eighty females, Forty of them as Control group non-lactating women while another forty as study group Lactating women.

Found the breast feeding or nursing for milk production during Lactation Create many problems in oral cavity like dental decay, gingivitis and periodontitis even teeth loss.

The bad oral hygiene of Lactating women or breast feeding mothers due to loss of bone density in pregnancy and Lactation For growing babies in addition to Careless of Lactating women.

Key words: Oral health of breast feeding, nursing with Orel health, Dental Caries of Lactating women .

#### **Introduction**

Women Consider basic unit of family and Community due to physiological role in reproduction, the Lactation affect on mother's oral dental health .(1,2)

Lactation define as secretion of milk from mammary glands, usually Lactation start post-pregnancy as nursing or feeding milk which initiated at delivery, the breast milk Contains nutrients which babies need in first months of life like vitamins, proteins, Fat, Carbohydrate and water. (3,4)

While oral heath according to WHO define as a Condition of free oral cavity from diseases like caries, gingivitis, periodontitis, xerostomia and also limiting in mastication and speaking. (5,6)

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During Lactation there are disturbance in hormones secretion, the direct hormones control for milk production during Lactation prolactin and oxytocin while oestrogen indirect affect. (6.7)

For breast feeding found advantages and disadvantages for both mother and child. For mother the advantage of breast feeding decrease risk for rheumatoid arthritis, hypertension, diabetes and cardiovascular disease, while for child the breast feeding provide health for development and protect from illness and disease during infancy. (8,9)

While disadvantages of Lactation to mother usually during breast feeding mother less freediom due to baby need every 2 to 3 hours for Lactation and also mother complain from painful in breast. (10,11)

Also Lactation it benefit economically and save money and babies heath which lower medical costs and reduce amount of work which loss to care of sick baby. (12,13)

#### **Materials and Methods**

Eighty females health (no any systemic diseases) divided into two groups

**Group I.** Control group, Forty non Lactating Females random Selection

**GroupII.** Study group, Forty Lactating Females.

Then oral clinical examination for both group done by using dental mouth mirror with probes examine from dental caries, plaque index and calculus index, according to silness I and Löe H.(14, 15)

By touch the internal surface of gingiva sulcus by use probe it bleeding from sulcus after half minute consider positive and if absence of bleeding was recorded as negative for gingival index the periodontal probe was move horizontal along soft tissues of gingival sulcus, usually gingival index determined for four areas of gingiva including mesiobuccal, distobuccal, buccal and Lingual mangins.

# **Statistical Analysis**

Data were presented Calculation by using descriptive statistics analysis (mean, standard deviation, frequencies) and then compare between two groups using Chi-square for eighty women, Forty of them Lactating and other forty non - Lactating women.

#### Results

In table (1): Found dental caries of study group Lactating women higher than of control group non-Lactating women with highly significant.

**Table (1):** Mean  $\pm$  SD and P – Value for dental caries of study and control groups .

Group	Number	Mean <u>+</u> SD	P - Value
Control	40	2.02 ± 0.01	P < 0.001
Study	40	4.21 <u>+</u> 2.10	

In table (2): Showed for gingival index (GI) in study group Significantly higher mean + SD than control group.

**Table (2):** Mean  $\pm$  SD and P – Value for gingival index for two groups .

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Control	40	3.01 <u>+</u> 0.35	P < 0.05
Study	40	6.21 <u>+</u> 0.82	

**In table (3):** Showed Lactating females significant in mean + SD for plaque index when compare with non- Lactating females.

Table (3): Mean + SD and of plaque index of two groups.

Group	Number	Mean ± SD	P - Value
Control	40	2.83 <u>+</u> 0.26	P < 0.001
Study	40	4.93 <u>+</u> 0.52	

In table (4): Found Calculus index which indicated of periodontal diseases higher in study group then control group.

Table (4): Mean + SD and P - Value of calculus index for two groups .

Group	Number	Mean <u>+</u> SD	P - Value
Control	40	$3.02 \pm 0.15$	P < 0.001
Study	40	5.21 <u>+</u> 0.41	

### **Discussion**

The care of mouth is one of basic for lactating women usually need adequate oral care to eat and drink to obtain good oral health by use oral assessment guide . (2)

The oral cavity it reservoir for pathogens or diseases therefore need to maintaining the tissues and structure of mouth in healthy conditions . (6,7)

The bad oral health of Lactating women (study group) when Compare with non - Lactating women(control group) due to deficiency of calcium for growing babies and also careless of Lactating women for clean oral cavity due to changes in life situation. (3)

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Also Lactating women an Suffer from dry mouth (Xerostomia) which lead to increase prevalence of dental caries, gingivitis and periodontitis because saliva play a role in heath of oral cavity. (5,7)

Some time also lactating women Suffer from teeth grinding due to breast feeding and position of muscles lead to create tension in neck and head of Lactating women this tension help mothers to grind teeth during sleep. (9,10)

The main changes during lactation which affect on oral health in including saliva or fluid of oral cavity changes in compositions, concentrations also rate of flow which usually increasing in acidity of saliva leading to bad oral health .(4,5)

Also decrease in immune response lead to increase of gingiva microbes which consider one of most important problems during lactation like dental decay , gum diseases , halitosis and tooth erosion .(12)

The elevated levels of inflammatory markers (IL6 , IL8 and PGE2) have found in fluid of amniotic of child bearing women

Leading to periodontal and gingival diseases . (7)

For prevention and treatment of oral problems during lactation instruction to lactating women to visit dental clinics for receive appropriate treatment about teeth brushing, fluoride use, dental floss use, intake of calcium in food also intake of vit.D. (9,10)

#### Conclusion

The present research to Compare dental caries and gingivitis between Lactating and non- Lactating women during first ten month period after childbirth.

The dental caries and gingivitis significantly higher in Lactating women than non- Lactating women, Lactation consider one of risk factors in dental caries and gingival inflammation. (3,5)

There is a positive and significant relationship between Lactation and hormonal changes during period of breast feeding the gingiva affected by hormones and the epithelial barrier against bacteria and the rate of collagen synthesis and turnover in the connective tissue undergoes changes lead to gingivitis, the dented caries and gingivitis are Chronic prosses. (5)

The prevalence of dental caries, gingival inflammation and periodontal disease due to mothers neglect forget about basic oral hygiene because on caries of baby also due to loss of bone density which affect on gingiva and periodontium. (9,10)

The prolactin is a key hormone or control milk production during Lactation the infants sucking act the breast leads to generation of nerve signals that one transmitted by sensory nerves to hypothalamus in brain. (7)

#### References

- 1. World Health Organization. Baby-Friendly hospitals boost breast feeding in Newzealand URL 02/11/16(2014).
- 2. F.D.I World Dental Fedration. Oral health World wide. Geneve, switerzland. 19-26 (2014)
- 3. Donaldson M, Good child JH: pregnancy, breast-Feeding and drugs used in dentistry J. Am Dental Associ 143: 858-71(2012)
- 4. ThamR.Bowatte G.D harmagescietal. Breast Feeding and the risk of dental caries. a systematic review and meta-analysis:104:62-84 (2015)
- 5. Degano MP, DeganoRA. Breast feeding and health women. A primer for dental practitioner. NY state Dent J. 64 (3):62-4. (1998)
- 6. Saliva AE, Demarco FF. Eeldens CA. Oral health related quality of life and associated factors in Southern Brazilion elderly. 32(1): 35-45 (2015)

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- 7. Lours F. Sex hormonal imbalance and effect in oral health, J Dant Res, 41: 221 -226 (1983)
- 8. Zachariasen RD. The effect of elevated ovarian hormones on periodontal health women. ObstetGynecol clin J. 20(2): 21-30 (1993)
- 9. Brown, S., Stuant- Butler, D; Leane, C, Glover, K; Mitchell; A, Deverix J. Francis T, Ahkit J, weetra, D, etal Initiation and duration of breast feeding of Aboriginal infants in South Australia women Birth 32, 315-322. (2019)
- 10. Itartz, DL, Blain, Caplice, S, Allende, T, Anderson, , Hall, B, Mc Grath, L; Williams, K; Jarman, H,etal Evaluation of an Australian 31(8):128-41.(2011)
- 11. Aboriginal Model of maternity Care, The Malaber Community Midwifery link Service Women Birth, 32, 427-43.2007
- 12. Aldis, J,MillsKapallas, K, Lawrence, H.p. Broughton, J, R; etal. Follow up of on intervention to Reduce Dental caries in digenous Australian Children. AseCondany Analysis of a Randomized Clinical Tria. JAMA Net W.open 2. 190- 99. (2019)
- 13. Australian Government Department of Health Australian National Breastt feeding strategy 2018 and beyond. draft for public Consultation 1-47.2018
- 14. Silness I and Löe H. plaque Index. (1967)
- 15. Löe H and Silness I., Gingival Index. (1967)