

GEORGIAN MEDICAL NEWS

ISSN 1512-0112

NO 12 (345) Декабрь 2023

ТБИЛИСИ - NEW YORK



ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии
საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

Monthly Georgia-US joint scientific journal published both in electronic and paper formats of the Agency of Medical Information of the Georgian Association of Business Press.
Published since 1994. Distributed in NIS, EU and USA.

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 ВИНТИ 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 ВИНТИ 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. Корректурa 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 computer-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 საქურაღებოლ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დაიცვათ 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 შედეგების 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 ფხიხლებში 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.

Yaomin Luo, Xin Chen, Enhao Hu, Lingling Wang, Yuxuan Yang, Xin Jiang, Kaiyuan Zheng, Li Wang, Jun Li, Yanlin Xu, Yin Xu Wang, Yulei Xie. TRANSCRIPTOME ANALYSIS REVEALED THE MOLECULAR SIGNATURES OF CISPLATIN-FLUOROURACIL COMBINED CHEMOTHERAPY RESISTANCE IN GASTRIC CANCER.....	6-18
Abramidze Tamar, Bochorishvili Ekaterine, Melikidze Natela, Dolidze Nana, Chikhelidze Natia, Chitadze Nazibrola, Getia Vladimer, Gotua Maia, Gamkrelidze Amiran. RELATIONSHIP OF ALLERGIC DISEASES, POLLEN EXPOSURE AND COVID-19 IN GEORGIA.....	19-26
Ibtisam T. Al-Jureisy, Rayan S. Hamed, Ghada A. Taqa. THE BIO-STIMULATORY EFFECT OF ADVANCE PLATELET RICH FIBRIN COMBINED WITH LASER ON DENTAL IMPLANT STABILITY: AN EXPERIMENTAL STUDY ON SHEEP.....	27-31
Amandeep Singh, Navnath Sathe, Kanchan Rani, Saumya Das, Devanshu J. Patel, Renuka Jyothi R. IMPACT OF MOTHER'S HYPOTHYROIDISM ON FETAL DEVELOPMENT AND OUTCOMES: A SYSTEMATIC REVIEW.....	32-36
Sevil Karagül, Sibel Kibar, Saime Ay, Deniz Evcik, Süreyya Ergin. THE EFFECT OF A 6-WEEK BALANCE EXERCISE PROGRAM ON BALANCE PARAMETERS IN FRAILTY SYNDROME: A RANDOMIZED CONTROLLED, DOUBLE-BLIND, PROSPECTIVE STUDY.....	37-42
Zainab Suleiman Erzaq, Fahmi S. Ameen. COMPARISON BETWEEN PCR STUDY AND ELISA STUDY AMONG PATIENTS WITH DIARRHEA.....	43-47
Igor Morar, Oleksandr Ivashchuk, Ivan Hushul, Volodymyr Bodiaka, Alona Antoniv, Inna Nykolaichuk. THE INFLUENCE OF THE ONCOLOGICAL PROCESS ON THE MECHANICAL STRENGTH OF THE POSTOPERATIVE SCAR OF THE LAPAROTOMY WOUND.....	48-51
Lyazzat T. Yeraliyeva, Assiya M. Issayeva, Malik M. Adenov. COMPARATIVE ANALYSIS OF MORTALITY FROM TUBERCULOSIS AMONG COUNTRIES OF FORMER SOVIET UNION.....	52-57
Rana R. Khalil, Hayder A.L. Mossa, Mufeda A. Jwad. MITOFUSIN 1 AS A MARKER FOR EMBRYO QUALITY AND DEVELOPMENT IN RELEVANCE TO ICSI OUTCOME IN INFERTILE FEMALES.....	58-61
Geetika M. Patel, Nayana Borah, Bhupendra Kumar, Ritika Rai, V. K. Singh, Chandana Maji. MEDITERRANEAN DIET AND ITS IMPACT ON THE ILLNESS CHARACTERISTIC OF YOUTH WITH IRRITABLE BOWEL CONDITION.....	62-66
Ketevan Arabidze, Irakli Gogokhia, Khatuna Sokhadze, Nana Kintsurashvili, Mzia Tsiklauri, Tamar Gogichaishvili, Iamze Tabordze. THE EVALUATION OF THE RISK OF COMPLICATIONS DURING MULTIMODAL AND OPIOID ANESTHESIA IN BARIATRIC SURGERY AND ABDOMINOPLASTY.....	67-71
Hadeer Sh Ibrahim, Raghad A Al-Askary. MARGINAL FITNESS OF BIOACTIVE BULKFILL RESTORATIONS TO GINGIVAL ENAMEL OF CLASS II CAVITIES: AN IN VITRO COMPARATIVESTUDY.....	72-79
Lobashova O.I, Nasibullin B.A, Baiazitov D.M, Kashchenko O.A, Koshelnyk O.L, Tregub T.V, Kovalchuk L.Y, Chekhovska G.S, Kachailo I.A, Gargin V.V. PECULIARITIES OF THE ORGANS OF THE REPRODUCTIVE SYSTEM OF WOMEN OF REPRODUCTIVE AGE WITH LIVER DYSFUNCTION UNDER THE INFLUENCE OF EXOGENOUS POLLUTANTS.....	80-86
Victoriia Ivano. EXPLORING NEONATAL HEALTH DISPARITIES DEPENDED ON TYPE OF ANESTHESIA: A NARRATIVE REVIEW.....	87-93
Omar B. Badran, Waleed G. Ahmad. THE COVID-19 PANDEMIC LOCKDOWN'S IMPACT ON ROUTINE CHILDHOOD VACCINATION.....	94-98
Valbona Ferizi, Lulëjeta Ferizi Shabani, Merita Krasniqi Selimi, Venera Bimbashi, Merita Kotori, Shefqet Mrasori. POSTNATAL CARE AMONG POSTPARTUM WOMEN DURING HOSPITAL DISCHARGE.....	99-104
Devanshu J. Patel, Asha.K, Amandeep Singh, Sakshi Vats, Prerana Gupta, Monika. A LONGITUDINAL STUDY OF CHILDHOOD SEPARATION ANXIETY DISORDER AND ITS IMPLICATIONS FOR ADOLESCENT PSYCHOPATHOLOGY.....	105-111
Kachanov Dmitrii A, Artsygov Murad M, Omarov Magomed M, Kretova Veronika E, Zhur Daniil V, Chermoew Magomed M, Yakhyaev Adam I, Mazhidov Arbi S, Asuev Zaurbek M, Bataev Ahmed R, Khasuev Turpal-Ali B, Rasulov Murad N. COMPARATIVE ANALYSIS OF THE EFFECTS OF SOME HEPATOPROTECTORS IN EXPERIMENTALLY INDUCED MAFLD IN ADULT WISTAR RATS.....	112-115
Nada J Alwan, Raghad A Al-Askary. EVALUATION OF INTERFACIAL ADAPTATION BETWEEN VARIOUS TYPES OF FIBER POSTS AND RESIN CEMENTS USING	

MICRO CT: AN IN VITRO COMPARATIVE STUDY.....	116-121
Anish Prabhakar, Vinod Mansiram Kapse, Geetika M. Patel, Upendra Sharma. U.S, Amandeep Singh, Anil Kumar. EMERGING NATIONS' LEARNING SYSTEMS AND THE COVID-19 PANDEMIC: AN ANALYSIS.....	122-127
Tereza Azatyan. THE STUDY OF SPATIAL REPRESENTATIONS OF CHILDREN WITH DIFFERENT DEGREES OF INTERHEMISPHERIC INTERACTION.....	128-132
Sefineh Fenta Feleke, Anteneh Mengsit, Anteneh Kassa, Melsew Dagne, Tiruayehu Getinet, Natnael Kebede, Misganaw Guade, Mulat Awoke, Genanew Mulugeta, Zeru Seyoum, Natnael Amare. DETERMINANTS OF PRETERM BIRTH AMONG MOTHERS WHO GAVE BIRTH AT A REFERRAL HOSPITAL, NORTHWEST ETHIOPIA: UNMATCHED CASE- CONTROL STUDY.....	133-139
Himanshi Khatri, Rajeev Pathak, Ranjeet Yadav, Komal Patel, Renuka Jyothi. R, Amandeep Singh. DENTAL CAVITIES IN PEOPLE WITH TYPE 2 DIABETES MELLITUS: AN ANALYSIS OF RISK INDICATORS.....	140-145
Mukaddes Pala. ExerciseandMicroRNAs.....	146-153
Zurab Alkhanishvili, Ketevan Gogilashvili, Sopia Samkharadze, Landa Lursmanashvili, Nino Gvasalia, Lika Gogilashvili. NURSES' AWARENESS AND ATTITUDES TOWARDS INFLUENZA VACCINATION: A STUDY IN GEORGIA.....	154-159
Aveen L. Juma, Ammar L. Hussein, Israa H. Saadon. THE ROLE OF COENZYME COQ10 AND VITAMIN E IN PATIENTS WITH BETA-THALASSEMIA MAJOR IN BAGHDAD CITY POPULATION.....	160-162
Merve Karli, Basri Cakiroglu. ADRENAL METASTASIS OF BILATERAL RENAL CELL CARCINOMA: A CASE PRESENTATION 12 YEARS AFTER DIAGNOSIS.....	163-165
Manish Kumar Gupta, Shruti Jain, Priyanka Chandani, Devanshu J. Patel, Asha K, Bhupendra Kumar. ANXIETY SYNDROMES IN ADOLESCENTS WITH OPERATIONAL RESPIRATORY CONDITIONS: A PROSPECTIVE STUDY.....	166-171
Mordanov O.S, Khabadze Z.S, Meremkulov R.A, Saeidyan S, Golovina V, Kozlova Z.V, Fokina S.A, Kostinskaya M.V, Eliseeva T.A. EFFECT OF SURFACE TREATMENT PROTOCOLS OF ZIRCONIUM DIOXIDE MULTILAYER RESTORATIONS ON FUNCTIONAL PROPERTIES OF THE HUMAN ORAL MUCOSA STROMAL CELLS.....	172-177
Nandini Mannadath, Jayan. C. EFFECT OF BIOPSYCHOSOCIAL INTERVENTION ON BEAUTY SATISFACTION AFTER STAGED SURGERY AMONG ADOLESCENTS WITH ORAL FACIAL CLEFTS.....	178-182
Bhupendra Kumar, Sonia Tanwar, Shilpa Reddy Ganta, Kumud Saxena, Komal Patel, Asha K. INVESTIGATING THE EFFECT OF NICOTINE FROM CIGARETTES ON THE GROWTH OF ABDOMINAL AORTIC ANEURYSMS: REVIEW.....	183-188
Musheghyan G.Kh, Gabrielyan I.G, Poghosyan M.V, Arajyan G.M. Sarkissian J.S. SYNAPTIC PROCESSES IN PERIAQUEDUCTAL GRAY UNDER ACTIVATION OF LOCUS COERULEUS IN A ROTENONE MODEL OF PARKINSON'S DISEASE.....	189-195
Bhupendra Kumar, Barkha Saxena, Prerana Gupta, Raman Batra, Devanshu J. Patel, Kavina Ganapathy. EFFECTS OF SOCIAL ESTRANGEMENT ON YOUNG PEOPLE'S MATURATION: A REVIEW OF THE RESEARCH.....	196-202
Mordanov O.S, Khabadze Z.S, Meremkulov R.A, Mordanova A.V, Saeidyan S, Golovina V, Kozlova Z.V, Fokina S.A, Kostinskaya M.V, Eliseeva T.A. COMPARATIVE SPECTROPHOTOMETRY ANALYSIS OF ZIRCONIUM DIOXIDE WITH THE CUBIC AND TETRAGONAL PHASE AFTER ARTIFICIAL AGING.....	203-210
Mohammed Abidullah, Sarepally Godvine, Swetcha Seethamsetty, Geetika Gorrepati, Pradeep Koppolu, Valishetty Anuhya, Sana vakeel. EFFECT OF GOAL-ORIENTEDPATIENT CENTRIC HEALTH CARE PROFESSIONAL INTERVENTION ON BLOOD GLUCOSE CONTROL INTYPE 2 DIABETES MELLITUSANDLEVEL OF PATIENT SATISFACTION.....	211-217

EFFECT OF BIOPSYCHOSOCIAL INTERVENTION ON BEAUTY SATISFACTION AFTER STAGED SURGERY AMONG ADOLESCENTS WITH ORAL FACIAL CLEFTS

Nandini Mannadath¹, Jayan.C².

¹Department of Nursing, College of Health & Sport Sciences, University of Bahrain, Kingdom of Bahrain.

²Professor (Rtd) Dept, of Psychology, University of Calicut, Kerala, India.

Abstract.

Introduction: Oral Facial Clefts (OFC) among adolescents can pose several significant challenges. Assessing one's contentment with one's appearance following surgery may be useful in identifying young people who may have adjustment issues.

Aims & Objectives: To find the efficacy of the biopsychosocial intervention on beauty satisfaction among adolescents with OFC surgery.

Materials & Methods: A descriptive survey was conducted among 86 adolescents, selected by simple random technique, who underwent staged surgical procedures for OFC at Charles Pinto Centre for Cleft Lip & Palate in India. Beauty satisfaction was measured by a Four-point rating scale. During the second phase, a Quasi-experimental design was adopted among 10 samples & Seven-day biopsychosocial intervention package was administered after the pretest assessment.

Results & Discussion: Most of the samples have only an average level of beauty satisfaction of 48 (55.8%), whereas a high level of beauty satisfaction was observed only among 24 (27.9%) samples & 14 (16.3%) had a low level. The study also revealed that both genders equally experience dissatisfaction with beauty ($P=0.381$). F- value for comparing beauty satisfaction among different age groups of adolescents was found to be non-significant at 0.05 level (p -value 0.253). This depicts that as age increases adolescents are more conscious of their beauty and appearance. The Level of beauty satisfaction has increased after the implementation of the biopsychosocial intervention. (p -value 0.001) at 0.01 level in the second phase, which is in tune with the study findings of Kapp Simon. **Summary & Conclusion:** Counselling and looking at actual facial features can help people accept their looks, according to study results on beauty satisfaction. Thus, a productive line of inquiry into cleft psychosocial research that ascertains the alterations in facial growth and the surgical experience must be assembled through observational, longitudinal, and cross-sectional investigations.

Key words. Oral facial clefts, adolescent, Bio-psychosocial intervention.

Introduction.

A wide range of congenital abnormalities in the development of the head and facial bones are collectively referred to as oral facial clefts. The prevalence of cleft lip and palate is 1:600 worldwide. 9.92 cases per 10,000 people globally, with or without cleft palate, were reported to have cleft lip. Cleft lip prevalence was 3.28 per 10,000, whereas cleft lip and palate prevalence was 6.64 per 10,000. Between 27,000 and 33,000 clefts are born with a cleft each year [1].

A cleft patient must undergo multiple therapy procedures for rehabilitation, beginning at birth and continuing into maturity, due to the multiplicity of issues they face. Facial aesthetic

evaluation is one of the most pertinent metrics for assessing treatment success among the several facets of treatment outcome audits, particularly for teenagers [2]. Adolescents choose beauty over intelligence and humour when defining qualities. Thus, the most crucial factor might be one's level of contentment with one's appearance. Because it is seen to be an essential prerequisite for healthy psychosocial development, particularly in adolescents, for whom facial aesthetics is critical to their sense of self and self-worth [3]. Furthermore, it was found that a strong predictor of depression was unhappiness with one's facial appearance [4]. Cleft patients continue to express concerns about their appearance, particularly about the cleft deformity, even after undergoing surgical and dental rehabilitations aimed at normalizing their look [5]. Patients with clefts had negative experiences connected to their looks, trouble adjusting to facial alterations following surgery, and changes in their body image as a result of these changes, according to a qualitative survey on the psychological impact of the condition.

Relationships between body image and quality of life emphasize that appearance perception are important to adolescents' wellbeing regardless of whether they have a appearance better. Adolescence is a crucial period for the development of body image than the other developmental age groups. However, it is plausible that adolescent with craniofacial disorders is more susceptible to body image issues and related psychological problems during this developmental phase because of variations in facial appearance. Hence the present study was intended to evaluate the effect of biopsychosocial intervention package on beauty satisfaction among adolescents with clefts. The challenge of this study was to deliver the biopsychosocial intervention package which facial disfigurement. To understand the perspectives of adolescent about facial meets developmental needs in minimizing the negative impact on the lives of affected adolescents with clefts. The investigator strongly believe that the biopsychosocial package can achieve acceptance, develop positive social interaction skills, and can also demonstrate social competence.

The current investigation was planned with two objectives in mind.

1. To examine the influence of age groups on beauty satisfaction among adolescents.
2. To determine the influence of gender on beauty satisfaction among adolescents.

Methods.

The present study has been conducted in 2 phases. Samples for the 2 phases were adolescents selected by simple random sampling technique, who underwent staged surgical procedures for OFC in a selected Cleft Centre, Adolescents with clinical diagnoses of different cleft types belonging to the ages between 12-19 years of both genders were included in the study.

Adolescents with syndromes, other congenital anomalies, learning disorders, other medical problems, and intellectual disability were excluded. The First phase adopted a descriptive survey among 86 adolescents to assess Beauty Satisfaction which was measured by a Four-point Beauty Satisfaction rating scale prepared and standardized by the Investigator. The second phase adopted a pre-post randomised design among 10 adolescents to assess the effectiveness of the biopsychosocial intervention package. Six-day package is prepared by the investigator based on Biopsychosocial model by Dr. George Engel [6]. The paradigm makes the case that a person's genetic composition (biology), mental state and behaviour (psychology), and social and cultural surroundings (the social world) interact. Six-day package included Rational emotive behaviour therapy, Assertive skill training, social skill training, Self-esteem improvement training, Relaxation technique & Self-hypnosis. Six-day package was conducted in 6 consecutive days by taking 2hrs in a day for the experimental group as the control group received the routine care alone. Ethical approval of the study was obtained by the IEC. A written consent was signed by each parent/legal guardian for each sample under the age of 18. Descriptive statistics like frequency and percentage were used for analyzing socio demographic and clinical profile of the respondents in the sample. Study variables were analyzed, and the results were presented in the form of mean, median and standard deviation. The inferential statistics like independent 't' test was used to compare the study variable among male and female children. independent 't' test was executed to find out the homogeneity in the pretest score of experimental and control group and also used to find out the significant difference both in post test score between experimental and control group. The significance of difference in scores of biopsychosocial concerns at three different stages of study (Pretest, Post I and follow up) were tested by using Repeated Measures ANOVA.

Schematic representation of second phase is as follows,

R O₁ X O₂ X O₃ Experimental group

R = Randomisation

O₁ = Refers to the measurement of bio-psychosocial variable (pre-test)

X = Refers to the intervention (bio-psychosocial interventional package)

O₂ = Measurement of bio-psychosocial variable after two weeks (post-test)

O₃ = Measurement of bio-psychosocial variable after four weeks (follow up)

R O₁-O₂-O₃ Control group

R = Randomisation

O₁ = Pre-test assessment of Biopsychosocial variables

O₂ = Measurement of bio-psychosocial variable after two weeks (post-test)

O₃ = Measurement of bio-psychosocial variable after four weeks (follow up).

Results and Discussion.

Demographic result reveals that majority of the samples 42(48.33%) belongs to middle adolescents, 23(26.74%) of samples were early adolescents and only 21(26.74%) were

late adolescents. Regarding gender,31(36%) were males whereas 55(64%) were females. Birth order status revealed that 25(29.1%) was of first order,27(31.4%) was from second order and the remaining 34(39.5%) were from last order.

Finding of the clinical characteristics revealed that out of 86 samples 88,4% were having both cleft lip and palate,98.8% were having visible clefts The result of the present study is consistent with a retrospective study conducted by Nambiar et al. [7], which shows Cleft Lip (CL) along with Cleft Palate (CP) was found to be the highest (64.6%) followed by CL (28.5%). There are studies like that of Uppal et al. [8] who have reported 185 (45%) of children are having both Cleft Lip and Cleft Palate (CLCP). Maternal history analysis reveals 62.8% got married between the age of 18-22 years. Consanguineous marriage is seen among 15.1% of the mothers.

These findings thereby throwing light on the relationship with consanguinity and congenital anomaly. In India, the incidence of consanguineous marriages is between 5% and 60%. In Indian sub-continent uncle-niece marriages are commonly seen. In Kerala, the marriage is not between uncle-niece, it is between the first cousins. In this case the risk of abnormality in the form of congenital malformation in the offspring is 50%, whereas the risk in second degree consanguinity is 5-10% and in third degree it is 3-5% [9].

According to Sah and Powar's [10] prior study, 48.9% of parents had consanguineous marriages and 1.3% of cases had a family history of congenital abnormalities. In a related study, Sridhar (2009) [11] found that 32% of the affected children had a history of consanguinity and that 9.05% of patients had a family history. As far as the investigator is aware, there aren't many research that have been published from India that look at the connection between OFC and consanguinity.

Finding of the antenatal history of the mothers revealed that 14.0% had fever while conceiving the affected child The result of the present study is in par with the findings of Sridhar (2009) which highlighted 5.3% of mother had fever in the 1st trimester. Related to the consumption of folic acid, 98.8% of mothers have not taken folic acid before conception. Only 65% of mothers have had consumed folic acid throughout their antenatal period. Maternal history reveals that 62.8% got married at the age of 18-22 years.

Considering the type of marriage of mother 15.1% of them had a consanguineous marriage. Increased paternal age of between 31-35 was seen in 45.3%. With regard to paternal history of smoking 48 (55.8%) of participant's fathers had a history of smoking. This result is in line with a study conducted in 2016 by Kummet et al [12]. that found a 14% greater risk of clefts was linked to paternal passive exposure to cigarette smoke. The researchers found that this field has not seen much research done on it.

Assessment of Beauty satisfaction.

Table 1 classifies the level of beauty satisfaction of children with Oral Facial Clefts. Out of 86 samples majority of the children 48(55.8%) have only average level of beauty satisfaction, 14 (16.3%) have low level of beauty satisfaction and 24 (27.9%) have high level of beauty satisfaction. These observations are consistent with the finding that subjects with visible anomalies

Table 1. Classification according to Level of Beauty satisfaction.

Level of satisfaction	Frequency	Percent
Low	14	16.3
Average	48	55.8
High	24	27.9
Total	86	100.0

n = 86

Table 2. Comparison of Beauty Satisfaction among male and female adolescents with oral facial clefts.

Gender	N	Mean	SD	t- value	p-value
Male	31	40.74	15.678	0.881ns	0.381
Female	55	43.82	15.485		

n = 86, ns: non-significant

Table 3. Comparison of Beauty satisfaction score between control and experimental groups in each period.

Period	Control		Experimental		Mean Difference	t-value	p-value
	Mean	SD	Mean	SD			
Pretest	15.20	3.42	19.20	3.56	-4.00	1.811 ^{ns}	0.108
Post I	18.80	1.79	33.80	1.30	-15.00	15.152 ^{**}	< 0.001
Post II	18.40	1.52	61.80	2.86	-43.40	29.949 ^{**}	< 0.001

** Significant at 0.01 level; ns: non-significant at 0.05 level

Table 4. Results of ANOVA for comparing Beauty Satisfaction scores among three age groups.

Source	Sum of Squares	Df	Mean Square	F	p-value
Between Groups	668.549	2	334.275	1.398 ^{ns}	0.253
Within Groups	19841.183	83	239.050		
Total	20509.733	85			

Ns: non-significant

were significantly more dissatisfied with their appearance than subjects with invisible anomalies [13]. Findings of many previous studies like Sousa et al. [14], Bull and Rumsey [15], Loh and Ascoli [16] and Ravikumar et al. [17] reported low and average level of acceptance of their body. The supportive findings also show that teasing by their peers over their facial appearance was an important predictor of psychological and behavioural problems.

Table 2 shows the comparison of Beauty Satisfaction among male and female children with cleft lip and palate. Since the calculated t-value is not significant at 0.05 level the null hypothesis that there is no significant difference between gender and Beauty Satisfaction is accepted. Thus, it can conclude that both males and female sample experiences beauty dissatisfaction. Interesting to note that the degree of satisfaction with beauty was not related to gender and age group. The investigator interpreted the gender indifferences as a response to a great social emphasis on attractiveness in both male and female adolescents. The lack of gender indifferences is in contradiction with Kapp [18] findings for a sample of preadolescents with clefts.

The mean score of late adolescents on beauty satisfaction is comparatively low (37.81) than that of early and middle adolescents (44). This may be a reflection of the increased

anxiety regarding facial appearance among subjects in the late adolescent age group. The study findings are also supported by the findings of Broder et al. [19] found that subjects with clefting did become more dissatisfied with their appearance with age.

Results of the phase 2 was based on the effectiveness of Biopsychosocial intervention package. Six days package was based on Biopsychosocial model as depicted in Figure 2. Children who have these malformations may face taunts and mockery as they get older and interact with other kids. In this case, regular assessments and multidisciplinary assistance are necessary for the full care of a kid with OFC. The bio-psycho-social model can be used to undertake coordinated efforts, allowing the kid to receive optimal habilitation, feel like a valuable part of society and ensure the family's optimal functioning.

Table 3 shows that t-value for the mean difference corresponding to the pre-beauty satisfaction score was found to be non-significant in the control and experimental group. Therefore, it is revealed that both the groups are homogenous in nature. In post-test I and post-test II there exist a significant difference in both group after the intervention at 0.01 level. Hence it can conclude that level of beauty satisfaction is increased after the implementation of biopsychosocial intervention package. Similar findings were observed by Kleve et al. [20] as there was significant improvement in levels of social anxiety, appearance-related distress, general anxiety and depression at the end of cognitive behavioural interventions.

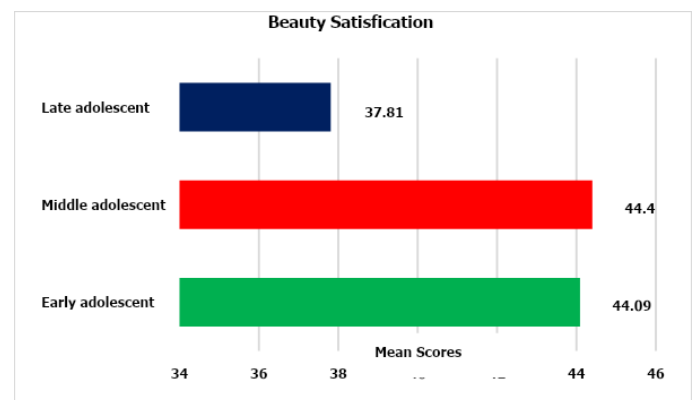


Figure 1. Comparison of mean score of Beauty satisfaction among three age groups.

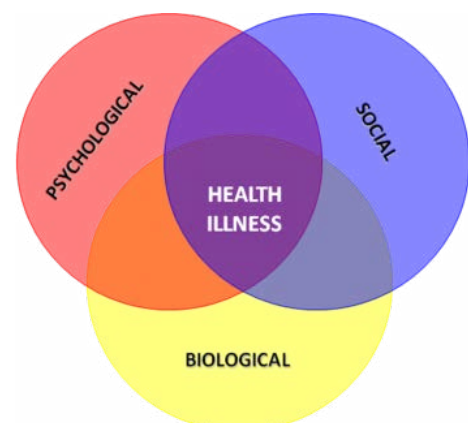


Figure 2. Biopsychosocial model.

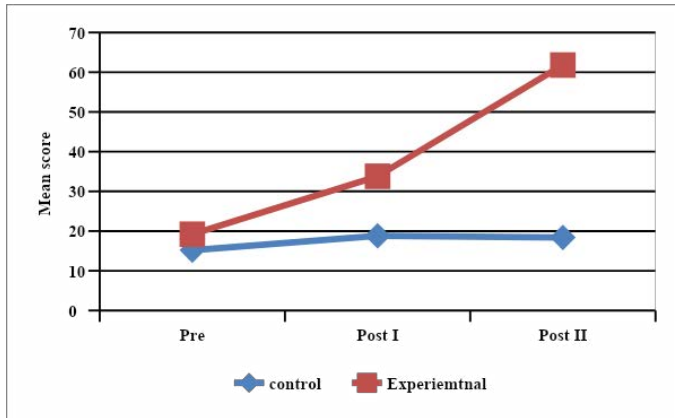


Figure 3. Line Graph shows Change in Beauty satisfaction score in control and experimental group.

To find out if these groups differed significantly in their perceptions of beauty, Analysis of Variance was performed. The F-value in Table 4. 33 shows that there is no statistically significant variation in attractiveness satisfaction between the three age groups. Therefore, it is acknowledged that there is no major difference between age and happiness with appearance.

Figure 3 revealed the pre-test score before intervention was quite similar in both experimental and control groups. But the rate of change of mean score in experimental group was higher than that of control group.

Conclusion.

According to the results above and the conversation around beauty satisfaction, counselling and looking at a face's realistic features might help people accept their physical appearance better. In order to develop social skills, the results also suggest that participants who are unhappy with the way their faces look should benefit from psychological assistance and intervention. Highlighting the average level of beauty satisfaction among adolescents should have biopsychosocial care across the life span to meet the changing needs over time. Therefore, a fruitful avenue of cleft psychosocial research that determines the facial growth changes & experience of surgery needs to be compiled in observational, longitudinal, and cross-sectional studies. Continued psychological counselling will help these children face the challenges of integrating with society. Nevertheless, there is a paucity of long-term cohort research regarding the changes in persons with clefts' satisfaction with their facial look as they age. An investigation of this kind is required to ascertain whether age differences have an impact on satisfaction and whether certain developmental stages are linked to the incidence of appearance-related discontent.

Acknowledgement

The author acknowledges Late Dr.H.S.Adenwalla, HoD, and Dr.P.V.Narayanan, Plastic and Reconstructive Surgeon at Charles Pinto Centre for Cleft Lip & Palate, Jubilee Mission Medical College and Research Centre, Thrissur, Kerala, India.

Conflict of Interest.

The authors declare that there was no conflict of interest.

REFERENCES

1. Mossey P, Little J. Addressing the challenges of cleft lip and palate research in India. *Indian Journal of Plastic Surgery.* 2009;42:9-18.
2. Mercado A, Russell K, Hathaway R, et al. The Americleft study: an inter-center study of treatment outcomes for patients with unilateral cleft lip and palate part 4. Nasolabial aesthetics. *Cleft Palate Craniofac J.* 2011;48:259-64.
3. Thomas PT, Turner SR, Rumsey N, et al. Satisfaction with facial appearance among subjects affected by a cleft. *Cleft Palate Craniofac J.* 1997;34:226-31.
4. Marcusson A, Paulin G, Ostrup L. Facial appearance in adults who had cleft lip and palate treated in childhood. *Scand J Plast Reconstr Surg Hand Surg.* 2002;36:16-23.
5. Sinko K, Jagsch R, Prechtel V, et al. Evaluation of esthetic, functional, and quality-of-life outcome in adult cleft lip and palate patients. *Cleft Palate Craniofac J.* 2005;42:355-6.
6. Engel G.L. The need for a new medical model: a challenge for biomedicine. *Science.* 1977;196:129-36.
7. Nambiar S, Singhal P, Menon A, et al. Clinico-epidemiological profile of oral facial clefts among children of coastal district of southern India. A 5-year hospital based study. *Journal of Cleft Lip Palate and Craniofacial Anomalies.* 2014;1:34-37.
8. Uppal S.K, Shah S, Mittal R.K, et al. Epidemiology and clinical profile of cleft lip and palate patients in a tertiary institute in Punjab, India: A preliminary study. *Journal of Cleft Lip Palate and Craniofacial Anomalies.* 2016;3:32-35.
9. Turnpenny P.D, Ellard S. Emery's elements of medical genetics. 14th edition. Philadelphia: Elsevier Chrchill Livingstone. 2011;269-270.
10. Sah R.K, Powar D.R. Epidemiological Profile of Cleft Lip and Palate Patients Attending Tertiary Care Hospital and Medical Research Centre, Belgaum, Karnataka – A Hospital Based Study. *Journal of Dental and Medical Sciences.* 2014;13:78-81.
11. Sridhar K. A community-based survey of visible congenital anomalies in rural Tamil Nadu. *Indian Journal of Plastic Surgery.* 2019;42:S184-S191.
12. Kummert C.M, Moreno L.M, Wilcox A.J, et al. Passive Smoke Exposure as a Risk Factor for Oral Clefts - A Large International Population-Based Study. *American journal of epidemiology.* 2016;183:834-841.
13. Peter J.P, Chinsky R.R, Fisher M.J. Sociological aspects of cleft palate adults: IV Social integration. *Cleft Palate Journal.* 1974;12:304-310.
14. Sousa A.De, Devare S, Ghanshani J. Psychological issues in cleft lip and cleft palate. *Journal of Indian Association of Pediatric surgeons.* 2009;14:55-58.
15. Bull R, Rumsey N. The social psychology of facial disfigurement. Springer, New York, NY. 1988.
16. Loh J, Ascoli M. Cross-cultural attitudes and perceptions towards cleft lip and palate deformities. *World culture Psychiatric Research Review.* 2011;6:127-134.
17. Ravikumar A, Balan R, Venkatramanan P. Self-perceived health related quality of life in adolescents with repaired cleft lip and palate. *International Journal of Contemporary Pediatrics.* 2017;4:1263-1266.

18. Kapp K. Self concept of the cleft lip and or palate child. *The Cleft palate journal*. 1979;16:171-6.
19. Broder H.L, Smith F, Strauss R. Habilitation of patients with clefts:parent and child ratings of satisfaction with appearance and speech. *The Cleft palate-craniofacial journal*. 1992;29:262-267.
20. Kleve L, Rumsey N, Wyn-Williams M, et al. The effectiveness of cognitive-behavioural interventions provided at Outlook: a disfigurement support unit. *Journal of Evaluation in Clinical Practice*. 2002;8:387-395.