# GEORGIAN MEDICAL MEWS

ISSN 1512-0112

No 6 (327) Январь 2022

### ТБИЛИСИ - NEW YORK



### ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии საქართველოს სამედიცინო სიახლენი

## GEORGIAN MEDICAL NEWS

No 6 (327) 2022

Published in cooperation with and under the patronage of the Tbilisi State Medical University

Издается в сотрудничестве и под патронажем Тбилисского государственного медицинского университета

გამოიცემა თბილისის სახელმწიფო სამედიცინო უნივერსიტეტთან თანამშრომლობითა და მისი პატრონაჟით

> ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ ТБИЛИСИ - НЬЮ-ЙОРК

**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 and The International Academy of Sciences, Education, Industry and Arts (U.S.A.) 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 и Международной академией наук, образования, искусств и естествознания (IASEIA) США 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 ინღექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

### МЕДИЦИНСКИЕ НОВОСТИ ГРУЗИИ

Ежемесячный совместный грузино-американский научный электронно-печатный журнал Агентства медицинской информации Ассоциации деловой прессы Грузии, Международной академии наук, индустрии, образования и искусств США. Издается с 1994 г., распространяется в СНГ, ЕС и США

### ГЛАВНЫЙ РЕДАКТОР

Николай Пирцхалаишвили

### НАУЧНЫЙ РЕДАКТОР

Елене Гиоргадзе

### ЗАМЕСТИТЕЛЬ ГЛАВНОГО РЕДАКТОРА

Нино Микаберидзе

### НАУЧНО-РЕДАКЦИОННЫЙ СОВЕТ

Зураб Вадачкориа - председатель Научно-редакционного совета

Александр Геннинг (Германия), Амиран Гамкрелидзе (Грузия), Константин Кипиани (Грузия), Георгий Камкамидзе (Грузия), Паата Куртанидзе (Грузия), Вахтанг Масхулия (Грузия), Тенгиз Ризнис (США), Реваз Сепиашвили (Грузия), Дэвид Элуа (США)

### НАУЧНО-РЕДАКЦИОННАЯ КОЛЛЕГИЯ

### Константин Кипиани - председатель Научно-редакционной коллегии

Архимандрит Адам - Вахтанг Ахаладзе, Амиран Антадзе, Нелли Антелава, Георгий Асатиани, Тенгиз Асатиани, Гия Берадзе, Рима Бериашвили, Лео Бокерия, Отар Герзмава, Лиана Гогиашвили, Нодар Гогебашвили, Николай Гонгадзе, Лия Дваладзе, Тамар Долиашвили, Манана Жвания, Тамар Зерекидзе, Ирина Квачадзе, Нана Квирквелия, Зураб Кеванишвили, Гурам Кикнадзе, Димитрий Кордзаиа, Теймураз Лежава, Нодар Ломидзе, Джанлуиджи Мелотти, Марина Мамаладзе, Караман Пагава, Мамука Пирцхалаишвили, Анна Рехвиашвили, Мака Сологашвили, Рамаз Хецуриани, Рудольф Хохенфеллнер, Кахабер Челидзе, Тинатин Чиковани, Арчил Чхотуа, Рамаз Шенгелия, Кетеван Эбралидзе

### Website: www.geomednews.org

The International Academy of Sciences, Education, Industry & Arts. P.O.Box 390177, Mountain View, CA, 94039-0177, USA. Tel/Fax: (650) 967-4733

Версия: печатная. Цена: свободная.

Условия подписки: подписка принимается на 6 и 12 месяцев.

По вопросам подписки обращаться по тел.: 293 66 78.

**Контактный адрес:** Грузия, 0177, Тбилиси, ул. Асатиани 7, IV этаж, комната 408

тел.: 995(32) 254 24 91, 5(55) 75 65 99

Fax: +995(32) 253 70 58, e-mail: ninomikaber@geomednews.com; nikopir@geomednews.com

По вопросам размещения рекламы обращаться по тел.: 5(99) 97 95 93

© 2001. Ассоциация деловой прессы Грузии

© 2001. The International Academy of Sciences, Education, Industry & Arts (USA)

### 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; International Academy of Sciences, Education, Industry and Arts (USA). Published since 1994. Distributed in NIS, EU and USA.

### **EDITOR IN CHIEF**

Nicholas Pirtskhalaishvili

### SCIENTIFIC EDITOR

Elene Giorgadze

### **DEPUTY CHIEF EDITOR**

Nino Mikaberidze

### SCIENTIFIC EDITORIAL COUNCIL

### Zurab Vadachkoria - Head of Editorial council

Alexander Gënning (Germany), Amiran Gamkrelidze (Georgia), David Elua (USA), Konstantin Kipiani (Georgia), Giorgi Kamkamidze (Georgia), Paata Kurtanidze (Georgia), Vakhtang Maskhulia (Georgia), Tengiz Riznis (USA), Revaz Sepiashvili (Georgia)

### SCIENTIFIC EDITORIAL BOARD Konstantin Kipiani - Head of Editorial board

Archimandrite Adam - Vakhtang Akhaladze, Amiran Antadze, Nelly Antelava, Giorgi Asatiani, Tengiz Asatiani, Gia Beradze, Rima Beriashvili, Leo Bokeria, Kakhaber Chelidze, Tinatin Chikovani, Archil Chkhotua, Lia Dvaladze, Tamar Doliashvili, Ketevan Ebralidze, Otar Gerzmava, Liana Gogiashvili, Nodar Gogebashvili, Nicholas Gongadze, Rudolf Hohenfellner, Zurab Kevanishvili, Ramaz Khetsuriani, Guram Kiknadze, Dimitri Kordzaia, Irina Kvachadze, Nana Kvirkvelia, Teymuraz Lezhava, Nodar Lomidze, Marina Mamaladze, Gianluigi Melotti, Kharaman Pagava, Mamuka Pirtskhalaishvili, Anna Rekhviashvili, Maka Sologhashvili, Ramaz Shengelia, Tamar Zerekidze, Manana Zhvania

### **CONTACT ADDRESS IN TBILISI**

**GMN** Editorial Board 7 Asatiani Street, 4th Floor Tbilisi, Georgia 0177

### 995 (32) 253-70-58

Phone: +1 (917) 327-7732

Phone: 995 (32) 254-24-91

Fax: 995 (32) 253-70-58

### CONTACT ADDRESS IN NEW YORK

NINITEX INTERNATIONAL, INC. 3 PINE DRIVE SOUTH ROSLYN, NY 11576 U.S.A.

### 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 6 (327) 2022

### Содержание:

Gogunskaya I.V $^1$ ., Zaikov S.V $^1$ ., Tkhorovskyi M.A $^2$ ., Plykanchuk O.V $^2$ ., Bogomolov A.Ye $^2$ . STATUS OF THE COMPOSITION OF ALLERGENIC EXTRACTS FOR SKIN TESTING IN UKRAINE AND THE WAYS TO OPTIMIZE IT
7
Kopchak O., Hrytsenko O. FEATURES OF GUT MICROBIOTA IN PATIENTS WITH MIGRAINE AND HEALTHY INDIVIDUALS
Olena A. Hryhorieva <sup>1</sup> ., Tetiana M. Matvieishyna. <sup>1</sup> , Yuri Y. Guminskiy. <sup>2</sup> , Oleksandra L. Lazaryk. <sup>1</sup> , Andrii O. Svetlitsky <sup>1</sup> .  GENERAL MORPHOLOGICAL CHARACTERISTICS OF GASTRO-INTESTINAL TRACT OF RATS WITH EXPERIMENTAL UNDIFFERENTIATEDDYSPLASIAOFCONNECTIVETISSUE
Trofimov N.¹, Kryshen V.¹, Korpusenko I.¹, Nor N.¹, Korpusenko E.¹, Makarenko A.²  PREOPERATIVE DONOR ZONES PREPARATION OF PERFORANT FLAPS BY TRAINING PERFORANT VESSELS WITH NEGATIVE PRESSURE
Olha S.Yurtsenyuk. PECULIARITIES OF DIAGNOSTICS AND TREATMENT OF NONPSYCHOTIC PSYCHIC DISORDERS AMONG THE STUDENTS OF HIGHER EDUCATIONAL ESTABLISHMENTS
Dubivska SS., Hryhorov Yu.B., Lazyrskyi V.O., Goloborodko M.M.  DYNAMICS OF CHANGES IN 2,3 DIPHOSPHOGLYCERATE AND COGNITIVE DYSFUNCTION IN THE POSTOPERATIVE PERIOD IN PATIENTS WITH ABDOMINAL NEOPLASMS

### PECULIARITIES OF DIAGNOSTICS AND TREATMENT OF NONPSYCHOTIC PSYCHIC DISORDERS AMONG THE STUDENTS OF HIGHER EDUCATIONAL ESTABLISHMENTS

### Olha S.Yurtsenyuk.

Doctor of Medical Science, Professor of the Department of Nervous Diseases, Psychiatry and Medical Psychology of the Bukovynian State Medical University, Chernivtsi, Ukraine

### Introduction.

Topicality of the issue of nonpsychotic psychic disorders (NPD) among students does not lose its value. On the contrary, at least popularization of this phenomenon among population dictates a number of reasons to deal with the issue, to carry out statistical processing and find potential "candidates" with this kind of disorders. Practice shows that the majority of students with pre-nosological and even clinically confirmed psychic disorders of a neurotic level do not go to a psychologist, psychotherapist, to say nothing of psychiatrist, for medical aid themselves. Conscious or unconscious refusal of students from psychiatric or psychological aid is substantially promoted by stigmatization of psychiatry, fear of psychiatric examination and psychiatric diagnosis [1,2].

The literary sources of the recent years [3-5] indicate that therapeutic-rehabilitation tactics in case of psychic disorders among young people is based on a comprehensive system of correction-prevention measures including those of early diagnostics, psychological prevention and correction of psychic and behavioral disorders among medical students developed on the concept of a comprehensive, multilevel effect [6,7], structured on the basis of biopsychosocial model.

Formation of adequate diagnostics and methods of psychological prevention and treatment of psychic and behavioral disorders of students is not possible without finding regulations of their occurrence and evaluation of the dynamics under the influence of multiple causes and effects. Complexity of this issue is confirmed by numerous scientific studies dealing with the questions of establishing the category of the norm, pathology and their transmutations in psychiatry [5,7].

### Objective.

To develop the system of a comprehensive diagnostics and treatment of NPD among the students of higher educational establishments and determine its efficiency.

### Materials and methods.

Complete comprehensive examination was performed during 2015-2017 keeping to the principles of bioethics and deontology (at the beginning of the research a written consent was obtained from every participant). The study included 1st-5th-year students of Medical Faculties at Bukovinian State Medical University and 1st-4th-year students of the Faculty of Pedagogics, Psychology and Social Work, Philological Faculty, the Institute of Physical-Technical and Computer Sciences, the Faculty of Mathematics and Informatics, Philosophical-Theological Faculty at Yurii Fedkovych Chernivtsi National University. The results of examination of 1235 students were analyzed.

All the students (1235 individuals) were divided into two groups – the main (Ist) and comparative (IInd). The main group

included 317 (25,67%) students diagnosed with nonpsychotic psychic disorders (NPD). The group in its turn was divided into two groups – therapeutic one including students with NPD (N=210, 66,25%), who received treatment; and this group was subdivided into two subgroups: IA, (complex) group including 177 (84,29%) students who received our original comprehensive system of diagnostics, treatment and prevention, and IB (standard) group including 33 (15,71%) students who received a standard system of treatment and prevention, and the control group (N=107, 33,75%) including 107 individuals with NPD, who refused from treatment and prevention for various reasons. To verify clinical features of NPD 918 (74,33%) students without NPD, practically healthy ones, were examined as II comparative group.

852 students (68,99%) from Bukovinian State Medical University and 383 students (31,01%) from Yurii Fedkovych Chernivtsi National University participated in the research. An average age of the participants was 20,15± 0,05 years. Gender distribution included 365 males and 870 females, that is, 29,55 % and 70,45 % respectively. The sampling did not differ much by the gender and age content, place of residence, and form of education. A leading criterion to be included into the research was studies at a higher educational establishment. Examinations were carried out in the period between examinations.

The following methods were used: clinical, clinical-psychopathological, clinical-epidemiological, clinical-anamnestic, experimental-psychological and statistical.

### Results and Discussion.

The system of diagnostics, prevention, psychotherapy and pharmacotherapy of NPD among students of higher educational establishments (HEE) was based on the concept of a comprehensive, multilevel effect [1,3,7,8], developed on the basis of the biopsychosocial model [2,5,7], and the principles of systemacy, staging, totality, differentiation and individuality of therapy [4].

Complexity of the effect enabled to maximum intensify the measures developed Комплексність впливуаt the expense of mutual intensification of the effects of various measures, directions, and techniques of psychotherapeutic and psychopharmacologic work. Differentiation and individual approach were applied considering all the psychic, psychodiagnostics and social signs peculiar for every certain patient.

Moreover, the use of a number of regulations promoted a maximum rate of correction of psychic pathology found in sick students, in particular: partnership, meaning involvement of a patient to psychotherapy realization; many-sided efforts and actions, psychocorrection effects targeted on various spheres of

© *GMN* 32

a patient's psychosocial functioning; identity of psychosocial and biological correction methods; step-by-step, transitivity of diagnostic, pharmacologic and psychotherapeutic measures conducted.

It should be noted that necessity in methodically rich, differentiation correction process was determined by its performance under out-patient conditions. Therefore, special attention was paid to stage-by-stage approach: a) aim at collaboration with a doctor, positive attitude to him/her, motivation to carry out psychoprevention, psychotherapy, ability to self-analysis of the psychosocial state, formation of optimistic prospects due to therapy (1 stage); b) des-actualization of important worries (anxiety, fears, emotional and vegetative discomfort etc.) (1 stage); elimination of psychopathologic symptoms (symptomatic pharmacotherapy and psychotherapy) (2 stage); c) re-socialization, gradual reconstruction of the patient's value system in order to prevent social-psychological maladjustment (conflict situations, tension in the interpersonal relations, negative behavioral stereotypes, dependent behavior etc.) (3 stage); d) reflexion, consolidation of psychopreventive experience, advancing the levels of psychic, social-working adjustment, supporting therapy (4 stage).

Special attention was paid to the degree of availability of the information got by the sick students, setting of feasible tasks, a systematic approach in mastering the skills of express-therapy (self-suggestion, relaxation).

The examination resulted in the diagnostics of NPD in 317 (25,67%) students including 97 (30,60%) males (M) and 220 (69,40%) females (F).

The effect of treatment was determined by the psychodiagnostic scales: Spielberger-Khanin State Trait Anxiety Inventory – STAI (situational anxiety level (SAL), and personality anxiety level (PAL); Toronto Alexithymia Scale (TAS), Zung Self-Rating Depression Scale; Kurt Heck and Helga Hess Neurosis Express-Diagnostics. The method of treatment was considered to be effective when the score by the scales decreased in dynamics. In case when the score increased or did not change in dynamics, the method of treatment was considered to be ineffective for a particular patient.

Analyzing the results of our suggested comprehensive differentiation treatment of NPD among HEE students we have got reliable positive data according to all the above psychodiagnostic methods. Ten times decrease of a symptom that is, from high to moderate, or from moderate to low etc., was found in a considerable number of students. After the completed treatment 166 (79,05%) individuals in the therapeutic (IA) group demonstrated decrease of situational anxiety level, while in the control group only 5 (4,67%) students admitted improvement

(p<0,05). Analysis of the therapeutic effect on alexithymia level showed that its degree ten times decreased in 113 (53,81%) students from IA group, and in IB group positive dynamics according to this criterion was found in 3 (2,80%) students only (p<0,05). Personality anxiety level decreased in 114 (54,29%) students who received treatment, and in 7 (6,54%) individuals who refused from it for certain reasons (p<0,05). Neurotism level ten times decreased in 93 (44,29%) students of the therapeutic group and in 4 (3,74%) ones from the control group (p<0,05), which may be indicative of the fact that neurotism is rather personality characteristic of an individual than a sign of neurotic response. Considerable positive results were obtained according to Zung Self-Rating Depression Scale. Depression level decreased as a result of treatment in 177 (84,29%) patients with NPD. Only 11 (10,28%) sick students who refused from treatment indicated decrease of depression level (p<0.05).

Analyzing the quality of our suggested comprehensive treatment we compared the groups of students who underwent our comprehensive original system of diagnostics and treatment – IA "complex" group and students who received standard treatment (according to the criteria of diagnostics and psychotherapy of psyche and behavioral disorders [8]) – IB «standard group».

Table 1 demonstrates that situational anxiety level decreased considerably in both groups: 79,10% of patients in IA group and 60,61% individuals in IB group, and it did not differ reliably (p>0,05). It might be indicative of a considerable sensitivity of SAL to pharmacological treatment. Medical efficiency ratio (MER) was the following: (IA group) =140:177=0,79; MER (IB group) =20:33=0,60. MER (IA group) > MER (IB group) 1,32 times.

Medical efficiency ratio (MER) is calculated as the ratio of the number of patients with positive medical results (positive dynamics of health on the day of discharge) for the reporting period (MPf) to the total number of patients who were discharged from the medical institution for the same period (n): MER = MPf: n. According to the personality anxiety level MER (IA group) =103:177=0,58; MER (IB group) =3:33=0,09. MER (IA group) > MER (IB group) 6,4 times. Therefore, introduction of a comprehensive differentiation psychotropic therapy into the traditional complex of treatment improved reduction of anxiety disorders in patients with NPD 6,4 times, which is confirmed by the results of Spielberger-Khanin test.

Depression level ten times decreased in 160 (90,40%) students of the «complex» group and in 16 (48,48%) patients of the «standard» group (p<0,05). MER (IA group) =160:177=0,90; MER (IB group) =16:33=0,48. MER (IA group) > MER (IB group) в 1,88 рази. Alexithymia level ten times decreased in

Table 1. The number of patients presenting decrease of a symptom according to the psychodiagnostic scales.

	Groups	Complex group (N=177, 84,29%)		Standard group (N=33, 15,71%)		Do
Indices		Absolute	Relative, %	Absolute	Relative, %	Рφ
SAL		140	79,10	20	60,61	>0,05
PAL		103	58,19	3	9,09	<0,05
Alexithymia		98	55,37	6	18,18	
Depression		160	90,40	16	48,48	
Neurotism		79	44,63	4	12,12	

98 (55,38%) patients from IA group and 6 (18,18%) students of IB group (p<0,05). MER (IA group) =98:177=0,55; MER (IB group) =6:33=0,18. MER (IA group) > MER (IB group) 3,05 times. Neurotism level ten times decreased in 79 (44,63%) students from IA group and in 4 (12,12%) IB group (p<0,05). MER (IA group) =79:177=0,45; MER (IB group) =4:33=0,12. MER (IA group) > MER (IB group) 3,75 times. Thus, our original comprehensive system of diagnostics and treatment of NPD in students had reliably better results in comparison with the standard treatment.

### Conclusion.

Therefore, the use of our suggested system of a comprehensive diagnostics and differentiation psychotropic therapy improved reduction of psychic symptoms in patients with NPD 3,28 times (an average), which is confirmed by means of MER and psychodiagnostic methods.

### REFERENCES

- 1. Kraus C, Kadriu B, Lanzenberger R, Zarate C, Kasper S. Prognosis and improved outcomes in major depression: a review. Transl Psychiatry. 2019; 9:127.
- 2. World Health Day 2017 Depression: Let's talk. Fact sheet.
- 3. Mishiev VD Modern depressive disorders. Lviv: Vidvo MS, 2004.
- 4. Maruta NA Modern trends in the development of tools for the objective diagnosis of affective disorders (literature review). NO Maruta, KI Linskaya. Ukrainian Bulletin of Psychoneurology. 2018;26:110-115.
- 5. Kozhina AM, Korosty VI, Zelenskaya EA, Khmain S. Psychogenic depression and suicidal behavior in young people. Medical Psychology. 2013;4:42-45.
- 6. Yurtsenyuk O. Poshyrenist' ta kompleksne likuvannia nevrotychnykh, pov'iazanykh zi stresom ta somatoformnykh rozladiv u studentiv riznykh kursiv ta spetsial'nostei navchannia [Occurrence and comprehensive treatment of stress-related neurotic and somatoform disorders in students of different years and specialties]. Psychiatry, Neurology and Medical Psychology. 2020;13:43-48.
- 7. Mikhailov B. Psychotherapy in general medicine: Clinical guidance [Under Society. ed. B.V. Mikhailov]. B.V. Mikhailov, A.I. Serdyuk, and V.A. Kharkov: Flag, 2002; 128. Filatov AT Small psychotherapy at the resort. AT Filatov, AA Martynenko. K.: Health. 1983.
- 8. Criteria for the diagnosis and psychotherapy of mental and behavioral disorders. Ed. B.V.Mikhailova, S.I.Tabachnikova, A.K. Napreeenko Kharkiv, 2003.

### PECULIARITIES OF DIAGNOSTICS AND TREATMENT OF NONPSYCHOTIC PSYCHIC DISORDERS AMONG THE STUDENTS OF HIGHER EDUCATIONAL ESTABLISHMENTS Olha S.Yurtsenyuk.

Doctor of Medical Science, Professor of the Department of Nervous Diseases, Psychiatry and Medical Psychology of the Bukovynian State Medical University, Chernivtsi, Ukraine

### Abstract.

The article describes the system of comprehensive diagnostics and treatment of nonpsychotic psychic disorders (NPD) among the students of higher educational establishments (HEE).

**Topicality.** The topicality of NPD problem among students does not lose its value. On the contrary, at least popularization of this phenomenon among population dictates a number of reasons to deal with the issue, to carry out active diagnostics, prevention and treatment of the above disorders.

**Objective.** to develop the system of a comprehensive diagnostics and treatment of NPD among the students of higher educational establishments and determine its efficiency.

Materials and methods. Complete comprehensive examination of 1235 students of HEE was performed during 2015-2017 keeping to the principles of bioethics and deontology. The following methods were used: clinical, clinical-psychopathological, clinical-epidemiological, clinical-anamnestic, experimental-psychological and statistical.

**Results.** The results of our research were the following: 317 (25,67%) students were diagnosed with NPD, including 97 (30,60%) males and 220 (69,40%) females. The groups of students were analyzed concerning the quality of our comprehensive treatment suggested. An original complex system of diagnostics, treatment and prevention was developed for IA "complex" group of students, and IB "standard group" received standard treatment. The level of personality anxiety decreased reliably in the majority of students – 103 individuals (58,19%) who received our comprehensive treatment, while in IB "standard" group this parameter decreased in 3 (9,09%) students only (p<0,05). Alexithymia level decreased considerably in 98 (55,38%) patients from IA group and 6 (18,18%) students from IB group (p<0,05). The level of depression ten times decreased in 160 (90,40%) students of the "complex" group and in 16 (48,48%) patients from the "standard" group (p<0,05). The level of neurotism decreased ten times in 79 (44,63%) students from IA group and 4 (12,12%) from IB group (p<0,05).

**Conclusions.** Therefore, the use of our suggested system of a comprehensive diagnostics and differentiation psychothropic therapy improved reduction of psychic symptoms in patients with NPD 3,28 times (mean), which is confirmed by means of psychodiagnostic methods.

**Keywords.** Nonpsychotic psychic disorders, students, treatment, diagnostics

### ОСОБЕННОСТИ ДИАГНОСТИКИ И ЛЕЧЕНИЯ НЕПСИХОТИЧЕСКИХ ПСИХИЧЕСКИХ РАССТРОЙСТВ У СТУДЕНТОВ ВУЗОВ

Юрценюк Ольга Сидоровна

Буковинский государственный медицинский университет, г. Черновцы, Украина

### **АННОТАЦИЯ**

В статье описана система комплексной диагностики и лечения непсихотических психических расстройств (НПР) у студентов высших учебных заведений (ВУЗов).

**Актуальность.** Актуальность проблемы НПР среди студентов не теряет своего значения. Наоборот, как

© *GMN* 

минимум популяризация этого явления среди населения диктует ряд причин заняться этим вопросом, проводить активную диагностику, профилактику и лечение вышеперечисленных нарушений.

**Цель:** разработать систему комплексной диагностики и лечения НПР у студентов высших учебных заведений и определить ее эффективность.

Материалы и методы. В течение 2015-2017 гг. проведено полное комплексное обследование 1235 студентов ВУЗов с соблюдением принципов биоэтики и деонтологии. Использовались следующие методы: клинический, клинико-психопатологический, клинико-эпидемиологический, клинико-анамнестический, экспериментально-психологический и статистический.

Полученные результаты. Результаты нашего исследования были следующими: у 317 (25,67%) студентов был диагностирован НПР, в том числе у 97 (30,60%) юношей и 220 (69,40%) девушек. Группы студентов были проанализированы относительно качества предложенного нами комплексного лечения. Для ІА «основной» группы студентов была разработана оригинальная комплексная

система диагностики, лечения и профилактики, а ІБ «стандартная группа» получила стандартное лечение. Уровень личностной тревожности достоверно снизился у большинства студентов – 103 человек (58,19%), получавших наше комплексное лечение, в то время как в группе ІБ «стандарт» этот показатель снизился только у 3 (9,09%) студентов (р<0,05). Уровень алекситимии значительно снизился у 98 (55,38%) больных ІА группы и у 6 (18,18%) студентов ІБ группы (р<0,05). Уровень депрессии в 10 раз снизился у 160 (90,40%) студентов «основной» группы и у 16 (48,48%) больных «стандартной» группы (р<0,05). Уровень невротизма снизился в 10 раз у 79 (44,63%) студентов ІА группы и 4 (12,12%) ІВ группы (р<0,05).

Выводы. Таким образом, применение предложенной нами системы комплексной диагностики и дифференцированной психотропной терапии способствовало уменьшению психической симптоматики у больных с НПР в 3,28 раза (в среднем), что подтверждается методами психодиагностики. Ключевые слова: непсихотические психические

**Ключевые слова:** непсихотические психические расстройства, студенты, лечение, диагностика.