GEORGIAN MEDICAL MEWS

ISSN 1512-0112

NO 9 (366) Сентябрь 2025

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 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 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 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. მიკროფოტო-სურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სუ-რათის 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.

GEORGIAN MEDICAL NEWS NO 9 (366) 2025

Содержание:

CHARACTERISTIC OF MYELOID SARCOMA BY CANCER GENOME PROFILING AND ALGORITHM OF POTENTIAL BIOMARKERS FOR UTERINE MESENCHYMAL TUMOR
Feruza Abdullayeva, Kuralbay Kurakbayev, Madamin Karataev. MODERN STRATEGIES IN OUTPATIENT STROKE CARE: A SYSTEMATIC REVIEW OF METHODS, TECHNOLOGIES, AND PROSPECTS
Shota Janjgava, Elene Giorgadze, Revazi Jamburia, Ana Davitashvili, Ketevan Asatiani. RECOMMENDATIONS FOR THE MANAGEMENT OF DIABETIC FOOT
Isoyan A.S, Danielyan M.H, Antonyan I.V, Azizyan N.H, Mkrtchyan A.A, Nebogova K.A, Karapetyan K.V. CHANGES IN THE MORPHOLOGICAL AND FUNCTIONAL STATE OF HYPOTHALAMUS NUCLEI NEURONS IN LONG-TERM CRUSHING SYNDROME
Saduakassova Korlan Zarlykovna, Kassenova Gulzhan Toktaubekovna, Issayeva Raushan Binomovna. EPIDEMIOLOGY AND DIAGNOSTIC CHALLENGES OF AUTISM SPECTRUM DISORDERS IN CHILDREN IN THE REPUBLIC OF KAZAKHSTAN
Nurbol Tursynbaev, Samat Zharmenov, Altyn Dossanova. IMMUNISATION OF CHILDREN IN KAZAKHSTAN: ASSESSMENT OF COVERAGE AND BARRIERS TO VACCINATION REFUSALS IN THE CONTEXT OF SOCIAL NETWORKS AND PARENTAL BELIEFS
Tariel V. Ghochikyan, Melanya A. Samvelyan, Armen S. Galstyan, Karine S. Avetisyan. BIOLOGICAL STUDIES OF THIAZOLES OF NEW STRUCTURE
Yahya Qasem Mohammed Taher, Safeyya Adeeb Ibrahim, Duaa Mohammed Ahmed. BENIGN FASCICULATION SYNDROME AMONG HEALTH CARE WORKERS, A SINGLE CENTER STUDY
Marine A. Parsadanyan, Hrant M. Avanesyan, Arsen B. Lokyan, Sahak V. Hovhannisyan, Mariam A. Shahinyan, Marieta S. Mikaelyan, Gaspar H. Kocharyan, Ara P. Antonyan, Poghos O. Vardevanyan. INTERACTION OF DOPAMINE WITH DNA, DEPENDING ON THE IONIC STRENGTH OF THE SOLUTION: POTENTIAL APPLICATION IN SENSOR TECHNOLOGY
Ahmed Alaa Al-Temimi, Raja Ezman Raja Sharif, Mohd Shahezwan Abd Wahab, Hanis Hanum Zulkifly. GUIDELINE-DIRECTED MEDICAL THERAPY (GDMT) FOR HEART FAILURE MANAGEMENT: ADDRESSING APPLICATIONS, BARRIERS AND OPTIMIZING IMPLEMENTATION
Yerbolat Iztleuov, Marat Iztleuov, Anar Tulyayeva, Gulmira Iztleuova, Elyanora Kydyrbayeva. THE USE OF HERBAL MEDICINES IN PREVENTING CANCER MUTATIONS IN ANIMAL MODELS EXPOSED TO TOXICANTS: A SYSTEMATICREVIEW
Mazyad M Alenezi, Faisal A. Al-Harbi, Rana S. Alqurini, Abdulrahman M. Aloufi, Sulaiman M. AlMushawwah, Mohammed S. Alkhaldi, Reman H.Alsaqrah, Abdullah Yahya Asiri, Manar O. Alharbi, Sultan Alanazy. HOW PRIMARY HEALTH CARE PHYSICIANS IN SAUDI ARABIA HANDLE SUDDEN SENSORINEURAL HEARING LOSS: A CROSS-SECTIONAL STUDY
Hussein A Saheb, Hussam H Sahib, Ahmed M sultan, Luma hassnaui. THE INCIDENCE OF URINARY TRACT INFECTION AMONG PATIENTS TREATED WITH VARIABLE DOSES OF DAPAGLIFLOZIN: A COMPARATIVE STUDY
Ilia Nakashidze, Ahishtan Febrian Nishanthan, Shota Nakashidze, Aleena Parveen Shaikh, Nameera Parveen Shaikh, Naman Chauhan, Salome Zoidze, Sarfraz Ahmad, Irina Nakashidze. PRECISION MEDICINE AND ANAESTHESIA: CURRENT CLINICAL AND GENOMICS APPROACHES
Gasparyan Diana V, Shishkova Valeria E, Gevorgyan Sergey A, Podorovskaya Alexandra I, Kudryashova Arina A, Parfilova Elizaveta A, Poltoratskaya Karina D, Djurabaeva Gulnozahon S, Patsukova Anastasia V, Bolban Svetlana E. PRIMARY HYPERPARATHYROIDISM: DIAGNOSTIC DIFFICULTIES AND RARE MANIFESTATION IN THE FORM OF HYPERCALCAEMIC CRISIS
Uday Mahajan, Muhammad Yousaf, Fahad Jalil, Asif Afridi, Meraj Akhtar, Haroon Yousaf, Amna Hilal, Adnan Asif, Muzammil Ahmed Khan, Anurag Dureja, Mohammed Jaffer Ali, Madeeha Hussaini. REVIEW OF INTRA-OPERATIVE TECHNIQUES TO ASSESS REDUCTION QUALITY IN TIBIAL PLATEAU FRACTURES120-123
Sara Abdelmahmoud Omer, AbdElkarim Abobakr Abdrabo, Afif Abdelmahmoud Omar, Einas A Osman. DIAGNOSTIC AND PROGNOSTIC VALUE OF ANTI-CYCLIC CITRULLINATED PEPTIDE AND RHEUMATOID FACTOR IN RHEUMATOID ARTHRITIS PATIENTS
Alan Adnan Saber. A DESCRIPTIVE STUDY ON THE TRENDS OF CAUSATIVE BACTERIA AND ANTIMICROBIAL RESISTANCE PROFILES IN PATIENTS WHO DEVELOPED SERSIS FOLLOWING CASTRIC SLEEVE RESECTION. 129, 134

Kuralay Amrenova, Askar Serikbayev, Altay Dyussupov, Alua Sharapiyeva, Altynay Dosbayeva, Ainur Krykpayeva, Ynkar Kairkhanova, Nazym Kudaibergenova, Zhanar Zhumanbayeva. HEALTH-RELATED QUALITY OF LIFE OF POST-COVID-19 PATIENTS IN KAZAKHSTAN
Anar Tulyayeva, Iztleuov Yerbolat, Dinara Zholmukhamedova, Nauryzbay Imanbayev, Maya Alibekova. CORRELATION OF HER2 STATUS WITH LYMPH NODE METASTASIS IN KAZAKH PATIENTS WITH GASTRIC141-147
Ahmad MT. Kurukchi, Afya SD. Al-Radha, Athraa A. Mahmood. RADIOGRAPHIC EVALUATION OF THE IMPACT OF PRF MEMBRANE LAYERING ON PERI-IMPLANT TISSUE: RANDOMIZED CONTROLLED CLINICAL TRIAL
Berdia Beridze, George Gogniashvili. LINGUISTIC VALIDATION, PSYCHOMETRIC EVALUATION AND CROSS- CULTURAL ADAPTATION OF THE GEORGIAN SINO-NASAL OUTCOME TEST
Sahib Memon, Mustafa Al-Yassen, Uday Mahajan, Sirtaaj Mattoo, Karim Hussien. OPERATIVE VERSUS NONOPERATIVE MANAGEMENT OF SALTER-HARRIS TYPE II DISTAL RADIUS FRACTURES IN CHILDREN: A RETROSPECTIVE COHORT STUDY
Z.E. Alshimbayeva, R.Kh. Begaydarova, N.M. Khodzhaeva, G. K. Alshynbekova, B.K. Koichubekov, Zolotaryova O.A. IMMUNOLOGICAL CRITERIA FOR PREDICTING SEVERE AND COMPLICATED FORMS OF VARICELLA ZOSTER IN CHILDREN
Anastasiia Shumarova. COPING STRATEGIES IN CONDITIONS OF CONTINUOUS TRAUMATIC STRESS: COMPARATIVE ANALYSIS WITHIN THE CONTEXT OF ARMED CONFLICT
Noha O Mohamed, Rayan Yousef, Abobuker Elgak, Mohammed Mohammed, Sara Mohammed, Amna Mustafa, Tayseer Ahmed, Mutwakil Mubarak. PARADOXICAL ELEVATION OF PLATELET INDICES IN SUDANESE PATIENTS WITH CHRONIC HEPATITIS B: A CROSS-SECTIONALANALYSIS
Lyazzat Alibekova, Dinara Ospanova, Arailym Muratkhan, Bibinur Abdimuratova, Makhigul Maxudova. SELF-ASSESSMENT ON LEADERSHIP SKILLS OF NURSING SERVICE MANAGERS IN KAZAKHSTAN
Ze-Quan Liu, Wei-Wei Chang, Long Hua, Li-Jun Zhu, Li-Ying Wen, Jia-Jing Zhao, Yi-Chen Li, Ying-Shui Yao, Yue-Long Jin. THE RELATIONSHIP BETWEEN NEGATIVE EMOTIONS AMONG BOARDING SCHOOL STUDENTS IN CERTAIN REGIONS OF ANHUI PROVINCE AND FAMILY ENVIRONMENT AND EDUCATIONAL METHODS
Zozulya Aleksei V, Teslevich Vladislav S, Abkhazava Peride, Ramazanov Islam A, Tokhtarova Snezhana V, Streltsova Olga V, Kalsynov Gamzat M, Chernogoloviy Artem S, Antun Djemi F, Gamzaeva Saida T. COMPARATIVE ASSESSMENT OF THE EFFECT OF SILYMARIN, FENOFIBRATE, BETAINE AND ADEMETIONINE ON THE DEVELOPMENT OF STEATOHEPATITIS IN WISTAR RATS
Maira Zh. Espenbetova, Alexandr Zubkov, Ainur S. Krykpayeva, Aida M. Bidakhmetova. CYTOLOGICAL EXAMINATION OF THYROID NEOPLASMS IN INDIGENOUS RESIDENTS LIVING IN THE FORMER SEMIPALATINSK NUCLEAR TEST SITE AREA

SELF-ASSESSMENT ON LEADERSHIP SKILLS OF NURSING SERVICE MANAGERS IN KAZAKHSTAN

Lyazzat Alibekova¹, Dinara Ospanova², Arailym Muratkhan², Bibinur Abdimuratova², Makhigul Maxudova²*.

¹State Enterprise at the Higher Medical College of the Public Health Department of Almaty, Kazakhstan.

²Al-Farabi Kazakh National University, Almaty, Kazakhstan.

Abstract.

Currently, a major reform of the nursing service is being implemented in the Republic of Kazakhstan. One of its main responsibilities, aligned with international trends, involved the development of leadership skills among nursing service managers. As the nurse managers' role in reforming the field of nursing is crucial, the purpose of this cross-sectional study was to assess the leadership qualities among nurse managers in the Republic of Kazakhstan. An online survey was conducted using a self-assessment standardized questionnaire for measuring leadership abilities of nursing service managers. Results indicated that 33.8% of participants demonstrated inherent leadership qualities, while 48.5% of nurses revealed the potential to develop these attributes. Moreover, 7.4% of the respondents were currently identified as non-leaders, while the need to cultivate their leadership competencies was apparent. Similarly, 2.9% of the participants appeared to require mentorship and rigorous effort to enhance their leadership qualities, while 7.4% were unlikely to succeed as leaders due to inherent personal traits. Effective nursing leadership is an essential component of quality improvement and reform. Healthcare organizations in the Republic of Kazakhstan appear to have proficient nurse managers and leaders able to interact effectively in their field. Mentorship and organisational support are essential for further cultivating appropriate leadership qualities for nurse managers in times of services' reform.

Key words. Leadership, nurse manager, leadership skills, healthcare reform, nursing service.

Introduction.

Leaders in nursing practice show by their example the correct behavior in solving basic nursing tasks, which include caring and teaching patients and their families [1]. It is the quality of medical care and ensuring patient safety that is a fundamental task in both nursing and the health care system in general [2,3]. Therefore, the development of leadership in nursing has been identified as one of the priority areas of development in the healthcare system [4].

In the Republic of Kazakhstan in the period 2017-2021. The Erasmus+ project "Promoting the Innovation Capacity of Higher Education in Nursing during Health Services Transition (ProInCa)" was implemented. The report on one of its objectives, "Modernizing Leadership in Nursing," identified and described the leadership and management competencies of nursing service leaders. Also, as a result of assessing the leadership competencies of nurses, the need for further study of leadership issues in nursing was identified [5].

The level of development of leadership qualities of nursing service leaders can be determined by studying both the opinions of their environment and by conducting a self-assessment of leadership qualities. Leadership self-assessment is important for identifying strengths and weaknesses in both leadership and quality of nursing care [6]. This is justified by the fact that leadership qualities are important for achieving positive treatment results for patients and the medical organization itself as a whole [7].

Conducting a self-assessment makes it possible to determine the level of development of certain leadership qualities of nursing service managers [5,6], as well as to determine the main directions for further development of the necessary leadership competencies [7]. The purpose of this study is to identify the level of leadership among nursing service managers in the Republic of Kazakhstan through self-assessment.

Materials and Methods.

A cross-sectional study among nurses in the Republic of Kazakhstan was conducted at the end of 2023. to identify the level of leadership through self-assessment. Nursing service managers (senior and chief nurses, deputy directors of nursing services) were asked to complete a self-assessment using a standardized questionnaire by J.Welch [8]. This questionnaire consists of 12 statements aimed at revealing certain leadership abilities: the ability to communicate, intuition, the ability to prioritize work, teamwork, determination, commitment to work. The assessment was based on a Likert scale, where 1 – complete disagreement with the statement, 5 – complete agreement of the respondent. The analysis of leadership qualities was carried out based on the summation of the points received and their interpretation and in accordance with the methodology [8]. Thus, when receiving 50 points or more, respondents are endowed with leadership qualities, 40-49 - there are prerequisites to become leaders, 30-39 - it is necessary to develop leadership qualities, 20-29 - lack of experience or innate ability to become a leader, less than 20 points - a low chance of becoming a leader. leader due to poor development of leadership qualities.

75 nursing service managers completed this self-assessment. Recruitment of study participants was carried out in several cities of Kazakhstan (Astana, Almaty, Shymkent, Atyrau, Kyzylorda, Pavlodar), in which there were higher medical colleges that occupy leading positions in the training of nursing personnel in the Republic of Kazakhstan. Inclusion criteria: having at least three years of practical experience in the specialty, position held at the time of the survey - head nurse, chief nurse or deputy director of nursing services; consent to participate in the study.

© GMN 184

A mailing with an invitation to participate in the study and an accompanying noted about the purpose of the study and a description of all stages of maintaining confidentiality of data was sent to eligible college graduates through the college administration. In case of agreement to participate in the study, respondents followed the provided link to the online survey.

Participants were informed about the purpose of the study and voluntarily took part in it. Participation is completely anonymous. All principles of the Declaration of Helsinki for scientific research were observed [9].

For conducting a scientific study, the research plan was submitted for consideration to the Local Committee on Bioethics of the West Kazakhstan Medical University (Aktobe, Republic of Kazakhstan) with a description of the methodology, sampling strategy and methods of statistical data processing. A positive conclusion was received on January 26, 2023 – protocol No. 1, assigned number 1.6, meeting dated January 24, 2023.

The internal consistency of the questionnaire was 0.746. Descriptive statistics, correlation analysis, and ANOVA were used to describe the data. When processing the data, the statistical package SPSS 23.0 (IBM SPSS Statistics, USA) was used. Significance criteria were considered at p < 0.05.

Results.

In order to conduct a self-assessment on the leadership of nursing managers, an anonymous online survey was conducted at the end of 2023, in which 75 nurse managers (senior, chief and deputy directors of nursing services) took part. The average age was 44.5 years (SD=8.8), work experience was 22.3 years (SD=10.3). It was noted that the position of chief nurse was filled by specialists whose work experience exceeded 20 years (Table 1). For the position of deputy director of nursing services, the total work experience ranged from 11 to 40 years. Senior nurses were specialists with less than 10 years of experience in their specialty.

34.7% of respondents lived and worked in Almaty, 12.0% in Atyrau region, 10.7% in Kyzylorda, and 9.3% each in Astana, Shymkent and Pavlodar regions. 37.3% had a diploma of technical and vocational education, 22.7% of respondents were graduates of an applied bachelor's degree. 33.3% had higher education, and 6.7% were master's degree graduates.

When analyzing the influence of factors, a significant correlation was determined (Table 2) between the age and work experience of respondents of 0.815 (p = 0.01). This indicates a direct strong connection - the older the respondent, the longer his work experience. A significant average direct correlation was also revealed with the influence of education on the position of respondents of 0.338 (p = 0.01).

More than half of the respondents 65.3% (Figure 1) agreed that they are straight people. 81.3% of respondents noted that they have a good instinct in matters of professional activity. The absence of this was determined by the results of self-assessment among a fifth of nurses.

72.0% of all respondents could think globally. The remaining 38.0% indicated that this did not apply to them, or disagreed, or completely disagreed with this statement. It was important that 86.7% of nurses agreed and completely agreed that they put the patient first. 14.3% of nursing directors disagreed (completely disagreed or it is not apply to them) and were not guided by this principle in their work. This might be due to the fact that this category did not work directly with patients directly.

82.7% of respondents regarded changes as new opportunities for themselves. 86.7% of respondents were able to communicate effectively with their surroundings. 14.7% of surveyed nurses did not know how to build a team. 85.3% of respondents noted that they were quite capable of building a team.

78.6% of respondents helped the organization achieve its goals. And 21.4% marked this statement as not apply to them, disagree or completely disagree.

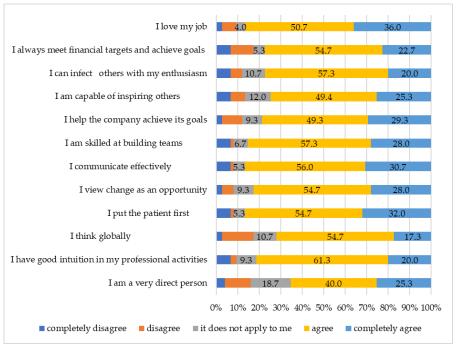


Figure 1. Summary of nurses' self-assessed leadership skills (n=75).

Table 1. Respondents' position and work experience (n=75).

		Position				
		Head nurse (%)	Chief nurse (%)	Deputy Director for Nursing Services (%)	Total (%)	
	3-10 years	10 (13.3)	0 (0.0)	0 (0.0)	10 (13.3)	
	11-20 years	16 (21.3)	0 (0.0)	3 (4.0)	19 (25.3)	
Work experience	21-30 years	28 (37.3)	1 (1.3)	1 (1.3)	30 (40.0)	
	31-40 years	12 (16.0)	0 (0.0)	1 (1.3)	13 (17.3)	
	>40 years	2 (2.7)	1 (1.3)	0 (0.0)	3 (4.0)	
Total		68 (90.6)	2 (2.7)	5 (6.7)	75 (100.0)	

Table 2. Correlation between age, work experience, position, and education of nursing leaders (n=75).

		Age	Position	Work Experience	Education
	Pearson correlation	1	069	.815**	041
age	significant (2-tailed)		.555	.000	.729
	N	75	75	75	75
	Pearson correlation	069	1	.030	.338**
position	significant (2-tailed)	.555		.797	.003
	N	75	75	75	75
	Pearson correlation	.815**	.030	1	.104
work experience	significant (2-tailed)	.000	.797		.373
	N	75	75	75	75

Table 3. ANOVA of work experience on self-esteem (n=75).

№	Statement	F	p value
1	I am a very direct person	2.264	.071
2	I have good intuition in my professional activities	2.813	.032
3	I think globally	6.083	.000
4	I put the patient first	4.696	.002
5	I view change as an opportunity	3.529	.011
6	I communicate effectively	4.315	.004
7	I am skilled at building teams	3.746	.008
8	I help the company achieve its goals	3.133	.020
9	I am capable of inspiring others	3.026	.023
10	I can infect others with my enthusiasm	3.274	.016
11	I always meet financial targets and achieve goals	2.454	.054
12	I love my job	3.964	.006

The ability to inspire other team members was inherent in the self-assessment of 74.6% of respondents. The ability to infect others with their enthusiasm was inherent in 77.3% of respondents. This statement did not apply to the rest of the interviewed respondents.

Fulfillment of their financial tasks and achievement of goals was noted by 77.4% of respondents. 86.7% of nursing service managers loved their jobs. And 13.3% of nurses did not share their love for their work, which indicates that they were forced to do something they did not like for one reason or another.

According to the self-assessment, senior nurses scored an average of 46.27 points (SD=11.56), and chief and deputy directors of nursing services scored 50.7 points (SD=4.86). According to Welch's description, 48.5% of nursing service managers were individuals who had absolutely all the makings of becoming a real leader, and 33.8% belonged to the so-called A players - such people had everything to be a leader. 7.4%

are not leaders at the time of the survey; they need to work on developing their leadership skills. At the same time, 2.9% of respondents need to have a mentor and make efforts to develop leadership skills. And 7.4% of respondents are not capable of being leaders due to their personal qualities. Thus, 58.8% of all respondents (respondents who scored 20-49 points) need to develop their leadership skills. It is worth noting that among chief nurses and deputy directors of nursing services, the following picture was observed: 71.4% had all the prerequisites to be a leader, 28.6% were absolute leaders.

When studying the influence of work experience on self-esteem, a significant Fisher criterion was determined for almost all items, except for "I am a very direct person" (Table 3). Thus, it could be argued that respondents' work experience influences self-assessment statements on leadership: intuition, communication, determination, teamwork, commitment to work and the ability to prioritize work issues.

Discussion.

Our study assessed the leadership qualities of hospital nurses in the Republic of Kazakhstan. 33.8% of respondents were true leaders, 48.5% of nurses could become them. 7.4% were not currently leaders; they needed to work on developing their leadership skills. At the same time, 2.9% of respondents needed to have a mentor and work hard to develop their leadership abilities. And 7.4% of respondents were not capable of being leaders due to their personal qualities.

In a similar study conducted among employees of a scientific and medical organization in 2022 in the city of Kemerovo, Russian Federation, it was revealed that 57.5% of respondents had leadership potential, among them a third were nurses. 49.2% of respondents had the inclinations and prerequisites to become leaders. 15.2% of respondents should improve their level to develop leadership skills, and 5.3% - insufficient level of leadership competencies [10].

In Saudi Arabia, a study by Alilyyani et al. (2024) showed that nursing experience had a strong influence on the level of leadership skills development [7]. Thus, it had been determined that nursing service managers usually occupied their positions without the necessary knowledge, and they were forced to acquire knowledge based on their experience [11]. Thus, leadership qualities were those qualities that could be developed with the acquisition of life and practical experience and were not solely innate qualities [12]. In our study, 58.8% of respondents needed to develop their leadership skills.

However, the study by James et al. (2022) showed the importance of teaching leadership fundamentals and skills at the undergraduate nursing level [13]. Therefore, undergraduate educational programs in Nursing were currently aimed not only at developing practical nursing skills, but also at communication skills and developing leadership qualities in future nurses.

A limitation of the study conducted was the data collection instrument. The selected questionnaire was not specialized specifically for healthcare workers. It was a management tool for working with human resources - defining a leader in a work team. This was also an advantage of this study. Because it made it possible to approach nursing service managers primarily as leaders, and not just nursing specialists with leadership inclinations. As known to be an effective manager, it needed to develop leadership skills. For this purpose, such methods of determining leadership qualities as self-assessment were carried out. This made it possible in the future to develop personal qualities for effective nursing leadership [14]. Another drawback of the conducted study is the sample size - 75 heads of nursing service. There is also a bias in the selection of study participants, since they all belong to the leading medical colleges of the Republic of Kazakhstan. Therefore, these results are difficult to implement on the general population of all heads of nursing service in the country. The obtained results contribute to further detailed study of leadership in the context of nursing reform in the country.

However, self-assessment of leadership qualities was more subjective than objective. Another drawback of the study was that only subjective self-assessment of nursing service managers was conducted, which may be inconsistent with assessment by colleagues and subordinates. Thus, in a study conducted in a private hospital in San Luis Potos, Mexico, a strong difference was identified between the results of self-assessment of nursing service managers and assessments by their subordinates [15].

Conclusion.

Leadership in nursing is an essential component for the implementation of quality nursing care. Leadership skills are important for both nursing leaders and all team members. The results obtained showed that in medical organizations of the Republic of Kazakhstan there are quite strong and capable managers and leaders of the nursing service. They can interact effectively, positioning themselves as leaders in their field, contributing to the subsequent development of nursing in the Republic of Kazakhstan.

Nursing leadership in Kazakhstan deserves close attention and further study for the implementation of subsequent stages of nursing reform in the country. This will help both improve the level of nursing education in general and improve the image of nurses in society.

Author Contributions.

Conceptualization, D.O. and M.M.; methodology, D.O. and L.A.; software, B.A. and A.M.; validation, M.M., L.A.; formal analysis, A.M. and B.A.; investigation, M.M.; resources, L.A. and D.O.; data curation, M.M.; writing—original draft preparation, M.M., A.M.; writing—review and editing, M.M., D.O. and B.A.; visualization, L.A.; supervision, D.O.; project administration, D.O.; funding acquisition, none. All authors have read and agreed to the published version of the manuscript."

Funding.

This research received no external funding.

Conflicts of Interest.

The authors declare no conflicts of interest.

REFERENCES

- 1. World Health Organization. The State of the World's Nursing 2020: Investing in education, jobs and leadership. Geneva: WHO; 2020. https://iris.who.int/bitstream/hand le/10665/331677/9789240004924-rus.pdf.
- 2. Alsadaan N, Salameh B, Reshia FAAE, et al. Impact of Nurse Leaders Behaviors on Nursing Staff Performance: A Systematic Review of Literature. Inquiry. 2023;60:469580231178528.
- 3. Haskins HEM, Roets L. Nurse leadership: Sustaining a culture of safety. Health SA. 2022;27:2009.
- 4. Huotari P. Modern leadership and management competencies of healthcare managers, as well as structural system changes needed for nursing reform in Kazakhstan. WP 2.4 Modernizing leadership in nursing. ProInCa; 2018.
- 5. Huotari P, Titanic P. Nursing Leadership Competence Assessment and Development in Healthcare in Kazakhstan. J Health Dev. 2020;4:17-25.
- 6. Cingel M, Andela R, Barf H. Nursing leadership in hospital practice: A research program into perceptions, experiences, and self-assessment of leadership competencies of nurses in a top-clinical hospital in the Netherlands. Sci Talks. 2023;5:100127.

- 7. Alilyyani B, Althobaiti E, Al-Talhi M, et al. Nursing experience and leadership skills among staff nurses and intern nursing students in Saudi Arabia: a mixed methods study. BMC Nurs. 2024;23:87.
- 8. Welch J. How to be a leader. Welch's leadership test. 2012. https://pintosevich.com/kak-byit-liderom-test-na-liderstvo-duelcha-3-minutyi/.
- 9. World Medical Association. World Medical Association Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects. JAMA. 2013;310:2191-2194.
- 10. Popsuiko AN, Danilchenko YV, Batsina EA, et al. Assessment of leadership qualities of employees of a scientific and medical organization. Social aspects of public health. 2022;4.
- 11. Warshawsky NE, Caramanica L, Cramer E. Organizational Support for Nurse Manager Role Transition and Onboarding: Strategies for Success. J Nurs Adm. 2020;50:254-260.
- 12. McCall MW. Leadership development through experience. Acad Manag Perspect. 2004;18:127-130.
- 13. James AH, Watkins D, Carrier J. Perceptions and experiences of leadership in undergraduate nurse education: A narrative inquiry. Nurse Educ Today. 2022;111:105313.
- 14. Lucas B. Developing the personal qualities required for effective nurse leadership. Nurs Stand. 2019;34.
- 15. Castillo ALR, Padilla MER, Hernández DG. Self-evaluation and evaluation of nursing leaders' Leadership Styles. Rev Lat Am Enfermagem. 2021;29:e3393.

Аннотация: В настоящее время в Республике Казахстан реализуется реформирование сестринской службы. Одной из ее важных задач, в соответствии с международными тенденциями, было развитие лидерских качеств у руководителей сестринской службы. Поскольку роль менеджеров медсестер в реформировании сестринского дела имеет решающее значение, целью данного перекрестного исследования была оценка лидерских качеств среди менеджеров медсестер в Республике Казахстан. Проведен онлайн-опрос с использованием стандартизированной анкеты самооценки для измерения лидерских способностей руководителей сестринской службы. Результаты показали, что 33,8% участников продемонстрировали врожденные лидерские качества, в то время как 48,5% медсестер выявили потенциал для развития этих качеств. Более того, 7,4% респондентов в настоящее время идентифицированы как не-лидеры, при этом потребность в развитии их лидерских компетенций очевидна. Аналогичным образом, 2,9% участников, по-видимому, нуждались в наставничестве и неустанных усилиях для улучшения своих лидерских качеств, в то время как 7,4% вряд ли добьются успеха в качестве лидеров из-за врожденных личностных качеств. Эффективное лидерство в сестринском деле является важным компонентом повышения качества и реформ. Организации здравоохранения в Республике Казахстан, как представляется, имеют квалифицированных менеджеров и руководителей медсестер, способных эффективно взаимодействовать в своей области. Наставничество и организационная поддержка имеют важное значение для дальнейшего развития соответствующих лидерских качеств у руководителей медсестер в период реформирования служб.

Ключевые слова: лидерство, медсестра-менеджер, лидерские навыки, реформа здравоохранения, сестринская служба.

რეზიუმე: ამჟამად ყაზახეთის რესპუზლიკაში მიმდინარეობს მედდების სამსახურის მნიშვნელოვანი რეფორმა. ისინ ერთ-ერთი მთავარი ამოცანა, რომელიც შეესაზამება საერთაშორისო ტენდენციებს, დაკავშირებულია მედდების სამსახურის მენეჯერებში განვითარებასთან. ლიდერული უნარების მედდა-მენეჯერების როლი კრიტიკულია მედდების რეფორმირებაში, მოცემული ჭრილოვანი სფეროს კვლევის მიზანი იყო ყაზახეთის რესპუბლიკაში მედდამენეჯერების ლიდერული თვისებების შეფასება. ჩატარდა ონლაინ-გამოკითხვა, რომელიც დაფუძნდა თვითშეფასების სტანდარტიზებულ კითხვარზე, სამსახურის მენეჯერების მედდეზის ლიდერული შესაფასებლად. უნარების შედეგებმა აჩვენა, რომ 33.8%-მა გამოავლინა თანდაყოლილი ლიდერული თვისებები, ხოლო 48.5%-ს გააჩნდა ამ თვისებების გარდა განვითარეზის პოტენციალი. ამისა, 7.4% რესპონდენტებისა ამჟამად არ მიიჩნევა ლიდერებად, საჭიროება თუმცა აშკარაა მათი ლიდერული კომპეტენციების განვითარებისთვის. ანალოგიურად, 2.9%-ს სჭირდებოდა მენტორობა და ინტენსიური მუშაობა ლიდერული თვისებების გასაუმჯობესებლად, მაშინ როცა 7.4%-ს ნაკლებად ჰქონდა შანსი გამხდარიყო ლიდერი პირადი მახასიათებლების გამო. ეფექტიანი აუცილებელია მედდეზის ლიდერობა ხარისხის გაუმჯობესებისა და რეფორმის პროცესში. ყაზახეთის რესპუზლიკის ჯანდაცვის ორგანიზაციებს ჰყავთ კომპეტენტური მედდა-მენეჯერები და ლიდერები, ეფექტიანად ურთიერთობენ საკუთარ რომლეზიც სფეროში. მენტორობა და ორგანიზაციული მხარდაჭერა მედდა-მენეჯერების გადამწყვეტია შესაბამისი ლიდერული თვისებების გასავითარებლად, განსაკუთრებით რეფორმის პერიოდში.

საკვანძო სიტყვები: ლიდერობა, მედდა-მენეჯერი, ლიდერული უნარები, ჯანდაცვის რეფორმა, მედდების სამსახური.