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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии
საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.
GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

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

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.
ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

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

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

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

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

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

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

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

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

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

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

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

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

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

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

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ავტორთა საყურადღებოდ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

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

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

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

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

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

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

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

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

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

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

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

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

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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PSYCHOLOGICAL FEATURES OF REHABILITATION OF HIV-INFECTED PATIENTS

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Abstract.

The human immunodeficiency virus (HIV) is one of the major medical problems in the world. For almost forty years, it has had catastrophic effects on the body of infected people with variable pathogenesis of mortality. The purpose of the work is to analyse the importance of psychological assistance for the social adaptation of HIV-infected patients.

Materials and methods: The empirical basis of the study was the analysis of 30 medical records of inpatients. The majority were patients of working age, namely 25 people (83.3%), while the average age of the patients was (28.5±5.5) years old. During the study, patients were divided into groups depending on the receipt of psychological help, psychoemotional disorders, and signs of social maladjustment.

Results: The first group of patients consisted of 10 (33.3%) patients who refused psychological help. The second group, namely 20 (66.7%) patients, consisted of patients who received psychological help immediately after the diagnosis of HIV infection and had milder disorders.

During the research, a set of methods was used: clinical and anamnestic method; to assess the presence of depression in patients, the Montgomery-Asberg Depression Rating Scale (MADRS) was used; the Spielberger-Khanin anxiety questionnaire was used to determine the level of anxiety in patients; patients' adherence to treatment was determined using the Morisky-Goin compliance assessment scale.

Conclusions: The issue of adaptation of HIV-infected patients in society is a significant problem caused by the low level of awareness of HIV infection and the ways of its transmission. The obtained results indicate the need for psychological assistance to HIV-infected persons at every stage, both at the time of the announcement of the diagnosis (prevention of the development of depression, suicidal intentions), and during drug treatment (debriefing of the methodology, creation of peer-to-peer support groups), thanks to which the social adaptation of patients and the effectiveness of medical treatment are accelerated.

Key words. AIDS, social adaptation, debriefing, compliance, psychological assistance.

Introduction.

The human immunodeficiency virus (HIV) is one of the major medical problems in the world. For almost forty years, it has had catastrophic effects on the body of infected persons with variable pathogenesis of mortality [1,2], as well as on the psychoemotional condition of the patient [3]. The substantial declines in HIV-related mortality, as a consequence of the introduction of combination antiretroviral therapy (cART) assume increasing relative importance among HIV-positive individuals.

HIV-retrovirus, from the lentivirus genus, which infects and gradually destroys the cells of the human immune system, leads to the development of severe immunosuppression. There are two types of the virus - HIV-1 and HIV-2, which differ in their antigenic structure. If HIV-1 is spread all over the world, then HIV-2, which is considered more "moderate", is found only on the territory of West Africa.

Although people living with HIV (PLWH) are known to be vulnerable to psychological distress (PD), little is known about the prevalence of PD among PLWH [4,5]. There are studies suggest the need to provide psychosocial support services targeting PLWH according to changing symptom severity and neuroticism trajectories. Interventions should focus on increasing empathy for PLWH and enhancing the ability to consider the situation from different perspectives to avoid the development of neuroticism in long-term survivors [6,7] often connected with injury of internal organs in PLWH [8,9]. Although decades of research have found negative consequences of HIV/AIDS, there are studies which have highlighted also the positive consequences of HIV infection, i.e. the occurrence of posttraumatic growth (PTG). There are several terms used to describe positive changes following traumatic events, such as benefit finding, stress-related growth, thriving/flourishing or adversarial growth [4]. But general direction in management of PLWH requires psychological supporting especial to the risk group for HIV infection which is made up of persons addicted to injectable drugs (56%); promiscuous sexual contacts (22%), in the conditions of the penitentiary system (7%), in the history of blood transfusion (9%), the presence of piercings or tattoos (6%). In that connection the purpose of the study is to analyse the importance of psychological assistance for the social adaptation of HIV-infected patients.

Materials and Methods.

The study was performed with 30 HIV-infected patients. The majority were patients of working age, namely 25 people (83.3%), while the average age of the patients was (28.5±5.5) years old. The majority of patients by marital status were unmarried 43.3% or divorced - 26.6%. The gender composition was dominated by men - 18 (60%), and there were only 12 (40%) women. 3 (10%) patients were addicted to narcotic substances, 9 (30%) abused alcoholic beverages, and 18 (60%) denied having any bad habit. The majority of patients belong to low-income population groups 18 (60%).

During the study, patients were divided into groups depending on the receipt of psychological help, psychoemotional disorders, and signs of social maladjustment. Patients were distributed to two groups with equal severity of symptoms of HIV infection and psychological symptoms. The first group of patients consisted of 10 (33.3%) patients who refused psychological

help. The second group, namely 20 (66.7%) patients, consisted of patients who received psychological help immediately after the diagnosis of HIV infection. 10 patients of that group received an intensive course of psychological influence through psychological counselling using elements of cognitive and positive psychotherapy (individual counselling), a method of psychological self-regulation, and cognitive training.

The study was performed in accordance with the principles of the Helsinki Declaration of the World Medical Association "Ethical Principles of Medical Research Concerning Human Subjects" (2013) with written informed consent.

During the research, a set of techniques was used: clinical and anamnestic method; to assess the presence of depression in patients, the Montgomery-Asberg Depression Rating Scale (MADRS) was used; the Spielberger-Hanin anxiety questionnaire was used to determine the level of anxiety in patients; patients' adherence to treatment was determined using the Morisky-Green compliance assessment scale. The GAD-7 scale is a personality questionnaire for assessing the level of anxiety and screening for generalized anxiety disorder, which can be used for screening for panic and post-traumatic stress disorder. The scale is a test of 7 questions, each of which has four possible answers. For each answer, a certain number of points is awarded, based on the sum of which a conclusion is made about the level of anxiety. The interpretation of the questionnaire data was carried out depending on the obtained result: 0-4 points - minimal level of anxiety, 5-9 - points - moderate level of anxiety, 10-14 points - medium level of anxiety, 15-21 points - high level of anxiety [10,11].

Psychological counselling using elements of cognitive and positive psychotherapy (group and individual counselling) was carried out as a method of psychological influence; method of psychological self-regulation; cognitive training in accordance with previously published recommendations [11,12]. Classes were performed individually under the supervision of a psychologist, duration 20-25 minutes, at least 10 sessions for the rehabilitation period. Criteria for termination of the session: worsening of the patient's health and feeling of fatigue. At the same time, the patient was given recommendations to achieve a state of relaxation, to reduce the level of emotional tension, while controlling his own heart rate. Possible options for regulating the internal psychological state (elements of visualization, progressive muscle relaxation, breathing exercises, etc.) were proposed. Techniques were used, with the help of which it is possible to train the memory and attention of patients: "anagrams", "entangled lines", "Memorizing 10 words", "Memorizing visual images", "Noisy pictures", "Puzzles". Also, 3 group classes with elements of cognitive psychotherapy were conducted, the main goals of which were self-awareness and acceptance of one's illness, working through fears related to the recurrence of the disease, forming an image of the future and a picture of health.

Statistical processing of the data was performed using the Statistica for Windows 8.0 software package. Methods of descriptive statistics (determination of numerical characteristics of variables - arithmetic mean (M), mean sampling error (m), determination of the reliability of differences (p), which were tested via the Student-Fisher t-test in representative samples) were used. Correlation between indicators was assessed using Spearman's correlation coefficient (r). The difference in values between comparative indicators was considered significant at $p < 0.05$.

Results.

The first group of patients consisted of 10 (33.3%) patients who refused psychological help. They had psychoemotional disorders and signs of social maladaptation, namely: refusal to communicate - 3 (30%); the reaction of "denying the diagnosis" - 10 (100%), irritability - 3 (30%), signs of depression - 5 (50%), increased aggressiveness - 2 (20%), resigned from work immediately after the diagnosis - 4 (40%), breaking off friendships with colleagues and relatives after diagnosis - 7 (70%).

The second group, namely 20 (66.7%) patients, consisted of patients who received psychological help immediately after the diagnosis of HIV infection and had milder disorders: hiding information about their health - 3 (15%), signs of depression - 2 (10%), refusal to communicate - 1 (5%). During the debriefing, the patients of the second group were more actively interested in finding ways to solve both difficult everyday situations and problems related to the loss of health.

When assessing the presence of depression in patients using the MADRS rating scale, the following results were obtained: 6 patients of the first group had a major depressive episode and 4 had a moderate episode. Among the patients of the second group, only 4 patients had signs of depression in the form of an average depressive episode.

When examining the level of anxiety using the Spielberger-Hanin questionnaire, the patients of the first group, namely 6 patients, received less than 45 points, which corresponded to a moderate level of anxiety, and 4 - more than 45 points, which was a high level of anxiety. The results of the survey of the patients of the second group showed that almost all patients scored less than 30 points, which corresponded to a low level of anxiety.

The following results were obtained when assessing patients' compliance using the Morisky-Green scale: 6 patients of the first group received 2 points, which corresponded to a low level of compliance, and 4 patients had no compliance during the entire observation period.

When assessing the compliance of patients of the second group after debriefing, visiting the HIV center, and group psychological support for one to three months, the compliance was assessed as satisfactory and amounted to 3 points.

After three months, positive dynamics were observed both in the psychological state of patients and in social adaptation (patients were interested in finding ways to solve difficult everyday situations and problems related to the loss of health).

In the future, the compliance of the patients was maximum and amounted to 4 points (Table 1).

As research shows and today's practice confirms, the reaction to AIDS in the mass consciousness is "sleep phobia". It is caused by the fact that the mortality rate in AIDS is higher than in cholera and smallpox. This is not accidental, because the inevitable reaction in society to the term "AIDS" is "animalistic" horror in front of severe suffering, dying, death, and the powerlessness of medicine.

Table 1. Assessment of compliance of patients with HIV infection.

Period	Group of patients who refused psychological help	Group of patients who received psychological help
Before treatment	1.65±0.17	1.77±0.20
1 month	2.32±0.24	7.18±0.41*
1-3 months	2.29±0.19	12.05±0.37*
3-6 months	3.31±0.30	16.12±0.49*

Note: ** - significant difference between groups (p<0.05).*

***Table 2.** Level of anxiety of study groups.*

GAD-7	Persons with HIV, (N=20)		
	Initial (N=20)	**Without psychological rehabilitation (N=10)**	**After psychological rehabilitation (N=10)**
minimal level of anxiety, n	-	-	2
moderate level of anxiety, n	2	1	5
medium level of anxiety, n	11	3	3
high level of anxiety, n	7	6	-
average GAD-7	**11.13±0.40**	**12.49±0.54**	**8.25±0.33***

Note: ** - significant difference with the initial level (p<0.05).*

And this against the background of the fact that the treatment of AIDS-related patients is only partially effective.

The prognosis for such patients is disappointing - death within 2 years. This subjective horror, which is repeatedly reinforced by the growing horror of AIDS, is superimposed on the negative attitude of the society towards all HIV-infected people, who by inertia are classified as so-called marginal groups. In this situation, the diagnosis of a mental illness often stigmatizes a person (removal of the personality from broad social recognition), therefore, AIDS patients have a sense of incurability, doom to death, and this is intensified by emotional isolation, hostile attitude towards them from society. In such conditions, negative feelings can be provoked in an infected or sick person, namely a feeling of revenge, which can turn him into a conscious spreader of the pathogen, into a person where revenge dominates common sense. Such a situation requires medical professionals to maintain medical secrecy regarding HIV-infected patients. This leads to the fact that the human community is in a situation of "equilibrium", where, on the one hand, it is faced with the clinical reality and myths associated with this disease, and on the other - with the prohibition of any discrimination (restrictions rights and obligations) of AIDS patients, which is declared by the norm of international law. All this has a negative impact on the epidemic situation and the rate of spread of the infection.

Results of the GAD-7 test for level of anxiety detection have been presented in Table 2.

Discussion.

Studies show that HIV infection both directly and indirectly provokes the development of mental disorders, which is a consequence of the response to the disease; the need to adhere to long-term treatment, which prolongs the disease, the development of organic lesions of the brain. It is an axiom that mental illnesses are manifested much more often in HIV-infected people than in the general population. At the same time, among the mental disorders associated with HIV infection, there are disorders that are directly related to the individual's reaction to the fact of having HIV/AIDS [13,14].

Infection of a patient with HIV is a serious psychological trauma. Many researchers believe this, and they have every reason to do so, because this phenomenon is accompanied, first of all, by the fear of stigmatization and further discrimination, which leads to maladaptation, and this, in turn, can be accompanied by deviant behaviour. A number of scientists believe that these stigmas are a significant obstacle to fighting the spread of the disease. The essence of these stigmas, which are singled out in Ukraine, is social isolation; restrictions on rights and access to assistance; secondary stigmas (stigmatization of others). In turn, this leads to adaptation disorders and manifests itself in the form of affective (depressive syndrome; manic syndrome); neurotic (conversion disorders; hypochondriac syndrome; senestopathic syndrome; asthenoneurotic syndrome; anxiety disorders) as in other infectious disease and post-traumatic conditions [15,16].

HIV-infected people also experience self-stigmatization. She is characterized by a sense of self-worth as an individual. Therefore, discrimination and stigmatization of HIV-infected people have a strong psychological impact on self-awareness, causing depression in the individual, which leads to devaluation of one's own dignity, low self-esteem and, of course, despair. The consequence of this is the mental state of a person, when he has a sense of his own guilt; low self-esteem, shame; blaming others, feeling the need for punishment; desire to commit suicide. Such a psychological state as self-destruction is also characteristic of HIV-infected people. Scientific works were conducted that confirmed the multifactorial nature of anti-vital tendencies in the behaviour of HIV-infected people, indicating that not only depression is an important factor leading to suicidal behaviour, but also sleep disorders (namely, terminal insomnia); degree of personal enmity (negative feelings and negative evaluations of people and events); anxiety disorders [17,18].

Therefore, the medical staff should pay attention to the mental health of patients with HIV, regardless of the severity of the disease, and if necessary, assess individual mental functions and the likelihood of mental disorders [11,19]. During a pandemic, a biopsychosocial approach to prevention, care and treatment is necessary, even if attention is focused on the physical needs of the patient. Psychological rehabilitation provides control of the patient's psychological needs at all stages of care [20-22].

In these difficult conditions, society must create a system of public solidarity that has a humanistic character. It should consist of the following:

1. solidarity of healthy people, which excludes contemptuous discrimination relation to HIV-infected persons; on the contrary, these groups should be given all kinds of help. We are talking not only about funds, but also about intensive medical research, about education and moral and psychological support of the affected, about a self-critical attitude towards one's own sexual morality.

2. solidarity of potentially infected people who cannot rule out the possibility of contracting AIDS. They should voluntarily undergo an AIDS test, thereby bringing transparency to their own life plans.

3. solidarity of the infected, which involves their responsible actions, first of all, in sexual behaviour, which excludes the possibility of transmitting the disease (including by using needles for injections, donation, etc.).

4. patients are offered not only solidarity, but also sympathy and moral and psychological support.

The requirement of solidarity is a moral requirement. It is not always accompanied by appropriate actions. This applies to politics at the state level. Politics are practical actions, the purpose of which is the benefit of certain groups of people. In the case of AIDS, this goal is to protect healthy people and help the infected and sick. For this, it is necessary to resort to a number of organizational and psychological measures, taking into account the fact that AIDS is an epidemic of a pandemic scale, and drugs against it have not yet been found. These measures include:

- education about AIDS without moralizing and contempt for the infected.
- application of readily available anonymous testing.
- testing of all risk groups and, if possible, the entire population.
- in the case of a positive reaction to AIDS - a ban, in the form of a state resolution, on certain types of behaviour (for example, drug addiction).
- in case of its violation or in case of deliberate transmission of the virus - punishment in the form of isolation.
- AIDS testing of persons coming to work from other countries.

However, it should be remembered that there are no and cannot be such legislative measures that would protect against AIDS by 100%.

Treatment of patients with HIV/AIDS remains a complex medical and psychological problem. Qualified psychological help is needed at each stage:

1) at the time of the announcement of the diagnosis (prevention of the development of depression, suicidal intentions).

2) encouragement for active medical treatment.

3) psychotherapeutic work with HIV-infected drug users.

Very often, patients' disclosure of their diagnosis leads to a break in relations with relatives and friends, problems arise in the professional sphere and when receiving medical care. Recently diagnosed patients have low rates of normal reaction to the diagnosis and high rates of social maladjustment.

Our results correlate with data that management and self-management of HIV is crucial to reduce disease-related negative health outcomes [23]. Loneliness and social isolation are associated with poor disease management (e.g., medication non-adherence and care disengagement) and negative health outcomes in PLWH. Loneliness and social isolation are highly prevalent in PLWH and are associated with negative outcomes [23,24]. Given that psychological flexibility represents a set of regulation components (acceptance, efficacy, and resilience), strengthening it as a skill among PLWH can result in better clinical outcomes [25,26]. These findings should be verified in larger, diverse, and longitudinal samples to better understand interrelationships of psychosocial factors and clinical outcomes in PLWH. Simultaneously, legal reasons for compulsory admission should be reworded in order to remove stigmatization of the patient, that raising awareness about involuntary admission procedures and patient rights is paramount, that communication about procedures should be widely available in lay-language for the general population, and that training sessions and guidance should be available for legal and medical practitioners [27,28].

As one of limitation of our study is possible bias in patient characteristics that may have influenced the intervention's efficacy, as patient of first groups refused psychological help and contacts with them were limited.

Conclusion.

The issue of adaptation of HIV-infected patients in society is a significant problem caused by the low level of awareness of HIV infection and the ways of its transmission. Patients who were recently diagnosed have high rates of social maladjustment. The results obtained in our study indicate the need for psychological assistance to HIV-infected persons at every stage, both at the moment of the diagnosis (prevention of the development of depression, suicidal intentions), and during drug treatment (debriefing of the methodology, creation of peer-to-peer support groups), thanks to which the social adaptation of patients and the effectiveness of drug treatment are accelerated.

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