

Knowledge and awareness about postpartum distress among the students of saveetha dental college

ABSTRACT:

Introduction:

Postpartum depression (PPD) is the most common psychiatric condition after childbirth. PD has adverse long-term consequences for the mother, the infant's development and the family environment symptoms-the core symptom of sadness or low mood, as well as fatigue/sleep disturbance and irritability. The aim of the study is to determine the Knowledge and awareness about postpartum distress among the students of saveetha dental college.

Materials & methods:

A cross-sectional survey was conducted among the study population with a sample size of 100. A self administered structured questionnaire was prepared and consisted of 15 questions. It was circulated to participants through an online platform (google form). The statistics were done using SPSS software, chi-square test was used to check the association and P value of 0.05 was said to be statistically significant. The pros of the survey are that the students of different lifestyles and cultures were surveyed. Children and adults were excluded from the survey. Simple random sampling method was the sampling method used to minimize the sampling bias.

Result:

Women during postpartum go through a lot of hormonal changes which lead to mood swings etc. They become very self-conscious about their body. Mothers can also be depressed due to financial trouble, lactation etc. Chi square test: $p\text{-value}=2.98 > 0.05$ hence significant.

Conclusion:

In summary, this study demonstrated an honest level of data and positive attitudes towards women with postpartum depression. However, negative beliefs, stigma, and misconceptions still prevailed among the relations.

Keywords: postpartum depression, questionnaire, Chi square analysis.

-INTRODUCTION:

Postpartum distress is a psychiatric disorder. It has adverse consequences for the mother. PPD is the costliest public health problem for women. Seeking help for PPD symptoms isn't a private decision, it includes the entire women group (1). A prior study shows that prenatal women are encouraged by their husband to seek help regarding PPD. Postpartum depression lasts from the onset of pregnancy till 12 months after birth (2). About 18% of pregnant women are depressed during pregnancy. 13-19% of new mothers have minor/major depression in the first year after delivery. Left untreated prenatal depression has a damaging impact on the women and their family (3). Women see their GP at 6-8 week postpartum. If a prenatal mental illness is identified by health professionals, NICE recommends GP as the first line of assessment. Studies reporting on psychosis illness are not considered anxiety or depression in the prenatal period is prevalent, not identified and needs unique attention (4). Better community mental health literacy is associated with positive helping and help seeking behavior. (5) Reduced stigma and reduced social distancing toward individuals with mental health problems and higher resilience in families affected by a mental health difficulty (6). Results suggested that awareness of postpartum depression was higher in the community, men and women difference in their knowledge and perception. (7) It is the lack of pleasure thanks to anxiety symptoms, panic attack, crying, depression, suicidal thoughts (6,8). In [India](#) PPD tends to be 22% evidence suggest that poor mental health cognitive and socio economic development of children are at great risk of developing delays, the children are at great risk of developing delays, behavioral problems, mother infant bonding disorder. (8). Unfortunately prenatal mental health remains an unrecognized part of MCH programs in India. Women in general enjoy special attention from family during their ~~pregnancy~~ pregnancy (9). Lack of family support will be an important risk factor for PPD. Postpartum depression affects about 15% of mothers. Studies have discovered several psychosocial and biological risk factors for PPD (9,10). The negative short term and long term effect on children development is well established. Treatment options include psychotherapy and antidepressant medication (9-11), depression during (12) PPD is a serious mental health problem for women and its complication has serious implications for the welfare

of the family and therefore the psychological development of the ~~kid~~-kid. The purpose of this study is to summarize findings regarding rates of postpartum depression and risk factors for postpartum depression during a quantitative fashion (9–11,13). The ~~first part~~first part of this review will summarize findings from a large number of different methods and specific measures to determine depression. ~~there's~~There's an expectation that new parents, especially mothers are going to be in joyfull if not tired during this time (14).(15)

One manifestation of postpartum psychosis is severe unipolar depression and ~~some postpartum~~some postpartum blues develop into postpartum depression (13).~~Moreo_ver~~Moreover, there is some evidence that a sub group of women have depression only in the postpartum period and that some women are particularly vulnerable to all types of hormonal changes.(16)The aim of the study is to determine the Knowledge and awareness about postpartum distress among the students of saveetha dental college

MATERIALS AND METHODS:

A cross-sectional survey was conducted among the study population with a sample size of 100. A self administered structured questionnaire was prepared and consisted of 15 questions. It was circulated to participants through an online platform (~~google~~Google form). The statistics were done using SPSS software, chi-square test was used to check the association and P value of 0.05 was said to be statistically ~~significant~~significant. The pros of the survey is that the students of different lifestyles and cultures were ~~surveyed~~surveyed. Children and adults were excluded from the survey. Simple random sampling method was the sampling method used to ~~minimise~~minimize the sampling bias.

Inclusion and exclusion criteria: All those who are willing to participate were included in this study. Those who were not willing and had language barrier in answering the English version of the questionnaire were excluded from the study

RESULTS:

Majority of the participants were female and in the age group 18-20. A majority of 60% have felt scared or panicked for reason (figure 1) ,61% of the population feel that things have been getting on top of them(figure 2), 56% of the mothers haven't been looking forward to things with enjoyment (figure 3),63% weren't interested in doing household chores during postpartum (figure 4),Around 51% haven't been able to see the funny side of thing during postpartum (figure 5) ,62% are worried if they won't bond with the baby (figure 6),a majority ie; 69% feel anxious or scared for no reason (figure 7). Among Females, 41.38 % (blue) of the participants are not aware about postpartum distress and 34.48 % (green) are aware about postpartum distress. Among Males, 17.24 % (blue) are not aware about postpartum distress and 6.9 % (green) are aware about postpartum ~~distress~~distress. Chi square test is done to note the statistical significance. The p value found to be 0.217 (P > 0.05), hence proving the study is not statistically significant (figure 8). Among the study population females showed greater

knowledge and awareness in comparison to males. This study demonstrated a good level of knowledge and positive attitudes towards women with postpartum depression.

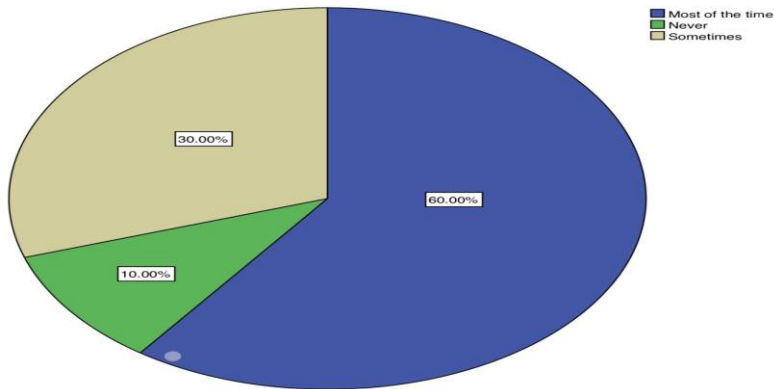


Figure1: Pie chart shows the percentage distribution about the mode of knowledge on postpartum distress in saveetha dental college. 60% of participants feel anxious or scared during postpartum, 30% of the participants sometimes feel scared or anxious during postpartum, 10% of participants never feel scared or anxious during postpartum. Blue represents the population who chose most of the time, green represents the population who chose never and beige represents the population whose choice ~~sometimes~~ sometimes. The majority of the participants feel anxious or scared for no reason during postpartum.

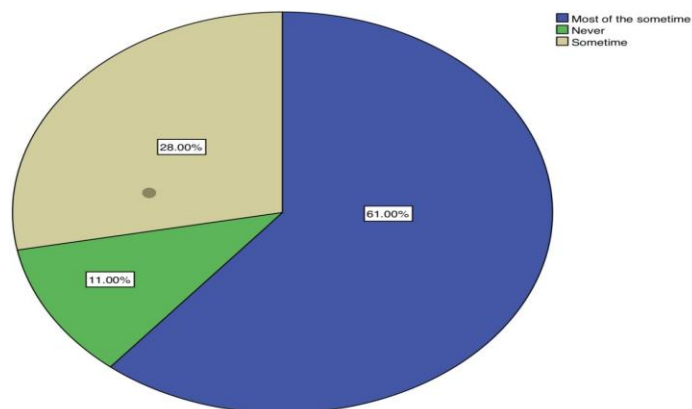


Figure 2: Pie chart shows the percentage distribution about the mode of knowledge on postpartum distress in saveetha dental college. 61% of participants feel that things have been getting on top of them during postpartum, 28% of the participants sometimes feel that things have been getting on top of them during postpartum, 11% of participants never felt that things have been getting on top of them during postpartum. Blue represents the population who chose most of the time, green represents the population who chose never and beige represents the population whose choice sometimes. majority of the participants feel that things have been getting on top of them during postpartum.

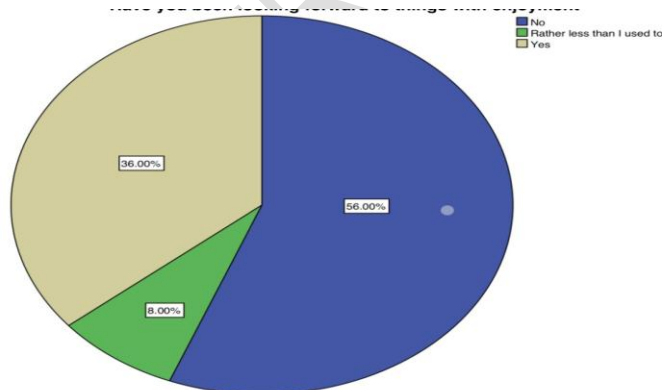


Figure 3: pie chart showing the percentage distribution about the mode of knowledge on postpartum distress in saveetha dental college. 61% of ~~participants aren't~~ participants aren't

looking forward to things with enjoyment during postpartum, 38% of the participants are looking forward to things with enjoyment during postpartum, 8% of participants have been looking forward to things with enjoyment rather less than they used to during postpartum. Blue represents the population who chose never, green represents the population who chose rather less than I used to and beige represents the population whose choice is yes. Majority of the participants aren't looking forward to things with enjoyment during postpartum.

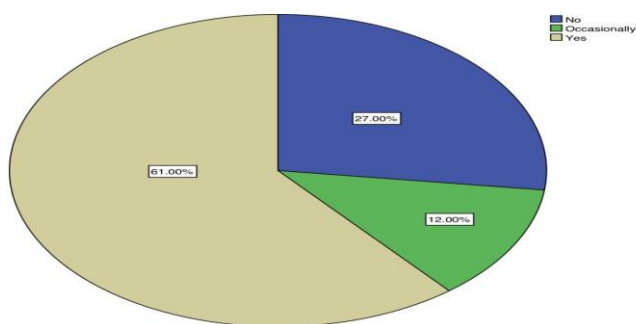


Figure 4: pie chart showing the percentage distribution about the mode of knowledge on postpartum distress in saveetha dental college. 61% of participants are not interested in household works during postpartum, 27% of the participants are interested in household works during postpartum, 12% of participants are occasionally interested in household works during postpartum. Blue represents the population who chose no, green represents the population who chose occasionally and beige represents the population whose choice is yes. Majority of the participants are not interested in household works during postpartum.

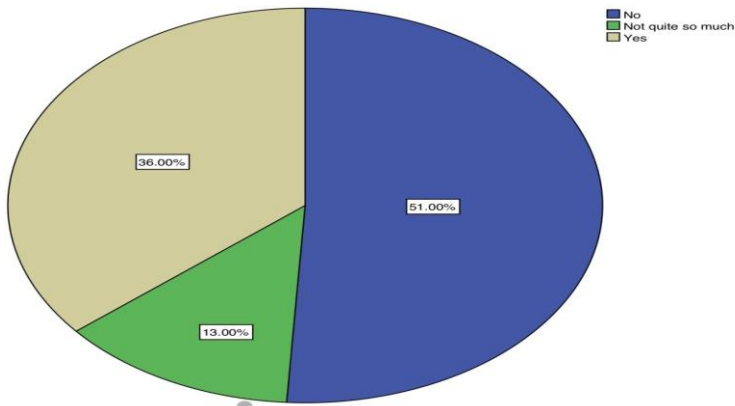


Figure 5: pie chart showing the percentage distribution about the mode of knowledge on postpartum distress in saveetha dental college. 51% of participants are not able to see the funny side of things during postpartum, 36% of the participants are able to see the funny side of things during postpartum, 13% of participants aren't quite able to see the funny side of things during postpartum. Blue represents the population who chose no, green represents the population who chose not quite so much and beige represents the population whose choice is ~~yes~~ yes. The majority of the participants are not able to see the funny side of things during postpartum.

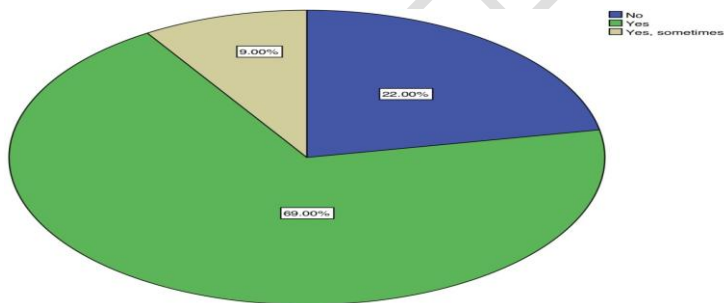


Figure 6: pie chart showing the percentage distribution about the mode of knowledge on postpartum distress in saveetha dental college. 69% of participants feel that they ~~wont~~ won't bond with the baby during postpartum, 22% of the participants feel that they will bond with the baby during postpartum, and 9% of ~~participants feel~~ participants feel that they ~~might bond~~ might bond with the baby during postpartum. Blue represents the population who chose no, green represents the population who chose yes and beige represents the population whose choice ~~sometimes~~ sometimes. ~~the~~ The majority of the participants feel that they ~~wont~~ won't bond with the baby during postpartum.

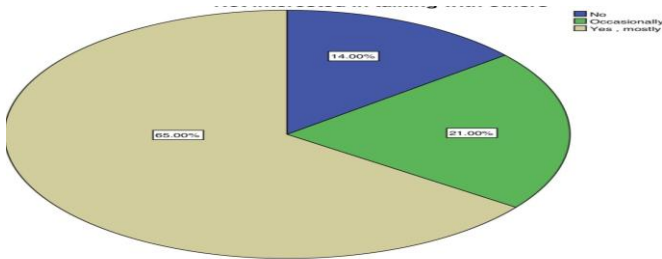


Figure 7: pie chart showing the percentage distribution about the mode of knowledge on postpartum distress in saveetha dental college. ~~Whereas -Whereas~~, 65% of participants are not interested in talking to ~~others—duringothers during~~ postpartum, 21% of the participants sometimes are not interested in talking to others during postpartum, 14% of participants aren't interested in talking to others during postpartum. Blue represents the population who chose ~~no~~ no, green represents the population who chose occasionally and beige represents the population whose choice ~~mostly—mostly. the~~ The majority of the participants feel majority of the participants feels anxious or scared for no reason during postpartum.

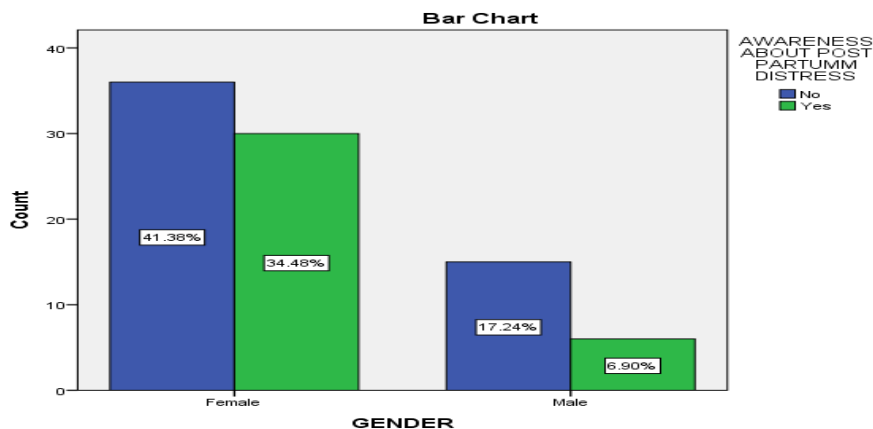


FIGURE 8 - Bar graph represents the association between the gender and the awareness about postpartum distress among the students of saveetha dental college. X axis represents the Gender and Y axis represents the number of participants. Among Females, 41.38 % (blue) of the participants are not aware about postpartum distress and 34.48 % (green) are aware about postpartum distress. Among Males, 17.24 % (blue) are not aware about postpartum distress and

6.9 % (green) are aware about postpartum distress. Chi square test is done to note the statistical significance. The p value found to be 0.217 ($P > 0.05$), hence proving the study is not statistically significant.

DISCUSSION:

Signs and symptoms of depression after childbirth vary, and they can range from mild to severe. (17) Symptoms usually develop within the first few weeks after giving birth, but may begin earlier during pregnancy or later up to a year after birth. (12) Fathers can experience postpartum depression, too. They may feel sad or fatigued, be overwhelmed, experience anxiety, or have changes in their sleeping patterns, the same symptoms mothers with postpartum depression experience (18). The prevalence of Postpartum Depression was 23.7%. Factors like legal status, prim parity, unwanted pregnancy, delivery complication, number of live babies, unpreferred infant sex by the mother, infant illness, previous infant loss, previous history of depression, substance abuse of husband and social support were associated with Postpartum distress in Bivariate analysis. (19)

Marital status, unwanted pregnancy, unmet sex preference of the mother, infant illness and social support were independently related to postnatal distress (Ross 2013; Cohen-Hanegbi 2019.) (Divorced/widowed) women were 3.45 times more likely to develop PPD than married women. Possibly, those women are susceptible to social, economic, and psychological challenges, which successively may aggravate the condition of depression. It may even be the very fact that the difficulty of adverse life events of losing someone they like most, then both economical and social loss follows. (12), (33)

Pregnancy in itself may be a major experience in women's life, Seso it demands physiological, psychological, social adjustments and financial preparation. (20) The social and economic burden resulting from unplanned pregnancies that adequate preparation wasn't made might end in psychological distress. Also in our setting unwanted pregnancy is mostly associated with economical status and this can lead to worrying for parents' and the coming babies' basic needs and better quality lifefife (6,8). (21) Around 57% of the study population belonged to the age group 18-20. 74% are female--female. Around 60% of the people felt scared or panicky for no good reason, the similar result ie; (55% felt scared or panicky) was observed when compared to a different article (22,23). 61% of the population felt that things have been getting on top of them, the similar result ie; (52.5%) was observed when compared to a different article (24). (25) 61% of the population have blamed themselves unnecessarily when things go wrong, the similar result ie; (69%) was observed when compared to a different article (24,26). 61% of the population was worried if they won't bond with the baby, the similar result ie; (80%) was observed when compared to a different article (26)(27). 51% weren't able to laugh or see the funny side of things, the similar result ie; (55%) was observed when compared to a different article (28). 69% were anxious or worried for no good reason, the similar result ie; (55%) was observed when compared to a different article (28,29). (12,30,31) 61% felt so unhappy they had

difficulty in sleeping, the similar result ie; (78%) was observed when compared to a different article (28-38).The limitations of this survey lies in the fact that cross-sectional survey was done among a restricted population (i.e) 100 dental students .Further research is needed on this topic by including the parents of the students and the school faculty.

CONCLUSION:

The study population of 100 dental students showed fair awareness and knowledge about postpartum distress. Among the study population females showed greater knowledge and awareness in comparison to males. Psychotherapy is a treatment option for women with PPD, with IPT being the most validated psy--chotherapy to be studied to date.In summary, this study demonstrated a good level of knowledge and positive attitudes towards women with postpartum depression. However, negative beliefs, stigma, and misconceptions still prevailed among the family members.

REFERENCE:

1. Thome M. Severe postpartum distress in Icelandic mothers with difficult infants: a follow-up study on their health care [Internet]. Vol. 17, Scandinavian Journal of Caring Sciences. 2003. p. 104–12. Available from: <http://dx.doi.org/10.1046/j.1471-6712.2003.00110.x>
2. Allison KC, Wenzel A, Kleiman K, Sarwer DB. Postpartum Distress Measure [Internet]. PsycTESTS Dataset. 2014. Available from: <http://dx.doi.org/10.1037/t35682-000>
3. Shokuhi ZB, Ranjbar F, Hakimi S, Bahri R, Ghaffarifar S. Postpartum Distress Measure-- Persian Version [Internet]. PsycTESTS Dataset. 2020. Available from: <http://dx.doi.org/10.1037/t75744-000>
4. Hirsch NM, Fingerhut R, Allison KC. The Prenatal Distress Measure: Adaptation of the Postpartum Distress Measure for a Prenatal Sample [Internet]. Vol. 26, Journal of Women's Health. 2017. p. 1193–200. Available from: <http://dx.doi.org/10.1089/jwh.2016.5962>
5. Shukla AK, Iravani S. Green Synthesis, Characterization and Applications of Nanoparticles. Elsevier; 2018. 548 p.
6. Ajslev TA, Andersen CS, Ingstrup KG, Nohr EA, Sørensen TIA. Maternal Postpartum Distress Measure [Internet]. PsycTESTS Dataset. 2014. Available from: <http://dx.doi.org/10.1037/t28697-000>

7. Bharath B, Perinbam K, Devanesan S, AlSalhi MS, Saravanan M. Evaluation of the anticancer potential of Hexadecanoic acid from brown algae *Turbinaria ornata* on HT-29 colon cancer cells [Internet]. Vol. 1235, *Journal of Molecular Structure*. 2021. p. 130229. Available from: <http://dx.doi.org/10.1016/j.molstruc.2021.130229>
8. Don BP, Mickelson KD. Paternal Postpartum Distress: The Role of Maternal PPD, Spousal Support, and Relationship Satisfaction [Internet]. *PsycEXTRA Dataset*. 2011. Available from: <http://dx.doi.org/10.1037/e706582011-001>
9. Frost LA. Postpartum Distress in Fathers: Predicting Depressive Symptoms, Anxiety and Anger at One Month Postpartum. 1996. 186 p.
10. O'Loughlen E, Galligan R. Disordered eating in the postpartum period: Role of psychological distress, body dissatisfaction, dysfunctional maternal beliefs and self-compassion. *J Health Psychol*. 2021 Feb 16;1359105321995940.
11. Millwood MC. Cesarean Birth As a Risk Factor for Postpartum Relationship Distress [Internet]. *PsycEXTRA Dataset*. 2010. Available from: <http://dx.doi.org/10.1037/e631982010-001>
12. Factors Contributing to Emotional Distress among Postpartum Mothers with Newborns at Newborn Unit Kenyatta National Hospital, Kenya [Internet]. *Medico-Legal Update*. 2021. Available from: <http://dx.doi.org/10.37506/mlu.v21i1.2399>
13. Pedrina F. Postpartum crisis in migrant families : dealing with cultural differences in situations of special distress [Internet]. Vol. 2, *L'Autre*. 2001. p. 537. Available from: <http://dx.doi.org/10.3917/lautr.006.0537>
14. Adams SS, Eberhard-Gran M, Sandvik ÅR, Eskild A. Mode of delivery and postpartum emotional distress: a cohort study of 55 814 women [Internet]. Vol. 119, *BJOG: An International Journal of Obstetrics & Gynaecology*. 2012. p. 298–305. Available from: <http://dx.doi.org/10.1111/j.1471-0528.2011.03188.x>
15. Clarizia G, Bernardo P. Diverse Applications of Organic-Inorganic Nanocomposites: Emerging Research and Opportunities: Emerging Research and Opportunities. IGI Global; 2019. 237 p.
16. Ezhilarasan D. Critical role of estrogen in the progression of chronic liver diseases. *Hepatobiliary Pancreat Dis Int*. 2020 Oct;19(5):429–34.
17. Gowhari Shabgah A, Ezzatifar F, Aravindhana S, Olegovna Zekiy A, Ahmadi M, Ghebihayat SM, et al. Shedding more light on the role of Midkine in hepatocellular carcinoma: New perspectives on diagnosis and therapy. *IUBMB Life*. 2021 Apr;73(4):659–

18. Kamath SM, Manjunath Kamath S, Jaison D, Rao SK, Sridhar K, Kasthuri N, et al. In vitro augmentation of chondrogenesis by Epigallocatechin gallate in primary Human chondrocytes - Sustained release model for cartilage regeneration [Internet]. Vol. 60, Journal of Drug Delivery Science and Technology. 2020. p. 101992. Available from: <http://dx.doi.org/10.1016/j.jddst.2020.101992>
19. Egbuna, C., Mishra, A. P. and Goyal, M. R. (2020) *Preparation of Phytopharmaceuticals for the Management of Disorders: The Development of Nutraceuticals and Traditional Medicine*. Academic Press
20. Mudigonda SK, Murugan S, Velavan K, Thulasiraman S, Krishna Kumar Raja VB. Non-suturing microvascular anastomosis in maxillofacial reconstruction- a comparative study. J Craniomaxillofac Surg. 2020 Jun;48(6):599–606.
21. Rajakumari R, Volova T, Oluwafemi OS, Rajesh Kumar S, Thomas S, Kalarikkal N. Grape seed extract-soluplus dispersion and its antioxidant activity. Drug Dev Ind Pharm. 2020 Aug;46(8):1219–29.
22. Wadhwa, R. *et al.* (2021) 'Anti-inflammatory and anticancer activities of Naringenin-loaded liquid crystalline nanoparticles in vitro', *Journal of food biochemistry*, 45(1), p. E13572.
23. Wahab, P. U. A. *et al.* (2018) 'Scalpel Versus Diathermy in Wound Healing After Mucosal Incisions: A Split-Mouth Study', *Journal of Oral and Maxillofacial Surgery*, pp. 1160–1164. doi: 10.1016/j.joms.2017.12.020
24. Sompalli S, Farrukh H, Faiek S, Higgins N. ACUTE POSTPARTUM PULMONARY EDEMA: A MOTHER IN DISTRESS [Internet]. Vol. 158, Chest. 2020. p. A2303. Available from: <http://dx.doi.org/10.1016/j.chest.2020.08.1954>
25. Wahab PUA, Madhulaxmi M, Senthilnathan P, Muthusekhar MR, Vohra Y, Abhinav RP. Scalpel Versus Diathermy in Wound Healing After Mucosal Incisions: A Split-Mouth Study. J Oral Maxillofac Surg. 2018 Jun;76(6):1160–4.
26. Lane DA. Early Postpartum Discharges: Impact on Distress and Outpatient Problems [Internet]. Vol. 8, Archives of Family Medicine. 1999. p. 237–42. Available from: <http://dx.doi.org/10.1001/archfami.8.3.237>
27. Santhakumar P, Roy A, Mohanraj KG, Jayaraman S, Durairaj R. Ethanol Extract of Capparis decidua Fruit Ameliorates Methotrexate-Induced Hepatotoxicity by Activating Nrf2/HO-1 and PPAR γ Mediated Pathways [Internet]. Vol. 55, Indian Journal of Pharmaceutical Education and Research. 2021. p. s265–74. Available from:

<http://dx.doi.org/10.5530/ijper.55.1s.59>

28. Obrochta CA, Chambers C, Bandoli G. Psychological distress in pregnancy and postpartum [Internet]. Vol. 33, Women and Birth. 2020. p. 583–91. Available from: <http://dx.doi.org/10.1016/j.wombi.2020.01.009>
29. Tronick EZ, Beeghly M, Katherine Weinberg M, Olson KL. Postpartum exuberance: Not all women in a highly positive emotional state in the postpartum period are denying depression and distress [Internet]. Vol. 18, Infant Mental Health Journal. 1997. p. 406–23. Available from: [http://dx.doi.org/10.1002/\(sici\)1097-0355\(199724\)18:4<406::aid-imhj7>3.0.co;2-i](http://dx.doi.org/10.1002/(sici)1097-0355(199724)18:4<406::aid-imhj7>3.0.co;2-i)
30. Solai Prakash AK, Devaraj E. Cytotoxic potentials of *S. cumini* methanolic seed kernel extract in human hepatoma HepG2 cells. *Environ Toxicol.* 2019 Dec;34(12):1313–9.
31. R, H. *et al.* (2020) ‘CYP2 C9 polymorphism among patients with oral squamous cell carcinoma and its role in altering the metabolism of benzo[a]pyrene’, *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, pp. 306–312. doi: 10.1016/j.oooo.2020.06.021: <http://dx.doi.org/10.1007/s13596-011-0044-0>
32. J, P. C. *et al.* (2018) ‘Prevalence and measurement of anterior loop of the mandibular canal using CBCT: A cross sectional study’, *Clinical Implant Dentistry and Related Research*, pp. 531–534. doi: 10.1111/cid.12609.
33. Nambi, G. *et al.* (2018) ‘Spinal manipulation plus laser therapy versus laser therapy alone in the treatment of chronic non-specific low back pain: a randomized controlled study’, *European journal of physical and rehabilitation medicine*, 54(6), pp. 880–889.
34. Santhakumar, P. *et al.* (2021) ‘Ethanol Extract of Capparis decidua Fruit Ameliorates Methotrexate-Induced Hepatotoxicity by Activating Nrf2/HO-1 and PPAR γ Mediated Pathways’, *Indian Journal of Pharmaceutical Education*, 55(1s), pp. S265–s274.
35. Saraswathi, I. *et al.* (2020) ‘Impact of COVID-19 outbreak on the mental health status of undergraduate medical students in a COVID-19 treating medical college: a prospective longitudinal study’, *PeerJ*, 8, p. E10164.
36. Sridharan, G. *et al.* (2019) ‘Evaluation of salivary metabolomics in oral leukoplakia and oral squamous cell carcinoma’, *Journal of oral pathology & medicine: official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology*, 48(4), pp. 299–306.
37. Tahmasebi, S. *et al.* (2021) ‘The effects of oxygen-ozone therapy on regulatory T-cell responses in multiple sclerosis patients’, *Cell biology international*, 45(7), pp. 1498–1509.
38. Vivekanandhan, K. *et al.* (2021) ‘Emerging Therapeutic Approaches to Combat COVID-19: Present Status and Future Perspectives’, *Frontiers in Molecular Biosciences*. doi:

10.3389/fmolb.2021.604447.

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