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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 ВИНТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებში.

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. Корректуре авторам не высылаются, вся работа и сверка проводится по авторскому оригиналу.

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

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf

In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

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

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

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

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

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

ავტორთა საყურადღებო!

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, შემავსებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

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

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

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

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

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

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

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

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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SELF-RATED HEALTH IN THE POPULATION OF MEDICAL WORKERS IN GEORGIA

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Abstract.

Introduction: Self-rated health status may be considered a good predictor of morbidity and mortality and is useful for understanding the sociodemographic, environmental, and clinical conditions associated with self-rated health.

Aim: The aim of the study is to analyze self-rated health status in the population of medical workers in Georgia and its relationship with socio-economic characteristics, lifestyle, clinical status, and work-related characteristics.

Materials and Methods: The study included 471 participants aged 18 to 83 years (48+15), including 351 women and 120 men.

All participants completed a self-administered questionnaire that included socio-economic characteristics, lifestyle, clinical status, and job characteristics. Health was assessed by respondents as poor, average, good, or very good.

Statistical analysis was performed using the SPSS 23 software package.

Results: More than half of the study participants rated their health as average, 34% as good, and only a small proportion as very good and poor, namely 6% and 5%, respectively. The odds ratio of good or very good self-rated health increase with Physician - $p=0.0320$, $OR=1.65$ (95%CI:1.04-2.60); Therapist - $p=0.0250$, $OR=1.94$ (95%CI:1.09-3.46); Underweight - $p=0.0190$, $OR=1.69$ (95%CI:1.09-2.60) and decrease with Age - $p<0.0001$, $OR=0.97$ (95%CI:0.96-0.99); Professional burnout - $p<0.0001$, $OR=0.33$ (95%CI:0.18-0.58); Other workplace stress - $p=0.0060$, $OR=0.48$ (95%CI:0.28-0.81); Alcohol - $p=0.0080$, $OR=0.20$ (95%CI:0.06-0.66); Physical inactivity - $p=0.0390$, $OR=0.63$ (95%CI:0.40-0.98); Oncological Diseases - $p=0.0230$, $OR=0.08$ (95%CI:0.01-0.70); Fast food - $p=0.0070$, $OR=0.55$ (95%CI:0.35-0.85).

Conclusions: Self-rated health among medical workers in Georgia is associated with psychosocial as well as behavioral and clinical factors—professional burnout, work stress, mental health problems, insomnia, overweight and physical inactivity, unhealthy eating behaviors, and self-medication.

The relative odds of good and very good self-rated health increase with underweight status and the professional factors of being a physician and a therapist, and decrease with age, professional burnout, workplace stress, alcohol consumption, fast food, physical inactivity, and oncological diseases.

Key words. Self-Rated health, lifestyle, clinical status, odds ratio.

Introduction.

Self-rated health (SRH) is a widely used and validated measure for assessing the overall health status of the general population and represents a reliable means of predicting morbidity and mortality by integrating the biological, psychological, social,

and functional aspects of an individual's health together with cultural and behavioral factors [1].

Self-rated health status may be considered a good predictor of morbidity and mortality and is useful for understanding the sociodemographic, environmental, and clinical conditions associated with self-rated health [2,3].

Healthcare workers (HCWs) often face occupational stressors such as heavy workloads, shift work, and emotionally demanding interactions with patients, which contribute to psychosocial Work-related stress and adversely affect their health [4].

Sleep deprivation negatively affects quality of life, mood, cognitive function, and health. Insomnia is associated with poor mood, increased use of healthcare resources, reduced quality of life, and possibly cardiovascular risk factors and diseases. Studies have shown increased cortisol levels, reduced immunity, and elevated markers of sympathetic activity in healthy sleep-deprived subjects and in individuals with chronic insomnia. The literature shows that subjective complaints consistent with chronic insomnia and reduced sleep may be associated with the development of diabetes, hypertension, and cardiovascular diseases [5].

Difficulties related to self-diagnosis, self-referral, and self-treatment among physicians are important and may affect both their own health and, consequently, the quality of care provided to patients [6,7].

The aim of the study is to analyze self-rated health status in the population of medical workers in Georgia and its relationship with socio-economic characteristics, lifestyle, clinical status, and work-related characteristics.

Materials and Methods.

The study included 471 participants aged 18 to 83 years (48+15), including 351 women and 120 men.

All participants completed a self-administered questionnaire that included socio-economic characteristics, lifestyle, clinical status, and job characteristics. Health was assessed by respondents as poor, fair, good, or very good.

Job stress was determined using the Perceived Stress Scale (PSS), which assesses perceived stress over a recent period [8], while burnout was assessed using the Maslach Burnout Inventory—Human Services Survey for Medical Personnel (MBI-HSS (MP)) [9].

Ethics statement:

The study was conducted in accordance with the principles of the Declaration of Helsinki and was approved by the Medical Ethics Committee of the Vivamed Clinic for Medical-Biological Research (Protocol N 1)

Statistical Analysis:

For quantitative variables, the mean and standard deviation were determined; for qualitative variables, frequency and percentage were calculated. Differences between groups for

qualitative variables were assessed using Fisher's exact test (F); results were considered significant when $p < 0.05$. The relative chance of good and very good health was assessed using binary logistic regression analysis - We included all variables for which $p < 0.05$ in the analysis, and then conducted regression analysis using the "Forward Stepwise (Likelihood Ratio)" method. Statistical analysis was performed using the SPSS 23 software package.

Results.

The distribution of study participants according to self-assessment is shown in Figure 1.

More than half of the study participants rated their health as fair, 34% as good, and only a small proportion as very good and poor, namely 6% and 5%, respectively.

The study population was divided into two groups, Group I included individuals with poor and fair self-rated health, whereas Group II included those with good and very good self-rated health (Table 1 and Figure 1).

Comparison of socio-demographic, behavioral, and clinical characteristics by self-rated health (poor/fair vs good/very good) in the population of medical workers in Georgia showed that no statistically significant differences between the groups were found by sex, ethnicity, or religion ($p > 0.05$).

Among marital status categories, being unmarried was statistically significant and was more common in Group II (17.09% vs 7.72%; $p = 0.002$).

The proportion of students was higher in Group II (7.54% vs 3.31%; $p = 0.039$). No differences were found in the other educational categories.

Among employment types, the proportion of respondents working in a therapeutic profile was higher in Group II (17.59% vs 10.66%; $p = 0.030$). No differences were found according to working hours or night shift ($p > 0.05$). Burnout (33.09% vs 23.12%) and work-related stress were more common in Group I (33.09% vs 23.12%; $p = 0.018$). Family stress was higher in Group II (12.56% vs 6.62%; $p = 0.027$).

Alcohol consumption was more frequent in Group I (6.25% vs 2.01%; $p = 0.028$). Overweight was significantly more common in Group I (45.59% vs 29.15%; $p < 0.001$), whereas Normal weight was more common in Group II (42.21% vs 26.84%; $p < 0.001$).

Physical inactivity was more frequently observed in Group I (37.13% vs 28.14%; $p = 0.041$).

Diseases of the digestive system (30.15% vs 19.60%; $p = 0.010$), neurological diseases (24.63% vs 15.08%; $p = 0.011$), blood diseases (6.99% vs 2.51%; $p = 0.029$), and oncological diseases (3.31% vs 0.50%; $p = 0.0370$) were significantly more frequent in Group I.

No statistically significant differences were found for the other diseases.

Insomnia was significantly more frequent in Group I (70.59% vs 60.30%; $p = 0.020$).

Fast-food consumption was higher in Group I (44.12% vs 29.65%; $p = 0.001$), whereas a balanced diet was more common in Group II (23.62% vs 14.71%; $p = 0.014$).

Excess intake of simple carbohydrates was higher in Group II (12.06% vs 5.88%; $p = 0.017$).

Self-medication was significantly more frequent in Group I (45.96% vs 29.65%; $p < 0.001$). Refusal of treatment was more frequent in Group II (17.09% vs 9.56%; $p = 0.015$). No differences were found in the frequency of seeking a physician specialist (Figure 2).

Compared with Group I, age was significantly lower in Group II: 50.98 ± 15.06 versus 43.93 ± 13.94, respectively; $t = 5.24$, $p < 0.0001$.

Table 2 presents the predictors of good/very good self-rated health.

The presented table reflects the results of binary logistic regression, where the dependent variable is good/very good self-rated health (Group II = 1).

The Odds Ratio of good or very good self-rated health increase with Normal weight status and the professional factors of

Table 1. Distribution of Medical Workers According to Self-Rated Health.

		Group I N=272		Group II N=199		F	p
		n	%	n	%		
Sex	Female	208	76.47	143	71.86	1.29	0.2580
Ethnicity	Georgian	258	94.85	183	91.96	1.61	0.2050
	Azerbaijani	4	1.47	4	2.01	0.20	0.6550
	Armenian	6	2.21	7	3.52	0.74	0.3920
	Other	4	1.47	5	2.51	0.23	0.6276
Religion	Christian	250	91.91	184	92.46	0.05	0.8270
	Muslim	14	5.15	12	6.03	0.17	0.6790
	Other religion	7	2.57	3	1.51	0.63	0.4290
Marital status	Married	186	68.38	120	60.30	3.31	0.0700
	Divorced	37	13.60	17	8.54	2.91	0.0890
	Widowed	8	2.94	6	3.02	0.00	0.9630
	Unmarried	21	7.72	34	17.09	9.94	0.0020
	Partner without marriage	5	1.84	5	2.51	0.25	0.6170
Education	Secondary specialized education	74	27.21	51	25.63	0.15	0.7020
	Student	9	3.31	15	7.54	4.27	0.0390
	Higher education	167	61.40	124	62.31	0.04	0.8410
	Academic degree	18	6.62	12	6.03	0.07	0.7970

Job titles	Physician	100	36.76	77	38.69	0.18	0.6700
	Nurse	90	33.09	58	29.15	0.83	0.3640
	Administrative service	63	23.16	36	18.09	1.78	0.1830
Clinical departments or units	Surgery	70	25.74	46	23.12	0.42	0.5160
	Therapy	29	10.66	35	17.59	4.72	0.0300
	Intensive care and resuscitation	68	25.00	51	25.63	0.0023	0.9598
	Other	42	15.44	31	15.58	0.00	0.9680
Working hours (per week)	<12	105	38.60	79	39.70	0.06	0.8100
	13-24	45	16.54	39	19.60	0.73	0.3940
	24-48	65	23.90	48	24.12	0.00	0.9550
	>48	69	25.37	55	27.64	0.30	0.5810
	Night shift	140	51.47	82	41.21	4.89	0.0280
Stress	Work-related burnout	90	33.09	46	23.12	5.61	0.0180
	In the family	16	5.88	21	10.55	3.47	0.0630
	Work-related stress	152	55.88	91	45.73	4.77	0.0290
	No	12	4.41	41	20.60	28.57	<0.0001
Harmful habits	Nicotine	36	13.24	31	15.58	0.52	0.4730
	Alcohol	17	6.25	4	2.01	4.88	0.0280
	Drug dependence	4	1.47	1	0.50	1.02	0.3120
	Healthy lifestyle	152	76.38	137	68.84	7.61	0.0056
Weight	Overweight	124	45.59	58	29.15	13.42	<0.0001
	Obesity	54	19.85	34	17.09	0.58	0.4480
	Normal weight	73	26.84	84	42.21	12.49	<0.0001
Physical activity	Physical inactivity	101	37.13	56	28.14	4.20	0.0410
	Moderate (150 min/week)	126	46.32	107	53.77	2.55	0.1110
	Intense 75 min	41	15.07	24	12.06	0.88	0.3500
	Cardiovascular system	53	19.49	45	22.61	0.68	0.4100
	Psychiatric	1	0.37	0	0.00	-	-
	Respiratory system	14	5.15	6	3.02	1.28	0.2580
	Endocrine diseases	14	5.15	7	3.52	0.71	0.3980
	Digestive system	82	30.15	39	19.60	6.77	0.0100
	Nervous system	67	24.63	30	15.08	6.48	0.0110
	Angiological	13	4.78	6	3.02	0.92	0.3370
	Renal	16	5.88	6	3.02	2.12	0.1460
	Skin diseases	9	3.31	12	6.03	2.00	0.1580
	Oncological diseases	8	3.31	1	0.50	4.38	0.0370
	Blood diseases	19	6.99	5	2.51	4.78	0.0290
	Hypovitaminosis	10	3.68	6	3.02	0.15	0.6960
	Injuries	25	9.19	15	7.54	0.40	0.5260
Sleep disorders	Sleepiness	33	12.13	26	13.07	0.09	0.7630
	Insomnia	192	70.59	120	60.30	5.48	0.0200
	Interrupted sleep	20	7.35	20	10.05	1.07	0.3010
Dietary pattern	Trans fats	22	8.09	13	6.53	0.40	0.5260
	Fast food	120	44.12	59	29.65	10.39	0.0010
	Predominantly carbohydrate-based diet	30	11.03	29	14.57	1.32	0.2520
	Predominantly protein-based	49	18.01	44	22.11	1.22	0.2710
	Balanced diet	40	14.71	47	23.62	6.11	0.0140
	Excess food intake	19	6.99	15	7.54	0.05	0.8190
	Intake of fruits and vegetables	49	18.01	39	19.60	0.19	0.6640
	Intake of synthetic beverages	25	9.19	16	8.04	0.19	0.6620
	Simple carbohydrates	16	5.88	24	12.06	5.69	0.0170
Treatment	Does not seek treatment	26	9.56	34	17.09	5.91	0.0150
	Uses self-medication	125	45.96	59	29.65	13.14	<0.0001
	Turns to friends	52	19.12	47	23.62	1.40	0.2370
	Turns to a physician specialist	61	22.43	51	25.63	0.65	0.4210

Table 2. Estimation of the Relative Odds of Good or Very Good Self-Rated Health.

Predictors	B	S.E.	Wald	p	OR	95% C.I.for OR	
Age	-0.03	0.01	13.74	<0.0001	0.97	0.96	0.99
Physician	0.50	0.23	4.58	0.0320	1.65	1.04	2.60
Therapist	0.66	0.30	5.02	0.0250	1.94	1.09	3.46
Professional burnout	-1.12	0.29	14.53	<0.0001	0.33	0.18	0.58
Work-related stress	-0.74	0.27	7.54	0.0060	0.48	0.28	0.81
Alcohol	-1.61	0.61	6.94	0.0080	0.20	0.06	0.66
Normal weight	0.52	0.22	5.51	0.0190	1.69	1.09	2.60
Physical inactivity	-0.47	0.23	4.26	0.0390	0.63	0.40	0.98
Oncological diseases	-2.54	1.12	5.20	0.0230	0.08	0.01	0.70
Fast food	-0.60	0.22	7.18	0.0070	0.55	0.35	0.85
Constant	1.78	0.42	17.56	<0.0001	5.90		

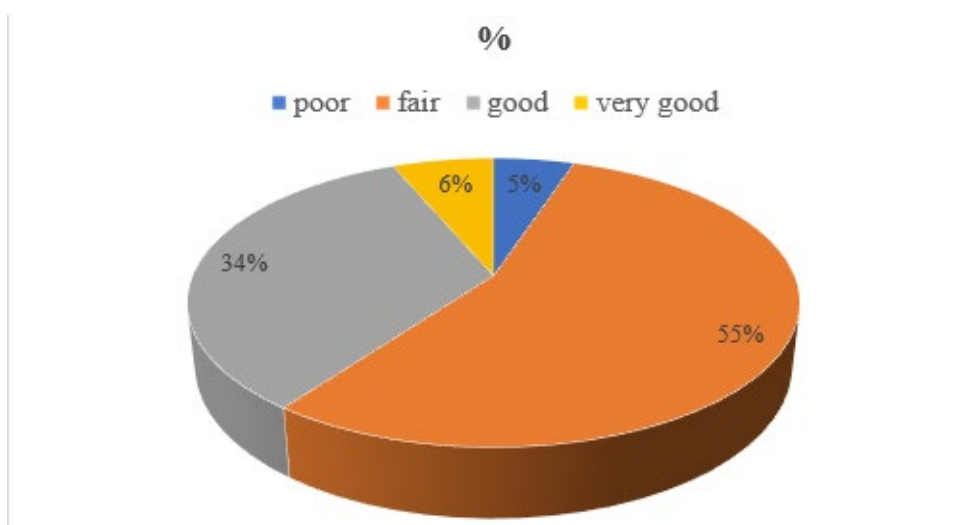


Figure 1. Distribution of Self-Rated Health.

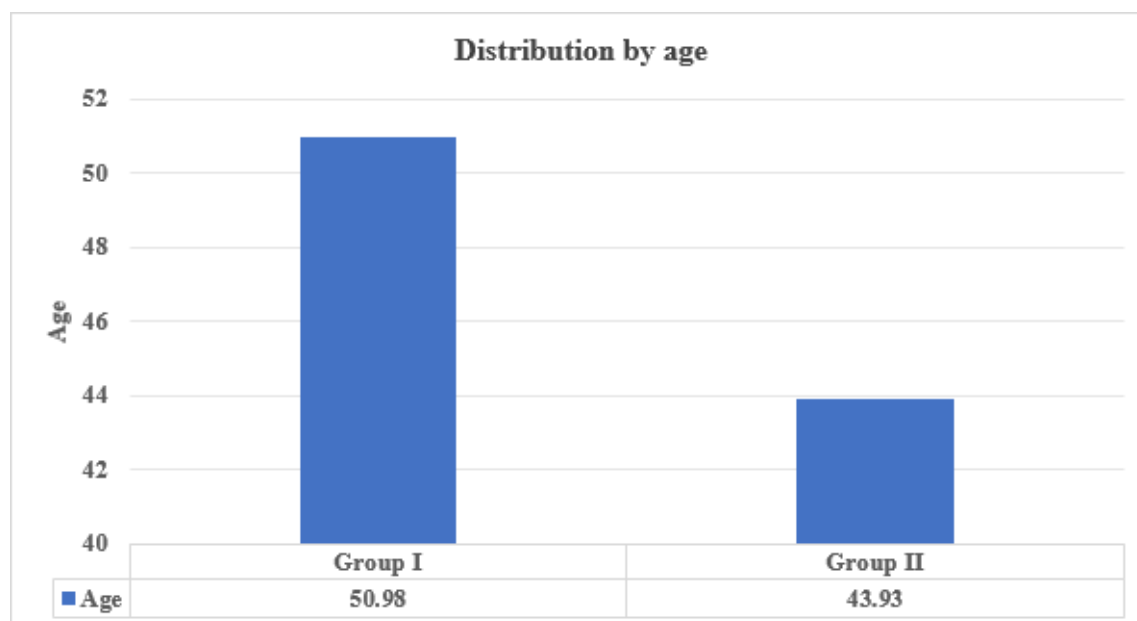


Figure 2. Distribution by age.

being a physician and a therapist, and decrease with burnout, Work-related stress, alcohol consumption, fast food, physical inactivity, and oncological diseases.

Each additional year of age reduces the odds ratio of good self-rated health by approximately 3%. The effect is statistically significant.

Discussion.

According to the literature, regardless of demographic characteristics, self-rated health (SRH) is an independent predictor of mortality and morbidity [10]. In our study, no statistically significant differences between groups were found by sex, ethnicity, or religion ($p > 0.05$), indicating that differences in self-rated health are not explained by these factors. This is consistent with an international meta-analysis in which self-rated health is considered an integral indicator that is relatively independent of demographic characteristics [11].

In various studies, marriage is associated with better health, although this relationship varies according to age and psychosocial factors [12,13]. In our study, the statistically significant marital-status finding was being unmarried ($p = 0.002$), with unmarried individuals predominating in the good/very good self-rated health group.

The proportion of students was higher in the good self-rated health group ($p = 0.039$), which may be explained by the age factor and the lower prevalence of chronic diseases in a younger population. In the Georgian student population, general self-rated health shows a positive correlation with stress [14].

Among employment types, those working in therapeutic specialties more often rated their health as good ($p = 0.030$). Weekly working hours were not statistically significant; however, night shift ($p = 0.028$) was significantly more frequent in the poor/fair self-rated health group.

According to the literature, Work-related stress and professional burnout significantly reduce self-rated health and increase the frequency of psychosomatic complaints [15,16]. Burnout is especially prevalent in healthcare, where high job demands and chronic stress substantially affect workers, particularly nurses and physicians, and where occupational stress constitutes an important public-health problem. Its impact extends to individuals and affects patient safety, healthcare quality, and organizational functioning [17]. According to the World Health Organization, burnout is an occupational phenomenon resulting from chronic work stress, which includes emotional exhaustion, cynicism, and decreased professional effectiveness, while work stress is considered as an individual's perceived reaction to environmental demands. Three symptoms define the burnout: (1) feelings of energy depletion or exhaustion; (2) increased mental distance from one's job or feelings of negativism or cynicism towards one's job; and (3) a sense of ineffectiveness and lack of accomplishment [18,19].

Occupational stress and work-related burnout ($p = 0.018$) were important associated factors in the poor/fair self-rated health group. Among physicians and other healthcare professionals, chronic work-related stress and exhaustion (burnout) have been confirmed as important preconditions for subjective deterioration in health [20].

It is known that body mass index correlates with self-rated

health [19]. In our study, overweight was more frequent in the poor/fair self-rated health group ($p < 0.001$), whereas Normal weight was more frequent in the good self-rated health group ($p < 0.001$). Regular physical activity is associated with better physical and mental health, and body mass index and physical activity are strong predictors of the subjective perception of health [21]. In our study, physical inactivity was more often observed in the poor self-rated health group ($p = 0.041$).

Among chronic diseases, disorders of the digestive system ($p = 0.010$), nervous system ($p = 0.011$), and blood diseases ($p = 0.029$) were significantly more frequent in the poor self-rated health group. This is fully consistent with studies indicating that chronic diseases, especially diseases of the nervous system, significantly reduce SRH [22].

Sleep disorders are known as independent risk factors for poor self-rated health and depressive symptoms [23]. Accordingly, insomnia was significantly more frequent in the poor/fair self-rated health group ($p = 0.020$), which further indicates the important role of psychophysiological burden.

Unhealthy eating behaviors are associated with metabolic disorders and subjective deterioration in health [24]. According to our study, fast food ($p = 0.001$) was more common in the poor self-rated health group, whereas a balanced diet was more common in the good self-rated health group ($p = 0.014$). Consumption of simple carbohydrates was higher in the good self-rated health group ($p = 0.017$), which may indicate a mismatch between perception and actual dietary risks.

Among healthcare workers, self-medication is a widespread practice and is associated with professional accessibility [25].

Self-medication was significantly more frequent in the poor self-rated health group ($p < 0.001$), whereas no treatment at all was more common in the good self-rated health group ($p = 0.015$). This may indicate that individuals who perceive themselves as subjectively healthy seek medical care less often.

Thus, the study results confirm that self-rated health is strongly associated with work-related stress, physical activity, body weight, diseases, eating behaviors, and self-medication.

The obtained results confirm that self-rated health is a complex bio-psycho-social indicator, and its improvement requires multifaceted interventions targeting the professional environment, lifestyle, and mental health.

According to the literature, within the logistic regression framework, level of education and diagnoses of chronic diseases were identified as the strongest determinants of self-rated health, whereas chronic diseases and low education were associated with significantly lower odds of reporting good health [24,26]. Our multivariable logistic regression model showed that good self-rated health among medical workers in Georgia is independently associated with age, professional characteristics, stress, lifestyle, and comorbid diseases. Burnout and alcohol consumption were the strongest negative predictors, whereas the physician profession and therapeutic profile were positive predictors.

Overall, these results are consistent with global evidence that lifestyle and psychosocial parameters contribute to subjective health assessments. Physical and behavioral predictive factors, namely the relationship between physical activity and the self-rated health profile, are consistent with our conclusion that the

relative odds ratio of good self-rated health decrease among physically inactive individuals [27].

Psychosocial factors: psychological distress (e.g., depression or stress) is a strong predictor of health in other populations, and our finding that stress is a strong negative predictor of good self-rated health (OR <1) is in agreement with the literature [28].

The consistency of data across different populations indicates that self-rated health is not merely an objective measure; it may be regarded as a complex bio-psycho-social indicator, and its improvement requires multifaceted interventions in the professional environment, lifestyle, and mental health domains. This should be taken into account in preventive strategies, health behavior interventions, and resource allocation.

Conclusion.

Self-rated health among medical workers in Georgia is associated with psychosocial as well as behavioral and clinical factors—professional burnout, Work-related stress, mental health problems, insomnia, overweight and physical inactivity, unhealthy eating behaviors, and self-medication;

The odds ratio of good and very good self-rated health increase with Normal weight status and the professional factors of being a physician and a therapist, and decrease with age, professional burnout, Work-related stress, alcohol consumption, fast food, physical inactivity, and oncological diseases.

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