

GEORGIAN MEDICAL NEWS

ISSN 1512-0112

NO 2 (347) Февраль 2024

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. Корректур авторам не высылаются, 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.

Yu-Ri Choi, Su-Bin Yu, Seoul-Hee Nam. ANTIBACTERIAL EFFECT OF CRATAEGUS PINNATIFIDA EXTRACT AGAINST ENTROCOCCUS FAECALIS A ROOT CANAL DISEASE-CAUSING BACTERIA.....	6-10
Larisa Melia, Revaz Sulukhia, Lali Pkhaladze, Nino Davidova, Archil Khomasuridze. MIFEPRISTON IN OBSTETRICS – WHY NOT?.....	11-14
Maryna Stoliarchuk. CORRELATION BETWEEN TRANSVERSE CEPHALOMETRIC PARAMETERS AND THE SEVERITY OF SKELETAL MALOCCLUSIONS.....	15-18
Deepak, Prashant Rao, Archana, Sowmya M, Sandeep. S, Suma S. A CROSS-SECTIONAL STUDY ON COVID-19 VACCINATION HESITATION AMONG UNIVERSITY STUDENTS.....	19-23
Tchernev G, Broshtilova V, Ivanov L, Alexandrov A, Smilov N, Kordeva S. DRUG RELATED NITROSOGENESIS, PHOTOCARCINOGENESIS AND ONCOPHARMACOGENESIS OF NODULAR MELANOMA: A CASE RELATED ANALYSIS CONCERNING THE POLYCONTAMINATION OF THE POLYMEDICATION WITH VALSARTAN/ HYDROCHLOROTHIAZIDE AND BISOPROLOL.....	24-27
Rawaa J. Matloob, Zeina A. Althanoon, Saad A. Algburi, Mudheher I. Salih, Marwan M. Merkhan. UPDATE ON THE USE OF METHOTREXATE IN THE MANAGEMENT OF RHEUMATOID ARTHRITIS.....	28-33
Georgi Tchernev. (N-NITROSO) PROPAPFENONE INDUCED ADVANCED NODULAR MELANOMA-FIRST REPORTED CASE IN THE WORLD LITERATURE: THE INEXTRICABLE LINKS BETWEEN THE PHOTOCARCINOGENESIS, DRUG RELATED NITROSOGENESIS AND PHARMACO-ONCOGENESIS.....	34-37
Elham M. Mahmood, Entedhar R. Sarhat, Maryam T. Tawfeq, Siham A. Wadee. HISTOLOGICAL AND BIOCHEMICAL STUDY OF THE EFFECT OF FEXOFENADINE ON SALIVARY GLAND IN RATS.....	38-40
Valerii Vovk, Igor Duda, Alla Vovk. THE EFFECT OF A MULTIMODAL APPROACH ON THE RESULTS OF TREATMENT IN SURGERY: INTEGRATION OF CHEMOTHERAPY, SURGERY, AND RADIOTHERAPY.....	41-46
Haitham Alhussain, Deepak, Bharath Chandra V, Lakshmi. R, Sumana A, Jishamol KR. EXAMINATION OF THE INCIDENCE OF POOR SLEEP QUALITY AND FACTORS ASSOCIATED FOR POOR SLEEP DURING THE VARIOUS PHASES OF PREGNANCIES.....	47-53
N. Ksajikyan, H. Aghababyan, M. Sargsyan. ASSESSMENT OF REACTIVITY TO THE BODY UNDER CONDITIONS OF PHYSICAL ACTIVITY IN STUDENTS AGED 17-20 YEARS....	54-58
Abinaya Srinivasa Rangan, Dhanush Balaji.S, Utham Chand, Raghunathan E.G, Deepthi.N, Prasanna Karthik.S. TRIGLYCERIDE – GLUCOSE INDEX, REMNANT CHOLESTEROL AND COMMON CAROTID ARTERY INTIMA-MEDIA THICKNESS AS AN ATHEROSCLEROTIC MARKER IN ISCHEMIC STROKE PATIENTS.....	59-65
Riyam AH. Al-Barwani, Entedar R. sarhat. BREAST CANCER-MODULATED OMENTIN AND VASPIN PLASMA LEVELS.....	66-69
Tchernev G, Dimova D. PERIOULAR HIGH RISK BCCS AFTER ADDITIONAL/PARALLEL INTAKE OF TORASEMIDE, MOXONIDINE AND MIRABEGRON: IMPORTANT LINKS TO SKIN CANCER RELATED (PHOTO-) NITROSOGENESIS IN THE CONTEXT OF PHARMACO-ONCOGENESIS.....	70-76
Abinaya Srinivasa Rangan, Dhanush Balaji.S, Saranya.C, Raghunathan E.G, Deepthi.N, Prasanna Karthik.S. ASSOCIATION OF MPV AND RDW WITH DISEASE ACTIVITY IN PATIENT WITH RHEUMATOID ARTHRITIS.....	77-81
Julieta Nino Gulua, Lela Sturua, Maia Khubua, Lela Shengelia. THYROID CANCER AS A PUBLIC HEALTH CHALLENGE IN GEORGIA.....	82-86
Rahma S. Almallah, Hani M. Almkhtar. MIRABEGRON INDUCED RELAXATION OF ISOLATED BOVINE CORONARY SEGMENTS: ROLE OF NO AND K+ CHANNEL.....	87-92
Gogotishvili Mariam, Gogebashvili Nino, Bakradze Mzia, Gorgiladze Tinatin, Japaridze Fridon. MANIFESTATIONS OF DISEASES OF THE ORAL MUCOSA OF PATIENTS IN THE ADJARA REGION DURING THE COVID-19 PANDEMIC.....	93-95
Nithesh Babu R, Fathima S Nilofar, Saranya Palanisamy, Gnanadeepan T, Mahendra Kumar K. EXPLORING THE INCIDENCE AND PREVALENCE OF NEW-ONSET AUTOIMMUNE DISEASE FOLLOWING COVID-19 PANDEMIC: A SYSTEMATIC REVIEW.....	96-103

E. Mosidze, A. Chikovani, M. Giorgobiani. ADVANCES IN MINIMALLY INVASIVE SURGERY FOR PECTUS EXCAVATUM: ENHANCING OUTCOMES AND PATIENT CARE.....	104-107
Nithesh Babu R, Fathima S Nilofar, Saranya Palanisamy, Gnanadeepan T, Mahendra Kumar K. SIGNIFICANCE OF NEUTROPHIL-LYMPHOCYTE RATIO AND PLATELET-LYMPHOCYTE RATIO AS PROGNOSTIC MARKERS OF DISEASE SEVERITY IN SYSTEMIC LUPUS ERYTHEMATOSUS.....	108-112
Athraa E. Ahmed, Nibras H. Hameed. PREVALENCE OF FETAL CONGENITAL ANOMALIES IN PATIENTS ATTENDING TIKRIT TEACHING HOSPITAL.....	113-116
Kazantsev A.D, Kazantceva E.P, Sarkisyan I.P, Avakova A.E, Shumakova A.O, Dyachenko Y.E, Mezhenko D.V, Kustov Y.O, Makarov Daniil Andreevich, Guliev M.T, Babaeva M.M. COMPARATIVE ANALYSIS OF POSITIVE AND NEGATIVE EXPECTATIONS WITH CONTROL OF VOLITIONAL EFFORT IN YOUNG AND OLD AGES AS RISK FACTORS OF SOCIAL AGING.....	117-121
Arnab Sain, Sarah Arif, Hoosai Manyar, Nauman Manzoor, Kanishka Wattage, Michele Halasa, Arsany Metry, Jack Song Chia, Emily Prendergast, Ahmed Elkilany, Odiamehi Aisabokhale, Fahad Hussain, Zain Sohail. CURRENT CONCEPTS IN THE MANAGEMENT OF BOXER'S FRACTURE.....	122-124
Gonashvili Meri, Kilasonia Besarion, Chikhladze Ramaz, Merabishvili Gela, Beriashvili Rusudan. MEDICO-LEGAL APPLICATIONS OF FRACTURE HEMATOMA: REVIEW.....	125-130
Zynab J. Jarjees, Entedhar R. Sarhat. ASSESSMENT OF OSTEOPONTIN, SCLEROSTIN, AND OSTEOCALCIN LEVELS IN PATIENTS WITH HYPOTHYROIDISM ON MEDICAL THERAPY.....	131-135
Tchernev G, Dimova D. EDUCATION FROM DERMATOLOGISTS: THE SIMULTANEOUSLY DEVELOPMENT OF 16 KERATINOCYTIC CANCERS AFTER USE OF METFORMIN IN COMBINATION WITH LOSARTAN/ HYDROCHLOROTHIAZIDE, METOPROLOL AND NIFEDIPINE-IMPORTANT LINKS TO DRUG RELATED (PHOTO)-NITROSO-CARCINOGENESIS AND ONCOPHARMACOGENESIS.....	136-141
Ismayilov M.U, Polukhov R.Sh, Poddubny I.V, Magammedov V.A. COMPARATIVE ASSESSMENT OF SURGICAL TREATMENT OF COMPLICATIONS OF ULCERATIVE COLITIS IN CHILDREN.....	142-148
Arnab Sain, Arsany Metry, Nauman Manzoor, Kanishka Wattage, Ahmed Elkilany, Michele Halasa, Jack Song Chia, Sarah Arif, Fahad Hussain, Odiamehi Aisabokhale, Zain Sohail. THE ROLE OF DISTAL LOCKING IN INTRAMEDULLARY NAILS FOR HIP FRACTURE FIXATION: A REVIEW OF CURRENT LITERATURE.....	149-150
Buba Chachkhiani, Manana Kalandadze, Shalva Parulava, Vladimer Margvelashvili. EFFECT OF SURFACE ABRASION AND TEMPERATURE TREATMENT ON METASTABLE TETRAGONAL ZIRCONIUM DIOXIDE (EXPERIMENTAL STUDY).....	151-155
Abdulrahman A Abdulhamed, Luma W Khaleel. CARDIOPROTECTIVE EFFECT OF GLYCYRRHIZA GLABRA EXTRACT AND GLYCYRRHIZA GLABRA SILVER NANOPARTICLE AGAINST ALLOXAN AND NICOTINAMIDE INDUCED DIABETIC CARDIAC INJURY IN RATS.....	156-159
Larysa Pentiuk, Tetiana Niushko, Emiliia Osiadla. FEATURES OF BLOOD PRESSURE DAILY MONITORING INDICATORS, STRUCTURAL AND FUNCTIONAL CHANGES OF THE LEFT VENTRICLE AND VESSELS IN WOMEN WITH HYPERTENSION II STAGE OF DIFFERENT REPRODUCTIVE AGE AND THEIR RELATIONSHIP WITH SEX HORMONES LEVEL.....	160-167
Rana dawood Salman Al-kamil, Thamir F. Alkhiat, H. N. K. AL-Saman, H. H. Hussein, Dawood Chalooob Hilyail, Falah Hassan Shari. THE EFFECT OF NUTRITIONAL GENOMICS ON CARDIOVASCULAR SYSTEM.....	168-176
Sopiko Kvaratsthelia. PREVALENCE OF DENTITION, DENTAL ARCHES AND DENTAL ANOMALIES.....	177-180
Dorosh D, Liadova T, Popov M, Volobuieva O, Pavlikova K, Tsivenko O, Chernuskiy V, Hrek I, Kushnir V, Volobuiev D. THE EFFECT OF MELATONIN ON THE SERUM LEVEL OF INTERLEUKIN 31 IN HERPESVIRUS SKIN DISEASES ON THE BACKGROUND OF HIV.....	181-184

COMPARATIVE ANALYSIS OF POSITIVE AND NEGATIVE EXPECTATIONS WITH CONTROL OF VOLITIONAL EFFORT IN YOUNG AND OLD AGES AS RISK FACTORS OF SOCIAL AGING

Kazantcev A.D¹, Kazantceva E.P², Sarkisyan I.P¹, Avakova A.E², Shumakova A.O², Dyachenko Y.E², Mezhenko D.V², Kustov Y.O², Makarov Daniil Andreevich¹, Guliev M.T¹, Babaeva M.M¹.

¹Federal State Autonomous Educational Institution of Higher Education I.M. Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation (Sechenov University), Moscow, Russian Federation.

²Peoples' Friendship University of Russia (RUDN), Medical Institute, 6 Miklukho-Maklaya str., Moscow, Russian Federation.

Abstract.

An elderly person is the subject of changes and development of the basic conditions of his life. Older patients may experience manifestations of social aging, in which some new areas of social reality remain unexplored for them. This article analyzes dispositional optimism and locus of control, as two personal characteristics closely related to the social and psychological aspects. The aim of the study was to examine the relationship between dispositional optimism and locus of control in young and old people.

During the study, 115 elderly respondents from the Gerontological Center were surveyed. The average age was 70 [52-74]. A survey of 120 students of the Krasnoyarsk State Medical University of the first, second, third and fourth years, whose average age was 20 [19-25] was conducted. The majority of elderly patients were classified as having an external locus of control (54%), while 46% had an internal locus of control. Regarding optimism, 20% of older people were optimists, 73% were pessimists, and 7% of respondents had a combination of both optimism and pessimism. The majority of young respondents also fell into the category with an external locus of control (70%), while 30% had an internal locus of control. 73% of young people were optimists, 19% were pessimists, and 8% of respondents had a combination of both optimism and pessimism. In older people, there is an inverse relationship between the indicators - the level of internality is inversely proportional to the level of optimism, which is explained by the expectation that bad events will happen more often in the future than good ones. Accordingly, it is necessary to introduce practical recommendations.

Key words. Locus of control, dispositional optimism, correlation, rehabilitation, elderly person.

Introduction.

According to the 1970 census, the proportion of people over 66 years of age in our country was 11.8% of the total population [1]. At the moment, this figure has increased by about 16% and continues to increase [2]. The growing proportion of older people in the population raises many issues for modern society, such as access to health care, social protection, and support, as well as educational opportunities and participation in social and cultural life [3].

Elderly people in Russian society differ significantly from their peers in Europe, America, and Eastern countries [4]. These differences can be seen not only in the standard of living, but also in social relationships, social certainty, status, and roles, as well as in age indicators [5]. The issue of older age groups

has remained relevant for centuries, since the influence of the elderly population on society is of great importance. However, in Russian sociology there is a clear lack of research devoted to older people as a specific social group [6]. Older people may experience symptoms of social aging that limit their access to new areas of social activity [4,7]. Moreover, many of them become less resilient, their performance decreases [3,8]. Preventing these problems, rather than combating existing ones, is the main task of psychoprophylaxis. It is very obvious that it is necessary to take into account not only sociodemographic and somatic factors, but also stable psychological phenomena that influence the level of satisfaction of older people. One such phenomenon is dispositional optimism. Initially, interest in the problem of optimism arose due to a simple observation: mentally healthy people usually tend to think optimistically about themselves, their potential and the future [9]. This led to the hypothesis that optimistic thinking promotes psychological well-being, helps you avoid depression, and helps you cope more effectively with life's challenges and obstacles by maintaining confidence and perseverance. Dispositional optimism is a quality that determines a person's tendency to believe that his life will be filled with a large number of favorable events rather than negative ones [9,10].

Also, one of the key roles in ensuring the social well-being of an individual belongs to the locus of control. Using this concept, success, or failure in any field of activity can be explained by either internal or external factors. Locus of control is a stable personality characteristic that is not highly susceptible to change [12,13]. It is a key indicator of an individual's readiness to take responsibility for his own actions, as well as for the actions of others, which can significantly influence his behavior [14,15].

The following research hypothesis was put forward: there is a direct relationship between locus of control and dispositional optimism in elderly and young people.

This paper analyzed dispositional optimism and locus of control, which are closely related to social and psychological aspects.

Aim of the study: to study the relationship between dispositional optimism and locus of control in young and elderly people.

Research objectives:

1. Analyze the main directions of rehabilitation of elderly people in the gerontological center.
2. Determine age group differences between elderly and young respondents in terms of the level of optimism and internality of the locus of control.

3. Develop practical recommendations for the formation of intergenerational interaction as a significant aspect of the rehabilitation of elderly people.

Materials and Methods.

The study was carried out on the basis of the gerontological center and the Krasnoyarsk State Medical University. prof. V.F. Voino-Yasenetsky (KrasSMU).

The Gerontological Center was created with the aim of providing social and medical services to older citizens to preserve and restore health, improve social and psychological status through preventive and health measures aimed at prolonging active life and performance. The main directions of rehabilitation of elderly people include: therapeutic correction of the disease using geroprotective therapy, oxygen therapy, herbal medicine, balneotherapy, speleotherapy, paraffin-ozokerite treatment, physiotherapeutic treatment (magnetic therapy), therapeutic massage, non-contact and mechanical massage, physical therapy, therapeutic dentistry, nutrition according to the principles of gerodietetics, social rehabilitation, psychological rehabilitation, organization of leisure activities.

The study protocol included 223 respondents from 2022 to 2023, who were divided into two groups: the first group - 115 elderly people and the second group - 108 students. The study conducted complies with all ethical standards laid down in the 2000 Declaration of Helsinki. The procedure was performed subject to obtaining informed voluntary consent from all study participants. The design of the study was open prospective.

In the group of elderly patients, the average age was 70 [52-74] years. Among the elderly respondents, 87.1% were female and 12.9% were male. Elderly respondents in 84.2% of cases live in the city of Krasnoyarsk and cities of the Krasnoyarsk Territory, 15.8% are residents of rural areas. Also, more than half of them live alone after the loss of a spouse (51%), about a third are married (40%) and 9% of respondents have never entered into a family relationship.

The second group consisted of 108 students of the first, second, third and fourth years of Krasnoyarsk State Medical University, whose average age was 20 [19-25] years. Of these, 32 were boys (26.6%) and 88 girls (73.4%). 7.6% of the subjects are residents of rural areas, while the majority of them - 92.4% - live in the cities of the Krasnoyarsk Territory. Only 12% are married, the majority of respondents - 88% - have not yet entered into a family relationship.

The subject of the study was the assessment of dispositional optimism and locus of control in elderly and young people with different levels of activity.

To diagnose optimism as a disposition, we used the dispositional optimism test, TDO (Gordeeva et al., 2010; Scheier, Carver, 1985), consisting of 10 points. TDO is positively associated with self-esteem, a sense of mastery, and an internal sense of control. At the same time, it has a negative relationship with anxiety, neuroticism, depression, and a tendency to experience anger. This test includes the following categories: optimists (an individual's tendency to believe that more pleasant events await him than unpleasant ones) and pessimists (an individual's tendency to believe that more unpleasant events await him than pleasant ones).

Locus of control served as an assessment of a person's ability to attribute their successes or failures only to internal or only to external factors (D. Rotter et al. 1954).

As part of the study, a psychological state was diagnosed in order to identify the level of optimism among respondents and their belonging to a certain type of locus of control. Dispositional optimism is a relatively stable personality characteristic that reflects positive expectations about the future. In turn, optimists, who tend to see predominantly positive aspects in the future, are more active in their actions compared to pessimists.

Testing was carried out both among students of Krasnoyarsk State Medical University and among elderly people undergoing treatment at the gerontological center.

Study's limitations: one limitation of this study was that it was limited to data related to subjective phenomenon that can result in bias of the findings obtained.

Statistical processing was carried out using methods of collecting and grouping factual material, calculating the median (Me) and interquartile range (IQR). Distribution for "normality" was determined using the Shapiro-Wilk normality test. The correlation coefficient (r) was checked for parametric characteristics using the Pearson criterion (χ^2), for non-parametric ones - using Spearman's rank correlation coefficient. Differences in indicators at $p < 0.05$ were considered significant.

Results and Discussion.

The present study determined whether there is a relationship between the level of locus of control and optimism in older people (Table 1).

Table 1. Analysis of dispositional optimism and locus of control among young and older respondents

Age group	Dispositional optimism			Locus control	
	Optimists	Pessimists	Combination	Interior	External
Elderly respondents (n = 115)	25%	70%	5%	40%	60%
Young respondents (n = 108)	69%	20%	11%	28%	72%
P	0.0105	0.0001	0.0304	0.0001	0.0120

The table 1 shows that the majority of older people surveyed were those whose locus of control was external (60%) - they tend to attribute performance results to external factors (externals), $p < 0.05$. While internal locus of control was observed in 40% of patients who tended to attribute performance results to internal factors (internals) - for example, their own efforts, their positive and negative qualities, the presence or absence of the necessary knowledge, skills, etc., $p < 0.05$.

According to the data obtained, 25% of elderly patients were optimists, 70% were pessimists, and 5% of respondents simultaneously showed both optimism and pessimism ($p < 0.05$).

By calculating the Spearman criterion, the distribution of indicators of optimism and locus of control within the group was compared and the relationship between them was identified. The resulting value $r_s = -1$ (a noticeable negative relationship, $r_{xy} = -0.55$) fell within the zone of significance of the criterion ($p = 0.0181$), which indicates that the level of optimism is inversely proportional to the internal controllability of the locus of control (Table 2).

Table 2. *r*-relationship between optimism indicator and locus control.

Age group	r-relationship (r _{xy}) between the optimism indicator and locus control	Relationship	P
Elderly respondents (n = 115)	-0.55	Inversely proportional	0.0181
Young respondents (n = 108)	+0.75	Directly proportional	0.0001

The majority of the students surveyed belonged to the external form of locus of control (72%), while the internal locus of control was found in 28% of cases ($p < 0.05$). Among young respondents, optimists prevailed (69%), 20% were pessimists, and 11% of respondents simultaneously showed optimism and pessimism ($p < 0.05$).

By calculating the Spearman criterion, the distribution of indicators of optimism and locus of control within the group was compared and the relationship between them was identified. The resulting value $r_s = 1$ (high positive relationship, $r_{xy} = +0.75$) falls within the zone of significance of the criterion ($p = 0.0001$) that optimistic students are internals (Table 2).

From the table 2 shows that among young respondents there is a direct relationship between the indicator of optimism and locus control (the higher the level of internality, the higher the level of optimism of an elderly person), while among elderly people the relationship is inversely proportional (the higher the level of internality, the lower level of optimism in older people). The obtained result is logical in terms of the fact that young people have stronger leadership potential.

Thus, it can be noted that optimists are more common among students, and pessimists are more common among older people: 69% versus 25% ($p < 0.05$). The combination of optimism and pessimism is observed much less frequently. Young and older people are more likely to be externalizers – 72% and 60% ($p < 0.05$), respectively (Figure 1).

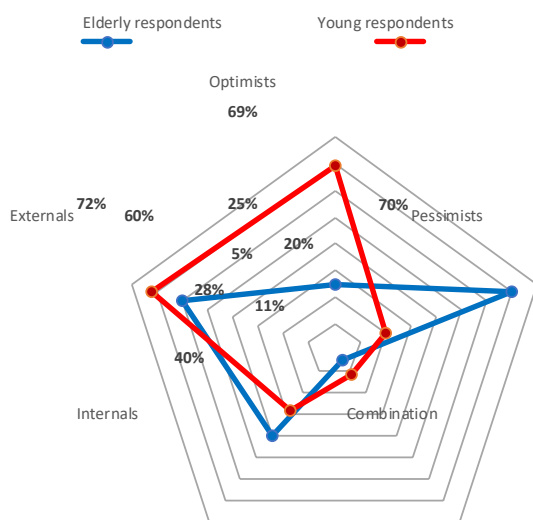


Figure 1. The relationship between dispositional optimism and locus of control among young and older respondents.

The relationship between dispositional optimism and locus control became different: in older people it was inversely proportional, and in young people it was directly proportional ($p < 0.05$).

The results of this study allow us to understand how optimism and locus of control are personal resources for normalizing mental state in young and old age. Based on the data obtained, it is possible to develop effective measures aimed at prevention, education, and development of psychological resources.

Conclusion.

The connection between dispositional optimism and locus of control of personality is shown. In relation to young people, older respondents have an inverse relationship of indicators - the higher the level of internality, the lower the level of optimism of the elderly person. That is, the more an elderly person believes that he is in control of events, the less optimistic the prospects seem to him. This is probably due to the fact that in the current economic situation, it seems impossible for older people to expect good things to happen in the future. Young respondents have more positive expectations from future events. The data obtained can serve as the basis for the development of programs for the prevention of unfavorable conditions in older people during various periods, including increased psycho-emotional stress.

Elderly people in a society of young people suffer from a low position in the hierarchy of intergroup relations. Interaction between generations is heterogeneous and unequal in various spheres of communication. The attitude of people of different ages towards life and their role in it is different. Youth, as is traditionally considered, is a time of plans and hopes; on the contrary, in old age people more often turn to memories and summing up results.

It is proposed to introduce practical recommendations:

1. It is necessary to carry out rehabilitation activities aimed at strengthening self-confidence, increasing self-esteem and the level of optimism by organizing interaction between generations in various forms, including cultural and leisure activities, teamwork and sports and recreational activities.
2. It is recommended to conduct individual psychological training with the participation of a specialist, involve older people in leisure activities with the younger generation, create situations of success with the support of educational psychologists, organize volunteer work with older people and involve social work specialists.
3. Organize an individual approach to older people as a social group.

Declaration of Conflicting Interests.

The authors declare no conflicts of interest regarding the publication of this paper.

Statement of Funding.

The author(s) received no financial support for the research, authorship, and/or publication of this article.

REFERENCES

1. Александрова М. Д. О возрастных лимитах трудоспособности. Возрастная психология взрослых. Под ред. Б. Г. Ананьева, Е. И. Степановой. Л.: Изд-во ЛГУ. 1971:123-127.

2. Александрова М. Д. Пожилой человек и проблемы профессиональной занятости. К истории вопроса. Вестник Санкт-Петербургского университета. Психология. 2014;2:87-96.
3. Бочаров О.В. Стиль объяснения событий и локус контроля как корреляты мотивации достижения. Психол. вестн. Урал. гос. ун-та. Екатеринбург. 2009;8:222-230.
4. Виндекер О.С. Взаимосвязь мотивации достижения с показателями оптимизма пессимизма. Проблемы образования, науки и культуры. 2009;4:119-125.
5. Виндекер О.С. Особенности мотивации достижения современных студентов: гендерный аспект. Психология образования: психологическое обеспечение «Новой школы». 2010;1:299-300.
6. Ильянская Я.А. Опыт развития систем непрерывного образования в России и за рубежом. Современные исследования социальных проблем. 2015;2:57-67.
7. Лобанова М.С. Практические возможности осмысленной жизни людей пожилого возраста. Актуальные проблемы психолого-педагогических исследований. 2023;1:178-182.
8. Райгородский Д.Я. Практическая психодиагностика. Методики и тесты. Учебное пособие. «Бахрах-М». 2010;1:141.
9. Гордеева Т. О. Психология мотивации достижения: учебное пособие для вузов / Т. О. Гордеева. – Москва : Академия, 2006:336.
10. Geryk T, Jacelon CS, LeBlanc R, et al. Self-management after hospitalisation. *Int J Older People Nurs.* 2019;14e:12257.
11. Graham KL, King KD. Evaluating the Working With Older Adults Scale With Clinical Psychology Doctoral Students. *Gerontologist.* 2022;62:1217-1225.
12. Mori K, Akezaki Y. *Nihon Eiseigaku Zasshi.* 2016;71:126-132.
13. Ермолаева М.В, Методы психологической регуляции эмоциональных переживаний в старости // Психология старости и старения: Хрестоматия / Сост. О.В. Краснова, А.Г. Лидере. М.: Академия, 2003:164-171.
14. Webb C, Smith A, Orrell M, et al. Positive psychology and attitudes to ageing in people aged 50 and over in the United Kingdom. *Aging Ment Health.* 2023;27:1156-1162.
15. Стюарт-Гамильтон Ян. Психология старения : пер. с англ. / Ян Стюарт-Гамильтон. – 4-е изд. – СПб. : Питер, 2010:320.

SUMMARY

DISPOSITIONAL OPTIMISM AND LOCUS OF CONTROL AS RISK FACTORS FOR SOCIAL AGING: COMPARATIVE ANALYSIS IN YOUNG AND OLD AGES

Kazantsev A.D¹, Kazantseva E.P², Sarkisyan I.P¹, Avakova A.E², Shumakova A.O², Dyachenko Y.E², Mezhenko D.V², Kustov Y.O², Makarov Daniil Andreevich¹, Guliev M.T¹, Babaeva M.M¹

¹*Federal State Autonomous Educational Institution of Higher Education I.M. Sechenov First Moscow State Medical University*

of the Ministry of Health of the Russian Federation (Sechenov University), Moscow, Russian Federation.

²*Peoples' Friendship University of Russia (RUDN), Medical Institute, 6 Miklukho-Maklaya str., Moscow, Russian Federation.*

Abstract. An elderly person is the subject of changes and development of the basic conditions of his life. Older patients may experience manifestations of social aging, in which some new areas of social reality remain unexplored for them. This article analyzes dispositional optimism and locus of control, as two personal characteristics closely related to the social and psychological aspects. The aim of the study was to examine the relationship between dispositional optimism and locus of control in young and old people.

During the study, 115 elderly respondents from the Gerontological Center were surveyed. The average age was 70 [52-74]. A survey of 120 students of the Krasnoyarsk State Medical University of the first, second, third and fourth years, whose average age was 20 [19-25] was conducted. The majority of elderly patients were classified as having an external locus of control (54%), while 46% had an internal locus of control. Regarding optimism, 20% of older people were optimists, 73% were pessimists, and 7% of respondents had a combination of both optimism and pessimism. The majority of young respondents also fell into the category with an external locus of control (70%), while 30% had an internal locus of control. 73% of young people were optimists, 19% were pessimists, and 8% of respondents had a combination of both optimism and pessimism. In older people, there is an inverse relationship between the indicators - the level of internality is inversely proportional to the level of optimism, which is explained by the expectation that bad events will happen more often in the future than good ones. Accordingly, it is necessary to introduce practical recommendations.

Key words: Locus of control, dispositional optimism, correlation, rehabilitation, elderly person.

РЕЗЮМЕ ДИСПОЗИЦИОННЫЙ ОПТИМИЗМ И ЛОКУС КОНТРОЛЯ КАК ФАКТОРЫ РИСКА СОЦИАЛЬНОГО СТАРЕНИЯ: СРАВНИТЕЛЬНЫЙ АНАЛИЗ В МОЛОДОМ И ПОЖИЛОМ ВОЗРАСТАХ

Казанцев А.Д¹, Казанцева Э.П², Саркисян И.П¹, Авакова А.Э², Шумакова А.О², Дьяченко Ю.Е², Меженько Д.В², Кустов Ю.О², Макаров Д.А¹, Гулиев М.Т¹, Бабаева М.М¹

¹*ФГАОУ ВО Первый Московский государственный медицинский университет имени И.М. Сеченова Минздрава России (Сеченовский Университет), 119991, г. Москва, ул. Трубецкая.*

²*ФГАОУ ВО Российский университет дружбы народов (РУДН), Медицинский институт, 117198, г. Москва, ул. Миклухо-Маклая.*

Пожилой человек является субъектом изменений и развития основных условий своего бытия. У пожилых пациентов могут наблюдаться проявления социального

старения, при котором некоторые новые области общественной реальности остаются для них неосвоенными. В настоящей работе проведен анализ диспозиционного оптимизма и локус контроля, двух личностных качеств, тесно связанных с социальным и психологическим аспектом. Целью исследования стало изучить взаимосвязь между диспозиционным оптимизмом и локусом контролем у лиц молодого и пожилого возраста.

В ходе исследования были проанкетированы 115 пожилых респондентов из геронтологического центра. Также было проведено анкетирование 120 студентов I, II, III и IV курсов Красноярского государственного медицинского университета, средний возраст которых составил 20 [19-25] лет. Большинство пожилых пациентов относились к категории с внешним локусом контроля (54%), в то время как 46% имели внутренний локус контроля. Относительно оптимизма, 20% пожилых людей были оптимистами, 73% - пессимистами, а у 7% респондентов сочетались и оптимизм, и пессимизм. Большинство молодых респондентов также относились к категории с внешним локусом контроля (70%), в то время как 30% имели внутренний локус контроля. 73% молодых людей были оптимистами, 19% – пессимистами, а у 8% респондентов сочетались и оптимизм, и пессимизм. У лиц пожилого возраста наблюдается обратная связь показателей – уровень интернальности обратно пропорционален уровню оптимизма, что объясняется ожиданием того, что в будущем будут скорее происходить чаще плохие события, чем хорошие. Соответственно необходимо внедрить практические рекомендации.

Ключевые слова: локус контроля, диспозиционный оптимизм, взаимосвязь, реабилитация, пожилой человек.

□□□□□□□□□□

დისპოზიციური ოპტიმიზმი და კონტროლის ლოკუსი, როგორც რისკის ფაქტორები სოციალური დაბერების მიმართ: შედარებითი ანალიზი ახალგაზრდა და ხანდაზმულ ასაკში

Kazantcev A.D.¹, Kazantceva E.P.², Sarkisyan I.P.¹, Avakova A.E.², Shumakova A.O.², Dyachenko Y.E.², Mezhenko D.V.², Kustov Y.O.², Makarov Daniil Andreevich¹, Guliev M.T.¹, Babaeva M.T.¹.

¹უმაღლესი განათლების ფედერალური სახელმწიფო ავტონომიური საგანმანათლებლო დაწესებულება ი.მ. სეჩენოვი რუსეთის ფედერაციის ჯანდაცვის სამინისტროს პირველი მოსკოვის სახელმწიფო

სამედიცინო უნივერსიტეტი (სეჩენოვის უნივერსიტეტი), მოსკოვი, რუსეთის ფედერაცია, 119991, მოსკოვი, ტრუბეცკაიას ქ.

²რუსეთის ხალხთა მეგობრობის უნივერსიტეტი (RUDN), სამედიცინო ინსტიტუტი, მიქლუხო-მაკლაიას ქ. 6, მოსკოვი.

ბსტრაქტული. ხანდაზმული ადამიანი მისი ცხოვრების ძირითადი პირობების ცვლილებებისა და განვითარების საგანია. ხანდაზმულ პაციენტებს შეუძლიათ განიცადონ სოციალური დაბერების გამოვლინებები, რომლებშიც სოციალური რეალობის ზოგიერთი ახალი სფერო მათთვის შეუსწავლელი რჩება. ეს სტატია აანალიზებს დისპოზიციურ ოპტიმიზმს და კონტროლის ადგილს, როგორც ორ პიროვნულ მახასიათებელს, რომელიც მჭიდროდ არის დაკავშირებული სოციალურ და ფსიქოლოგიურ ასპექტებთან. კვლევის მიზანი იყო გამოეკვლია კავშირი დისპოზიციურ ოპტიმიზმსა და კონტროლის ადგილს შორის ახალგაზრდებსა და მოხუცებში.

კვლევის ფარგლებში გერონტოლოგიური ცენტრის 115 ხანდაზმული რესპონდენტი გამოიკითხა. საშუალო ასაკი იყო 70 [52-74]. ჩატარდა გამოკითხვა კრასნოიარსკის სახელმწიფო სამედიცინო უნივერსიტეტის პირველი, მეორე, მესამე და მეოთხე კურსის 120 სტუდენტზე, რომელთა საშუალო ასაკი იყო 20 [19-25]. ხანდაზმული პაციენტების უმრავლესობა კლასიფიცირებული იყო, როგორც კონტროლის გარე ლოკუსის მქონე (54%), ხოლო 46%-ს ჰქონდა კონტროლის შიდა ლოკუსი. რაც შეეხება ოპტიმიზმს, ხანდაზმულთა 20% იყო ოპტიმისტი, 73% იყო პესიმისტი, ხოლო გამოკითხულთა 7%-ს ჰქონდა როგორც ოპტიმიზმის, ასევე პესიმისმის კომბინაცია. ახალგაზრდა რესპონდენტთა უმრავლესობა ასევე მოხვდა გარე კონტროლის ლოკუსის მქონე კატეგორიაში (70%), ხოლო 30%-ს გააჩნდა კონტროლის შიდა ლოკუსი. ახალგაზრდების 73% იყო ოპტიმისტი, 19% პესიმისტი, ხოლო გამოკითხულთა 8%-ს ჰქონდა ოპტიმიზმისა და პესიმისმის კომბინაცია. ხანდაზმულ ადამიანებში ინდიკატორებს შორის საპირისპირო კავშირია – შინაგანობის დონე უკუპროპორციულია ოპტიმიზმის დონისა, რაც აიხსნება იმით, რომ ცუდი მოვლენები მომავალში უფრო ხშირად მოხდება, ვიდრე კარგი. შესაბამისად, აუცილებელია პრაქტიკული რეკომენდაციების შემოღება.

საკვანძო სიტყვები: კონტროლის ლოკუსი, დისპოზიციური ოპტიმიზმი, კორელაცია, რეაბილიტაცია, ხანდაზმული ადამიანი.