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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии

საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНИТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman** (**Кириллица**), для текста на грузинском языке следует использовать **AcadNusx.** Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - http://www.spinesurgery.ru/files/publish.pdf и http://www.nlm.nih.gov/bsd/uniform_requirements.html
В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректура авторам не высылается, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or compu-ter-printed on a single side of standard typing paper, with the left margin of **3** centimeters width, and **1.5** spacing between the lines, typeface - **Times New Roman** (**Cyrillic**), print size - **12** (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf
In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

Articles that Fail to Meet the Aforementioned Requirements are not Assigned to be Reviewed.

ავტორთა საყურადღებოდ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე,დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx.** შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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IMPACT OF CULTURAL FACTORS ON THE DENTAL HEALTH STATUS AND BEHAVIOUR OF FEMALES IN THEIR GESTATION PERIOD

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Abstract.

Aim: To evaluate the effect of cultural factors on the oral health status and behaviour of pregnant women in Kerala.

Materials and Methods: A cross-sectional study was conducted among 128 females who were pregnant at 2 private hospitals in Kerala. The study tool was a questionnaire for examining the cultural factors impacting the dental health status and behaviour of females in their gestation period, which was framed based on a review of the literature. Oral health status was also examined by examining decay (DMFT), periodontal status (CPI index), oral mucosal lesions etc.

Results: Among the participants, 87% reported that oral health care is important during pregnancy brushes twice daily compared to 29.5% of the participants who reported that oral health care was not important during pregnancy (chi-square value=22.363, p value-0.001). 18.8% and 49.5% of the study subjects who were of the opinion that dental treatment should not be done in their gestational period had CPI-high scores of 4 (deep pocket) and 3 (shallow pocket) respectively.

Conclusion: Cultural factors can act as barriers which have to be reduced to enhance oral health behaviour and oral health status.

Key words. Behaviour, cultural factors, oral health status, pregnant women.

Introduction.

The period of gestation is an important period of life in a female's life. Various complex physiologic variations occur in the body of a female during gestation which negatively impact dental health [1].

Dental health care needs of women during gestation are varied compared to the general population. Dryness of mouth, periodontal disease etc. are some of the most common disorders related to dental health during gestation. The effect of gestation on quality of life related to oral health was important as this could predispose to mental irritation, lack of complete functioning, mental disorders physical pain etc. [1].

Periodontitis and the general `health of a person show a two-way association. Periodontal disease paves the way for the spread of dental microbes and their products through blood which then enters the foetal placental unit. So, these dental microbes can lead to preterm birth and low birth weight babies. Periodontitis during the gestational period interacts synergically with other causative factors to cause the complications of preterm birth. Adequate diet and good lifestyle practices involving dental hygiene practices are vital for the general well-being of females during gestation. Females during the gestational period should be regularly informed regarding the maintenance of good dental health care. This practice decreases the susceptibility to transfer of illness from pregnant women to their kids [2]

Research done on females in Cameroon revealed that even though the females were generally anxious regarding their health, the cultural aspect of roles played by specific genders made them not identify their right to better dental health maintenance. These females regarded the right to better health as contingent on the aim of caring for and completing the necessities of other people especially spouses by jeopardizing their own physical health and well-being [3].

Maternal oral health behaviours during pregnancy including dietary habits, maintenance of oral hygiene and regular professional check-ups for oral health have a significant impact on dental health during the gestational period. Females during the gestational period should be educated to do regular brushing and flossing, to visit the dental surgeon during the gestational period and to abstain from using more quantities of sugar-containing snacks and drinks. Women in their gestational period may not have knowledge of the effects of their dental health on the foetus. A lot of research reported that expectant moms had unfavourable attitudes towards their dental health care and usage of dental services during the gestational period. Moreover, there are no clinical guidelines for the treatment of dental patients during their gestational period. Also, there are no standards of practice. Another important factor is the worry regarding the safety of the kid [4].

Culture is transmitted from one generation to another generation [5]. Cultural aspects act as a hindrance to accessibility to health care services [6].

Cultures positively or negatively impact the attitudes and beliefs of the people towards dental health care [7].

Dental health is vital for physical and social function [8]. Oral health awareness, lifestyle, eating choices etc. influence dental health [9]. Culture affects the distribution of illness [10].

Studies assessing the impact of cultural factors on oral health behaviours and their effect on the oral health statuses of pregnant women are rare. Hence the present study was undertaken to assess the impact of cultural factors on the dental health status and behaviour of females in their gestational period in Trichur, a district in Kerala, India.

Materials and Methods.

A cross-sectional study was conducted on 128 study participants at 2 private hospitals in Trichur district. Here the utilization of a questionnaire was done to examine the cultural factors impacting the dental health status and behaviour of expectant mothers. The Protocol was presented, and the University Ethics Committee for Human Trials of MS Ramaiah University of Applied Sciences gave the ethical clearance for the study. Those pregnant women in all trimesters of pregnancy who were

willing to take part in the study were included in the study. Those females in their gestational period who formed the high-risk group (35 years of age and above or with comorbidities) were excluded. The relevant cultural factors were derived from the review of the literature using databases like Google Scholar, PubMed etc. which were utilized for making the questionnaire.

A pilot study was conducted on 18 study subjects to assess the sample size and feasibility. With a 95% confidence level, the sample size required was 128.

Face validity was also checked. 2 gynaecologists and 4 public health dentists did the content validation (Lawshe method). The question “Do you prefer females in doing dental treatment" got the CVR value of 0.33. The remaining questions have got CVR of 1 and they were retained.

A Malayalam expert did the translation and back translation. Following this, suitable changes were made. A total of twelve close-ended questions related to cultural factors were the independent variables on possible decision makers regarding your health and oral health care needs, whether females during their gestational period should undergo dental treatment etc. The questions on dependent variables were related to frequency of tooth brushing, dentifrice utilization etc. Evaluation of periodontal status (CPI index), DMFT and oral mucosal lesions for assessing the dental health status. Oral mucosal lesions scoring and coding were taken from WHO assessment proforma 1997.

We used the SPSS software's version 21 for statistical analysis. To check the correlation between categorical variables, non-parametric statistical tests, Chi-square test and Fischer exact test, were done. Fischer’s test was utilized in cases when more than 20% of the expected frequencies had a value below 5.

Results.

Amongst the study subjects, 43 % and 14.8 % of pregnant females in the study had CPI scores of 3 and 4 respectively. 5.6 % of the study subjects had a DMFT of 8, which was the highest score in the study. 3.9% of pregnant women were using tobacco. 37.5 % of expecting mothers brushed their teeth twice daily. 90.6 % responded that they never used to regularly visit the dentist while they were not pregnant.

Table 1 shows that 37.5 % of the study subjects reported that they were the decision makers regarding health and dental healthcare needs, whereas 43.8 % of the participants said that husbands made the decision regarding health and healthcare needs. 78.9 % of the study subjects responded that pregnant women should not undergo dental treatment as it could cause complications to the child or mother. 18% reported that oral health care was important during gestation.

Table 2 indicates that 22.7 % of the study subjects reported that barriers were there while communicating with their healthcare providers. Only 35.9 % of the study subjects said that their source of information regarding oral health was dentist only. 71.1 per cent of the participants said that they had sugar in between meals. 11 (8.6 %) and 36 (28.1 %) of the study subjects respectively strongly agreed and agreed that they perceived a visit to see an oral surgeon as fearful.

Table 1. *Cultural factors & perceptions influencing dental care.*

Variable	**N (%)**
Who is the decision maker regarding your Health & Oral Health Care Needs?	
a. Myself	48(37.5)
b. Husband	56(43.8)
c. In-laws and or parents	24(18.8)
d. Others (Please Specify)	0(0)
Dental treatment should be avoided during pregnancy as it can cause complications to the Child or Mother?	
Yes	101(78.9)
No	27(21.1)
Oral Health Care is important during pregnancy	
Yes	23(18)
No	61(47.7)
May be	25(19.5)
Not sure	19(14.8)

Table 2. *Factors affecting dental health and access to dental health care.*

Variable	**N (%)**
Any barriers while communicating to your Health Care Provider?	
Yes	29(22.7)
No	99(77.3)
The sources of information regarding oral health	
a. Internet	28(21.9)
b. Internet, consulting gynaecologist, consulting oral surgeon	4(3.1)
c. Magazine	31(24.2)
d. Magazine and consulting gynaecologist	2(1.6)
e. Magazine, consulting gynaecologist and consulting oral surgeon	1(0.8)
f. consulting gynaecologist	11(8.6)
g. Consulting gynaecologist and consulting oral surgeon	4(3.1)
h. Consulting oral surgeon	46(35.9)
i. Not sure/ no source	1(0.8)
j. Other	0
Do you eat sugar in between main meals?	
Yes	91(71.1)
No	37(28.9)
Do you perceive visit to see an oral surgeon as fearful?	
Strongly agree	11(8.6)
Agree	36(28.1)
Not sure /don’t know	59(46.1)
Disagree	13(10.2)
Strongly disagree	9(7)
Did you visit the dental surgeon during the pregnancy	
Yes	0(0)
No	128(100)

Table 3 shows that 18.8% and 49.5% of the study subjects who reported that dental treatment should not be done in their gestational period as it could cause complications to the child or mother have CPI-high score of 4 (deep pocket) and 3 scores

Table 3. *showing belief that that Dental treatment should be avoided during pregnancy in comparison with CPI high score.*

Crosstab					
			Do you think that Dental treatment should be avoided during pregnancy as it can cause complications to the Child or Mother		Total
			Yes	No	
CPI-high score	Calculus (2)	Count	32	22	54
		%	31.7%	81.5%	42.2%
	Shallow pocket (3)	Count	50	5	55
		%	49.5%	18.5%	43.0%
	Deep pocket (4)	Count	19	0	19
		%	18.8%	0.0%	14.8%
Total		Count	101	27	128
		%	100.0%	100.0%	100.0%

Chi square test value =22.363 p<0.001 very highly significant

Table 4. *Perception on importance of oral health during pregnancy in comparison with frequency of tooth brushing daily.*

Oral health care is important during pregnancy	Frequency of brushing		Total
	once	twice	
Yes	3 13.0%	20 87.0%	23 100.0%
No	43 70.5%	18 29.5%	61 100.0%
May be.	22 88.0%	3 12.0%	25 100.0%
Don't know	12 63.2%	7 36.8%	19 100.0%
Total	80 62.5%	48 37.5%	128 100.0%

Chi square test value =32.6, p value= .000 (very highly significant)

Table 5. *Barriers preventing effective communication for oral health in comparison with frequency of tooth brushing daily.*

Do you have any barriers while communicating to your Health Care Provider?	Times of brushing		Total
	once	twice	
Yes	24 82.8%	5 17.2%	29 100.0%
No	56 56.6%	43 43.4%	99 100.0%
Total	80 62.5%	48 37.5%	128 100.0%

Chi square value=6.566, p value=.010 (highly significant)

(shallow pocket) respectively, whereas 0% and 18.5% of the study subjects who reported that dental treatment should be done in their gestational period have CPI-high score of 4 and 3 scores (p value<0.001).

Table 4 shows that the frequency of brushing for 87% of the participants who responded that oral health care was important during gestation, was two times a day compared to only 29.5% of the participants who said that oral health care was not important during gestation (Chi-square test value =32.6, p value= .000-very highly significant).

Table 5 shows that amongst the participants, the frequency of brushing for 43.4 % who reported that they had no barriers while communicating with the health care provider was two times a day compared to only 17.2 % of the participants who said that they had barriers while communicating with the health care provider. (Chi-square test value=6.566, p value=.010 -highly significant).

Thus, we can infer that many of the cultural factors can affect dental health status and behaviour of females in their gestational period.

Discussion.

In the current research, while 11 (8.6%) of the study subjects strongly agreed, 36 (28.1%) of them agreed that they perceived a visit to see an oral surgeon as fearful which is comparable to the study done by Barman D et al. [11] where 93 % of pregnant women in Saora tribe showed fear towards the dentist.

In the present study, 90.6 % reported that they never used to regularly visit the dentist while they were not pregnant which is similar to the study done by Payal S et al. [12] wherein,

72.81% of pregnant females accepted that they never attended the dentist. This is also similar to the study done by Agrawal N et al. [13] where only 26.9 % of expecting mothers had an oral check-up at least once a year. But this is in contrast to the study done by Nagi R et al. [14] where 96.8% visited the dentist regularly. In the research conducted by Onwuka C et al. [15], it was found that only 37.9% (n=36/95) of the participants sought dental care during pregnancy, with the majority not seeking such care. This study identified several reasons for not seeking dental care during the index pregnancy. Among them 69.2% held the perception that dental problems are not relevant to pregnancy outcomes whereas 11.7% were afraid of dental procedures harming the baby, 9.5% were apprehensive about the expense of dental treatments, 8.5% reasoned not prioritising dental care to busy schedules and a very small percentage of 1.1% attributed their avoidance to fear of the dentist.

In this study, 43 % and 14.8 % of pregnant females have CPI scores of 3 and 4 respectively which is similar to the research conducted by Payal S et al. [12] where a high prevalence of periodontal disease (60%) among pregnant females was found.

In the current study, 3.9% of pregnant women were using tobacco compared to the study done by Payal S et al. [12] where 11.87 % consumed some form of tobacco.

In this study, 78.9 % of expecting mothers thought that dental treatment should not be done in the gestational period as it could cause complications to the mother and child which can be compared with the research conducted by Agrawal N et al. [13], wherein 46.4 % of expecting mothers thought that dental treatment should be done in gestational period. The finding by Agrawal N et al. [13] is similar to the study conducted by Bamanikar S et al. [16]. Also, in the study done by Ibrahim H M et al. [17], 27.9 % reported that they felt that dental treatment should not be done in the gestational period as it could be detrimental to the growing baby or themselves. This is similar to the study done by Dinas K et al. [18] 2007 in Greece wherein the belief that oral treatment during the gestational period is detrimental decreased the use of dental care. Similarly, in the investigation conducted by Al Habashneh R et al. [19], pregnant women who positively acknowledged the connection between dental health and gestation were notably more inclined to seek the services of a dental surgeon during their gestational period.

37.5% of expecting mothers in the present study brushed their teeth twice daily in contrast to the study done by Nagi R et al. [14] wherein 99.8% of expecting mothers brushed twice every day. In the study done by Agrawal N et al. [13] the awareness regarding brushing, using floss etc was found to be poor among expecting mothers.

In the current research, only 35.9 per cent of the participants reported that the source of their knowledge regarding dental health was dentists. This is comparable to the study done by Ibrahim H.M et al. [17] only 42.4 % of the participants reported that the source related to the knowledge regarding dental health is dentists. This is in contrast to the study done by Al Husseini R et al. [20] in the Health Science Centre in Kuwait, where 65% of the female students reported getting tooth brushing instructions from their dentist.

71.1 per cent of the participants said that they had sugar in between meals. These could increase their susceptibility to decay.

22.7% of the study subjects reported that barriers were there while communicating with their Health Care Provider which could result in less utilization of proper dental care.

In the study done by Oh J et al. [21], the recommendation is that females in their pregnancy period should be informed regarding the significance of having good dental health during gestation. In the study done by Dinas K et al. [18], the recommendation is that measures should be undertaken to curb limiting factors like beliefs.

Only 37.5 % of the participants in the current research conveyed that the decision-makers regarding the health and dental health care needs were themselves, whereas amongst the participants in the study conducted by Barbi L et al. [22], 72.58% reported that they take independent decisions regarding their health care.

The factors were assessed through a review of the literature and utilizing cross-sectional study. Further research has to be carried out for a longer period to assess more factors that act as a barrier. Oral health education incorporating these cultural factors should be undertaken in reducing the barriers which in turn could escalate the dental health status and behaviour of females in their gestational period.

Conclusion.

Cultural factors can act as barriers which have to be reduced to improve oral health behaviour and oral health status. Hence, awareness has to be generated among females in their period of gestation to improve their oral health status and behaviour.

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