MEDICUS

ISSN 1409-6366 UDC 61 Vol · 28 (1) · 2023

Original scientific paper

7 **ЛИПИДНИОТ МАРКЕР АПОЛИПОПРОТЕИН Б КАКО ПРЕДИКТОР ЗА КОРОНАРНАТА АРТЕРИСКА БОЛЕСТ КАЈ ДИЈАБЕТЕС МЕЛИТУС ТИП 2 ПАЦИЕНТИ СО И БЕЗ ДИЈАБЕТИЧНА НЕФРОПАТИЈА**
Вера Пеншовска Николова, Христијан Николов

16 **КОРЕЛАЦИЈА НА СЕРУМСКИТЕ ИМУНОГЛОБУЛИНСКИ ЛЕСНИ ЛАНЦИ-SFLC СО МАРКЕРИТЕ ЗА ТУМОРСКО ОПТЕРЕТУВАЊЕ КАЈ МУЛТИПНИОТ МИЕЛОМ**
Оливер С. Георгиевски, Сефедин Биљали, Светлана Цековска, Жаклина Трајковска-Анчевска, Никола Оровчанец

22 **THE EFFECTS OF COENZYME Q10 MICELLAR SOLUTION AND NANOLIPOSOMES ON SUPEROXIDE DISMUTASE (SOD) ACTIVITY IN CISPLATIN-INDUCED OXIDATIVE STRESS IN RATS**
Emilija Shikole, Icko Gjorgoski, Dusko Shalabalija, Marija Glavas Dodov, Jasmina Trojachanec

29 **PREVALENCE AND PREDICTORS OF OBSTRUCTIVE CORONARY ARTERY DISEASE IN SUSPECTED PATIENTS REFERRED FOR CORONARY ANGIOGRAPHY. REVIEW OF 100 PATIENTS**
Atilla Rexhepi, Valon Asani, Fisnik Demiri, Vlora Ibrahimi, Amela Dobjani

35 **ANTIOXIDANT ACTIVITY OF THE IONIZED WATER AND ITS IMPACT ON THE CONCENTRATION OF UREA IN RATS SERUM DURING HYPERTHERMIC STRESS**
Majlinda Ademi

Profesional paper

41 **CORRELATION OF CLINICAL AND INFLAMMATORY PARAMETERS IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE**
Angjela Debreshlioska, Irfan Ismaili, Irina Angelovska, Venco Vuinov, Marija Karakostova

47 **ATTITUDES TOWARD SUPPLEMENTATION AND PRACTICE OF VITAMIN C USE AMONG ADULTS BEFORE AND DURING COVID-19**
Ibadete Bucalija, Isjanovski Igor, Valza Ismajli, Veron Ismajli

58 **EXTENDED HIGH-FREQUENCY HEARING LOSS IN TINNITUS PATIENTS WITH NORMAL HEARING AT STANDARD AUDIOMETRIC FREQUENCIES**
Lidija Ristovska, Zora Jachova

64 **FRAKTURAT E GISHTËRINJËVE -PËRVOJAT TONA**
Ilber Besimi, Bekim Ismaili, Rron Elezi, Katarina Vidoevska, Nagip Rufati

67 **SOCIODEMOGRAPHIC CHARACTERISTICS OF PATIENTS DIAGNOSED WITH SCHIZOPHRENIA IN PSYCHIATRIC HOSPITAL, „SKOPJE", SKOPJE, FROM 2019 TO 2022**
Sabani S., Miloseva L.

73 **MENTAL HEALTH AMONG CHILDREN AND YOUTH IN THE SKOPJE REGION FOR THE YEAR 2021**
Besim Zeqiri, Valentina Simonovska, Lenče Miloševa

79 **PREDICTIVE VALUE OF TIME FROM VACCINATION TO DELIVERY AT PERINATAL OUTCOME IN PATIENTS PREVIOUSLY VACCINATED AGAINST COVID-19**
Ajla Shabani, Viktorija Jovanovska, Aleksandra Boshku, Nezhla Sh. Islami, Nikola Orovchanec

83 **VITAMIN D STATUS IN PATIENTS WITH COVID-19 – SEX DIFFERENCES ASSOCIATED WITH SEVERITY OF THE DISEASE.**
Ankica Pop-Kostova, Tatjana Ruskovska

90 **VLERA PREDIKTIVE E GJATESISE SE QAFES SE MITRES PER TE PARASHIKUAR LINDJEN PARAKOHE NE PACIENTE ME RREZIK PER LINDJE PARAKOHE**
Rozeta Shahinaj

95 **ФОРЕНЗИЧКА ЕПИДЕМИОЛОШКА АНАЛИЗА НА САМОУБИСТВАТА ВО РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЈА ВО ПЕРИОДОТ ПРЕД И ЗА ВРЕМЕ НА ЕПИДЕМИЈАТА СО КОВИД 19 ВИРУСОТ**
Ивчева А, Павловски Г, Чакар Љ, Битољану Н, Белакапоска Српанова В

100 **ТРЕНДОВИ НА РАСТ: РАЗЛИКИ ВО ЕТНИКУМИ, ПОЛ И ВОЗРАСТ**
Арјета Рауфи, Марина Крстевска Константинова, Авди Муртезани

Review

107 **ШТО ТРЕБА ДА ЗНАЕМЕ ЗА АВТОАНТИТЕЛАТА КАЈ РЕВМАТОИДЕН АРТРИТ?**
Љиндита Џемаили Јакупи, Мимоза Николовска Котевска, Артон Јакупи, Нусрет Исуфи, Башким Османи

113 **РЕТИНАЛНА МИГРЕНА: ПРЕГЛЕД НА ЛИТЕРАТУРА**
Денова А, Гошевска Даштевска Е, Петрушевска А

119 **DIABETIC MACULAR EDEMA (DME)**
Gazmend Mehmeti, Vesna Cheleva, Jana Nivicka Kjaeva, Hristian Duma

124 **МОЗОЧНИ УДАРИ ПОВРЗАНИ СО SARS-COV-2 ВО УСЛОВИ НА ПАНДЕМИЈАТА КОВИД-19: СИСТЕМАТСКИ ПРЕГЛЕД**
Наим Скендери, Бети Зафирова-Ивановска, Арта Хисени Скендери

Case report

130 **ПОЛИФАРМАЦИЈАТА КАЈ ИНСТИТУЦИОНАЛИЗИРАНИ АДУЛТИ КАКО РИЗИК ФАКТОР ЗА КОГНИТИВНИ НАРУШУВАЊА-ПРИКАЗ НА СЛУЧАЈ**
Марта Тунџева, Катарина Ставрић, Ирена Кондова Топузовска, Катерина Ковачевиќ, Беким Исмаили

136 **ХОЛИСТИЧКИ ПРИСТАП ВО ТРЕТМАН НА ПАЦИЕНТ СО ХОББ И КОМОРБИДИТЕТИ – ПРИКАЗ НА СЛУЧАЈ.**
Гициќ Азра, Ковачевиќ Катарина, Ангелеска Ружица, Сашка Јаневска

141 **CONGENITAL CARDIAC RHABDOMYOMA AND EPILEPSY IN A PATIENT WITH TUBEROUS SCLEROSIS: A CASE REPORT**
Danilo Nonkulovski, Ljelja Muaremoska-Kanzoska, Teodora Spasovska, Valentina Dukovska, Liljana Zivkovska

145 **CASE STUDY: 4 –YEAR OLD MALE PRESENTS CHRONIC COUGH, AFTER PREVIRAL INFECTION OF ADENOVIRUS**
Ljubica Proeska Stojanovski, Katerina Grabuloska

148 **DOBRAVA-BELGRADE HANTAVIRUS INFECTION MIMICKING ACUTE APPENDICITIS: DIAGNOSTIC CHALLENGE**
Shkelqim Muharremi, Arlind Sejdini, Selami Zhaku, Jetmir Ziba, Gjulsen Selim

152 **INTRASPINAL HEMOPHILIA BLEEDING WITH SUCCESSFUL TREATMENT WITH FACTOR IX CONCENTRATE. A CASE REPORT**
Teuta Dalipi, Rezeart Dalipi, Danica Popovska

155 **DISTAL LEG RECONSTRUCTION WITH REVERSE ISLAND SURAL FLAP AFTER A PATHOLOGIC TIBIAL FRACTURE: A POST BURNED CASE REPORT**
Gëzim XHEPA, Rezart ÇIPI, Gentian ZIKAJ, Sokol ISARAJ

161 **A RARE, AGGRESSIVE AND DIFFICULT TO DIAGNOSE MALIGNANT MELANOMA OF RECTUM; CASE REPORT**
Rexhep Selmani, Vladimir Joksimovic, Fesih Shehu, Fatjona Mislimi, Arian Selmani

165 **RADIOLOGICAL FINDINGS OF A LARGE RETROPERITONEAL LEIOMYOSARCOMA: A CASE REPORT**
Trajculeska T, Ognenoska B, Jovanovska Stojovska E, Pasoska M, Stojkovski A

Revistë e Shoqatës së Mjekëve Shqiptarë në Maqedoni
SHMSHM
MEDICUS

Medical Journal

MEDICUS

ISSN 1409-6366 UDC 61 Vol · 28 (1) · 2023

Original scientific paper

7 **ЛИПИДНИОТ МАРКЕР АПОЛИПОПРОТЕИН Б КАКО ПРЕДИКТОР ЗА КОРОНАРНАТА АРТЕРИСКА БОЛЕСТ КАЈ ДИЈАБЕТЕС МЕЛИТУС ТИП 2 ПАЦИЕНТИ СО И БЕЗ ДИЈАБЕТИЧНА НЕФРОПАТИЈА**
Вера Пеншовска Николова, Христијан Николов

16 **КОРЕЛАЦИЈА НА СЕРУМСКИТЕ ИМУНОГЛОБУЛИНСКИ ЛЕСНИ ЛАНЦИ-SFLC СО МАРКЕРИТЕ ЗА ТУМОРСКО ОПТЕРЕТУВАЊЕ КАЈ МУЛТИПНИОТ МИЕЛОМ**
Оливер С. Георгиевски, Сефедин Биљали, Светлана Цековска, Жаклина Трајковска-Анчевска, Никола Оровчанец

22 **THE EFFECTS OF COENZYME Q10 MICELLAR SOLUTION AND NANOLIPOSOMES ON SUPEROXIDE DISMUTASE (SOD) ACTIVITY IN CISPLATIN-INDUCED OXIDATIVE STRESS IN RATS**
Emilija Shikole, Icko Gjorgoski, Dusko Shalabalija, Marija Glavas Dodov, Jasmina Trojachanec

29 **PREVALENCE AND PREDICTORS OF OBSTRUCTIVE CORONARY ARTERY DISEASE IN SUSPECTED PATIENTS REFERRED FOR CORONARY ANGIOGRAPHY. REVIEW OF 100 PATIENTS**
Atilla Rexhepi, Valon Asani, Fisnik Demiri, Vlora Ibrahimi, Amela Dobjani

35 **ANTIOXIDANT ACTIVITY OF THE IONIZED WATER AND ITS IMPACT ON THE CONCENTRATION OF UREA IN RATS SERUM DURING HYPERTHERMIC STRESS**
Majlinda Ademi

Profesional paper

41 **CORRELATION OF CLINICAL AND INFLAMMATORY PARAMETERS IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE**
Angjela Debreshlioska, Irfan Ismaili, Irina Angelovska, Venco Vuinov, Marija Karakostova

47 **ATTITUDES TOWARD SUPPLEMENTATION AND PRACTICE OF VITAMIN C USE AMONG ADULTS BEFORE AND DURING COVID-19**
Ibadete Bucalija, Isjanovski Igor, Valza Ismajli, Veron Ismajli

58 **EXTENDED HIGH-FREQUENCY HEARING LOSS IN TINNITUS PATIENTS WITH NORMAL HEARING AT STANDARD AUDIOMETRIC FREQUENCIES**
Lidija Ristovska, Zora Jachova

64 **FRAKTURAT E GISHTËRINJËVE -PËRVOJAT TONA**
Ilber Besimi, Bekim Ismaili, Rron Elezi, Katarina Vidoevska, Nagip Rufati

67 **SOCIODEMOGRAPHIC CHARACTERISTICS OF PATIENTS DIAGNOSED WITH SCHIZOPHRENIA IN PSYCHIATRIC HOSPITAL, „SKOPJE", SKOPJE, FROM 2019 TO 2022**
Sabani S., Miloseva L.

73 **MENTAL HEALTH AMONG CHILDREN AND YOUTH IN THE SKOPJE REGION FOR THE YEAR 2021**
Besim Zeqiri, Valentina Simonovska, Lenče Miloševa

79 **PREDICTIVE VALUE OF TIME FROM VACCINATION TO DELIVERY AT PERINATAL OUTCOME IN PATIENTS PREVIOUSLY VACCINATED AGAINST COVID-19**
Ajla Shabani, Viktorija Jovanovska, Aleksandra Boshku, Nezhla Sh. Islami, Nikola Orovchanec

83 **VITAMIN D STATUS IN PATIENTS WITH COVID-19 – SEX DIFFERENCES ASSOCIATED WITH SEVERITY OF THE DISEASE.**
Ankica Pop-Kostova, Tatjana Ruskovska

90 **VLERA PREDIKTIVE E GJATESISE SE QAFES SE MITRES PER TE PARASHIKUAR LINDJEN PARAKOHE NE PACIENTE ME RREZIK PER LINDJE PARAKOHE**
Rozeta Shahinaj

95 **ФОРЕНЗИЧКА ЕПИДЕМИОЛОШКА АНАЛИЗА НА САМОУБИСТВАТА ВО РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЈА ВО ПЕРИОДОТ ПРЕД И ЗА ВРЕМЕ НА ЕПИДЕМИЈАТА СО КОВИД 19 ВИРУСОТ**
Ивчева А, Павловски Г, Чакар Љ, Битољану Н, Белакапоска Српанова В

100 **ТРЕНДОВИ НА РАСТ: РАЗЛИКИ ВО ЕТНИКУМИ, ПОЛ И ВОЗРАСТ**
Арјета Рауфи, Марина Крстевска Константинова, Авди Муртезани

Review

107 **ШТО ТРЕБА ДА ЗНАЕМЕ ЗА АВТОАНТИТЕЛАТА КАЈ РЕВМАТОИДЕН АРТРИТ?**
Љиндита Џемаили Јакупи, Мимоза Николовска Котевска, Артон Јакупи, Нусрет Исуфи, Башким Османи

113 **РЕТИНАЛНА МИГРЕНА: ПРЕГЛЕД НА ЛИТЕРАТУРА**
Денова А, Ѓошевска Даштевска Е, Петрушевска А

119 **DIABETIC MACULAR EDEMA (DME)**
Gazmend Mehmeti, Vesna Cheleva, Jana Nivicka Kjaeva, Hristian Duma

124 **МОЗОЧНИ УДАРИ ПОВРЗАНИ СО SARS-COV-2 ВО УСЛОВИ НА ПАНДЕМИЈАТА КОВИД-19: СИСТЕМАТСКИ ПРЕГЛЕД**
Наим Скендери, Бети Зафирова-Ивановска, Арта Хисени Скендери

Case report

130 **ПОЛИФАРМАЦИЈАТА КАЈ ИНСТИТУЦИОНАЛИЗИРАНИ АДУЛТИ КАКО РИЗИК ФАКТОР ЗА КОГНИТИВНИ НАРУШУВАЊА-ПРИКАЗ НА СЛУЧАЈ**
Марта Тунцева, Катарина Ставрић, Ирена Кондова Топузовска, Катерина Ковачевиќ, Беким Исмаили

136 **ХОЛИСТИЧКИ ПРИСТАП ВО ТРЕТМАН НА ПАЦИЕНТ СО ХОББ И КОМОРБИДИТЕТИ – ПРИКАЗ НА СЛУЧАЈ.**
Гициќ Азра, Ковачевиќ Катарина, Ангелеска Ружица, Сашка Јаневска

141 **CONGENITAL CARDIAC RHABDOMYOMA AND EPILEPSY IN A PATIENT WITH TUBEROUS SCLEROSIS: A CASE REPORT**
Danilo Nonkulovski, Ljelja Muaremoska-Kanzoska, Teodora Spasovska, Valentina Dukovska, Liljana Zivkovska

145 **CASE STUDY: 4 –YEAR OLD MALE PRESENTS CHRONIC COUGH, AFTER PREVIRAL INFECTION OF ADENOVIRUS**
Ljubica Proeska Stojanovski, Katerina Grabuloska

148 **DOBRAVA-BELGRADE HANTAVIRUS INFECTION MIMICKING ACUTE APPENDICITIS: DIAGNOSTIC CHALLENGE**
Shkelqim Muharremi, Arlind Sejdini, Selami Zhaku, Jetmir Ziba, Gjulsen Selim

152 **INTRASPINAL HEMOPHILIA BLEEDING WITH SUCCESSFUL TREATMENT WITH FACTOR IX CONCENTRATE. A CASE REPORT**
Teuta Dalipi, Rezeart Dalipi, Danica Popovska

155 **DISTAL LEG RECONSTRUCTION WITH REVERSE ISLAND SURAL FLAP AFTER A PATHOLOGIC TIBIAL FRACTURE: A POST BURNED CASE REPORT**
Gëzim XHEPA, Rezart ÇIPI, Gentian ZIKAJ, Sokol ISARAJ

161 **A RARE, AGGRESSIVE AND DIFFICULT TO DIAGNOSE MALIGNANT MELANOMA OF RECTUM; CASE REPORT**
Rexhep Selmani, Vladimir Joksimovic, Fesih Shehu, Fatjona Mislimi, Arian Selmani

165 **RADIOLOGICAL FINDINGS OF A LARGE RETROPERITONEAL LEIOMYOSARCOMA: A CASE REPORT**
Trajculeska T, Ognenoska B, Jovanovska Stojovska E, Pasoska M, Stojkovski A

Betimi i Hipokratit

Në çastin kur po hy në radhët e anëtarëve të profesionit mjekësor premtoj solemnisht se jetën time do ta vë në shërbim të humanitetit. Ndaj mësuesve do ta ruaj mirënjohjen dhe respektin e duhur. Profesionin tim do ta ushtroj me ndërgjegje e me dinjitet. Shëndeti i pacientit tim do të jetë brenga ime më e madhe. Do t'i respektoj e do t'i ruaj fshehtësitë e atij që do të më rrëfehet. Do ta ruaj me të gjitha forcat e mia nderin e traditës fisnike të profesionit të mjekësisë.

Kolegët e mi do t'i konsideroj si vëllezër të mi.

Në ushtrimin e profesionit ndaj të sëmurit tek unë nuk do të ndikojë përkatësia e besimit, e nacionalitetit, e racës, e politikës, apo përkatësia klasore. Që nga fillimi do ta ruaj jetën e njeriut në mënyrë apsolute. As në kushtet e kërcënimit nuk do të lejoj të keqpërdoren njohuritë e mia mjekësore që do të ishin në kundërshtim me ligjet e humanitetit. Këtë premtim po e jap në mënyrë solemne e të lirë, duke u mbështetur në nderin tim personal.

The Oath of Hippocrates

Upon having conferred on me the high calling of physician and entering medical practice, I do solemnly pledge myself to consecrate my life to the service of humanity. I will give my teachers the respect and gratitude which is their due. I will practice my profession with conscience and dignity. The health of my patient will be my first consideration. I will respect the secrets which are confided in me, even after the patient has died. I will maintain by all the means in my power, the honor and the noble traditions of the medical profession.

My colleagues will be my brothers.

I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient. I will maintain the utmost respect for human life from its beginning even under threat and I will not use my medical knowledge contrary to the laws of humanity. I make these promises solemnly, freely and upon my honor

Editorial Board

Medical Journal

MEDICUS

ISSN 1409-6366 UDC 61 Vol · 28 (1) · 2023

Revistë Shkencore Nderkombëtare e Shoqatës së Mjekëve Shqiptarë të Maqedonisë
International Journal of Medical Sciences of the Association of the Albanian Doctors from Macedonia

Botues/ Publisher: **SHMSHM / AAMD**
Tel. i Kryeredaktorit / Contact: **+389 (0) 71 240 927**
Zhiro llogaria / drawing account: **200-000031528193**
Numri tatimor / tax number: **4028999123208**
Adresa e Redaksisë-Editorial Board Address: **Mehmed Pashë Deralla nr. 16, Tetovë**
e-mail: **shmshm@live.com**

Kryeredaktori
Prof. Dr. Nevzat Elezi

Redaktorët
Prof. Dr. Omer Xhemaili, Zurich, Zvicër
Prof. Dr. Florin Ramadani, Wels, Austri
Prof. Dr. Atilla Rexhepi, Tetovë, Maqedoni
Prof. Dr. Lul Raka, Prishtinë, Kosovë
Prof. Dr. Nevzat Elezi, Tetovë Maqedoni - Ud. Dekan i Fakultetit të Shkencave Mjekësore - Tetovë
Doc. Dr Rexhep Selmani, Shkup, Maqedoni

Këshilli Redaktues
Nobelisti Prof. Dr. Ferid Murad, Hjuston, SHBA
Prof. Dr. Rifat Latifi, Arizona, SHBA
Prof. Dr. Alex Leventa, Jerusalem, Izrael
Prof. Dr. Sedat Üstündağ, Edirne, Turqi
Prof. asoc. dr. Avdyl Krasniqi, Prishtinë, Kosovë
Prof. dr. sci. Kirk Milhoan,Texas, SHBA
Dr. sci. Minir Hasani, Gjermani
Prof. dr sci. Alfred Priftanji, Tiranë, Shqipëri
Prof. dr. sci. Naser Ramadani, Prishtinë, Kosovë
Prof. dr Yovcho Yovchev, Stara Zagora, Bullgari
Doc. Dr. Skender Saiti, Shkup, Maqedoni
Prof. Dr. Milka Zdravkovska, Shkup, Maqedoni
Prof. dr Gentian Vyshka, Tiranë,Shqipëri
Prim. dr Gani Karamanaga, Ulqin, Mali Zi
Prof. dr Ramush Bejiqi, Prishtinë, Kosovë
Dr. Sc. Spec. Meral Rexhepi, Tetovë, Maqedoni
Dr. Sc. Irfan Ahmeti, Shkup, Maqedoni

Editor-in-Chief
Nevzat Elezi, MD. PhD

Editors
Omer Dzemaili, MD, PhD, Zurich, Switzerland
Florin Ramadani, MD, PhD, Wels, Austria
Atilla Rexhepi, MD, PhD, Tetovo, Macedonia
Lul Raka, MD, PhD, Prishtina, Kosova
Nevzat Elezi, MD, PhD, Tetovo, Macedonia - Dean of Faculty of Medical Sciences - Tetovo
Rexhep Selmani, MD, PhD, Skopje, Macedonia

Editorial Board
Nobel Laureate Ferid Murad, MD, PhD, Houston, USA
Rifat Latifi, MD, PhD, Arizona, USA
Alex Leventa, MD, PhD Jerusalem, Israel
Sedat Ustundağ, Edirne, Turkiye
Avdyl Krasniqi, MD, PhD, Prishtina, Kosova
Kirk Milhoan, MD, PhD, Texas, USA
Minir Hasani, MD, PhD, Germany
Alfred Priftanji, MD, PhD, Tirana, Albania
Naser Ramadani, MD, PhD, Prishtina, Kosova
Yovcho Yovchev, MD, PhD, Stara Zagora, Bulgaria
Skender Saiti, MD, PhD, Skopje, Macedonia
Milka Zdravkovska, MD, PhD, Skopje, Macedonia
Gentian Vyshka, MD, PhD, Tirana, Albania
Gani Karamanaga, MD, Ulcinj, Montenegro
Ramush Bejiqi, MD, PhD, Prishtina, Kosova
Meral Rexhepi, MD, PhD, Tetovo, Macedonia
Irfan Ahmeti, MD, PhD, Skopje, Macedonia

Bordi Këshillëdhënës
Prof. dr. Shpëtim Telegrafi, Nju Jork, SHBA
Prof. dr. Gëzim Boçari, Tiranë, Shqipëri
Prof. dr. Donço Donev, Shkup, Maqedoni
Prof. Dr. Isuf Dedushaj, Prishtinë, Kosovë
Prof. Dr. Ramadan Jashari, Belgjikë
Prof. Dr. Holger Tietzt, Gjermani
Prof. Dr. Vjollca Meka-Sahatçiu
Prof. Dr. Milena Petrovska, Shkup, Maqedoni
Prof. Dr. Sonja Bojaxhieva, Shkup, Maqedoni
Dr. Spec. Ylbert Ademi, Gostivar, Maqedoni
Doc. Dr. Naser Durmishi, Shkup, Maqedoni

Advisory Board
Shpetim Telegrafi, MD, PhD, New York, USA
Gezim Bocari, MD, PhD, Tirana, Albania
Donco Donev, MD, PhD, Skopje, Macedonia
Isuf Dedushaj, MD, PhD, Prishtina, Kosova
Ramadan Jashari, MD, PhD, Belgjum
Holger Tietzt, MD, PhD, Germany
Vjollca Meka-Sahatciu, MD, PhD
Milena Petrovska, MD, PhD, Skopje, Macedonia
Sonja Bojadzieva, MD, PhD, Skopje, Macedonia
Ylbert Ademi, MD, Gostivar, Macedonia
Naser Durmishi, MD, PhD, Skopje, Macedonia

Sekretariati i redaksisë
Doc. Dr. Bekim Ismaili, Maqedoni
Dr. Sead Zeynel, Maqedoni
Dr. Rihan Saiti, Maqedoni

Editorial Secretariat
Bekim Ismaili, MD, PhD Macedonia
Sead Zeynel, MD, Macedonia
Rihan Saiti, MD, Macedonia

Këshilli Botues
Prim. Dr. Ali Dalipi
Prim. Dr. Ferit Muça
Prim. Dr. Lavdërim Sela
Prim. Dr. Shenasi Jusufi
Dr. Nadi Rustemi
Dr. Bedri Veliu
Dr. Gafur Polisi
Dr. Baki Alili
Doc. Dr. Ilber Besimi
Dr. Gazi Mustafa
Dr. Edip Sheji
Dr. Murat Murati
Dr. Dukagjin Osmani
Dr. Bari Abazi
Dr. Fadil Murati
Dr. Fadil Maliqi
Dr. Besa Pocesta-Islami
Dr. Jakup Jakupi
Dr. Muharem Saliu
Dr. Sufjan Belcista-Ferati
Dr. Xhabir Bajrami
Dr. Sc. Majlinda Ademi

Editorial Council
Ali Dalipi, MD
Ferit Muca, MD
Lavderim Sela, MD
Shenasi Jusufi, MD
Nadi Rustemi, MD
Bedri Veliu, MD
Gafur Polisi, MD
Baki Alili, MD
Ilber Besimi, MD, PhD
Gazi Mustafa, MD
Edip Sheji, MD
Murat Murati, MD
Dukagjin Osmani, MD
Bari Abazi, MD
Fadil Murati, MD
Fadil Maliqi, MD
Besa Pocesta-Islami, MD
Jakup Jakupi, MD
Muharem Saliu, MD
Sufjan Belcista-Ferati, MD
Xhabir Bajrami, MD
Majlinda Ademi, MD, PhD

Dizajni & Pamja
Aleksandar Kostadinovski

Design & Layout
Aleksandar Kostadinovski

Shtypur në
Shtypshkronjen "Pruf Print", Shkup

Printed in:
Print House "Pruf Print", Skopje

Medicus shtypet në tirazh: 600 ekzemplarë
Revista shperndahet falas

The Jounal Medicus is printed and distributed free of charge with a circulation of 600 copies.

Profesional paper

SOCIODEMOGRAPHIC CHARACTERISTICS OF PATIENTS DIAGNOSED WITH SCHIZOPHRENIA IN PSYCHIATRIC HOSPITAL, „SKOPJE", SKOPJE, FROM 2019 TO 2022

Sabani S.[1], Miloseva L.[2]

[1]PHI Psychiatric Hospital, „Skopje", Skopje, Republic of North Macedonia,
[2]Faculty of Medical Sciences, Goce Delcev University, Stip, Republic of North Macedonia.

Corresponding author: Suzana Sabani, e-mail: suzanasabani@yahoo.co.uk

Medicus 2023, Vol. 28 (1): 67-72

ABSTRACT

Schizophrenia is a chronic mental disorder which represents a clinical syndrome that consists of psychological symptoms and behavioral changes. Findings from worldwide research and literary sources point to the connection between sociodemographic characteristics and schizophrenic disorders.

Goal: To analyze the role that sociodemographic characteristics (gender, age, marital status, educational degree, employment and social status) have in patients with acute and chronic diagnosis of schizophrenia.

Method: This research represents a retrospective and prospective study, based on the data collected from patients that have been and are still being treated in the Psychiatric Hospital "Skopje" in Skopje. This was done thanks to the official approval and cooperation of the management team of the hospital. The data is collected from 2387 patients with chronic and acute conditions of the illness. These patients were hospitalized in the period between January 2019, to December 2022, and they have been diagnosed with schizophrenia according to the International Classification of Illnesss (ICD). The identity of the patients is protected and their data were collected and analyzed using identification codes. The statistical analysis on the data was done using the software SPSS (Statistical Package for the Social Science, version 20).

Results: The total number of patients who received treatment for schizophrenia during the time period 2019-2022 is 2387 patients. The first group consists of 558 patients with a diagnosis of their first schizophrenia episode out of which 429 (77.0%) are men and 129 (23.0%) are women. The second group is consisted of 1829 patients with chronic schizophrenia out of which 1396 (71.0%) are men and 523 (29.0%) are women. The results show that in the cases of acute schizophrenia, the biggest number of patients fall in the age ranges between 20-29 & 30-39 years of age, while in the group of chronic patients, they are aged 40-49 years old, and above 50. Our results indicate that schizophrenia is more likely to happen to people who live in urban cities. Regarding educational status, the highest number of patients are those with high school and/or elementary school education, while regarding their employment status, most of the subjects are unemployed, retired or are beneficiaries of social aid.

Conclusion: The represented data shows that age, gender, marital status, education, and employment status are related to schizophrenia. With adequate psychiatric and psychological help, in the form of counseling and psychotherapeutic treatment, the patients can be helped to more easily accept and overcome the illness. These results can be of help to the families of those suffering from schizophrenia, but also to the professionals who work with treating schizophrenia, through the form of counseling, therapy and adapting to the illness, in creating a new lifestyle, and promoting and sustaining mental health.

Key words: schizophrenic disorder, patients, sociodemographic characteristics, prevention, mental health.

INTRODUCTION

Schizophrenia is a chronic mental disorder that represents a clinical syndrome that consists of psychological symptoms and behavioral changes. In the heterogenous clinical condition of the illness, the following symptoms can be found: hallucinogenic perceptions, dark thoughts and beliefs, reduction of emotional experiences and feelings of pleasure, various cognitive difficulties related to memory and basic functioning, characteristic behavior that is related to psychotic experiences and difficulties with self-control and everyday functioning [5].

Although today we approach schizophrenia as a singular entity, it consists of a number of heterogenous, still unknown disorders. In addition to the analyzed characteristics, there is data related to the individual presentation of the illness, the response to the treatment, the course of the illness, as well as the capability of the patient to function socially [12]. The risk of suffering from schizophrenia varies from 0.3 to 3.7 percent, depending on the definition and diagnostic criteria. The average risk from schizophrenia in the general population is around 1 percent, while the incidence is around 15 people out of 100 000 [13]. The disorder itself most often manifests between 20 and 35 years of age, so this period is related to a high risk of its appearance [2]. Meanwhile, in 25 percent of the patients it shows up in the period between puberty, to 30 years of age [3], in 25 percent it shows up between 30 and 40 years of age, in 16-18% above 40 years of age, and only in 2-3 % before reaching 15 years of age. If psychosis shows up around or later than 50 years of age, it is considered that the disorder itself is caused by alcohol and/or substance abuse. That is why it is said that the end of adolescence and the start of maturity, the critical years for social and professional development of any human being, is the riskiest period for the appearance of schizophrenia. Around 40 percent (men) and 23 percent (women) from the cases analyzed, schizophrenia shows up before reaching 19 years of age [10]. The illness manifests earlier on in men than in women. It often shows up in the adolescent period, all the way to a more mature age, from 16 to 35 years old, where there is a steep increase of the frequency in which the illness appears. More specifically, that is a 50 percent increase around the age of 25, and after 40 years of age, the percentage of appearance decreases [11]. It also shows up a lot more frequently in urban cities and environments, than in rural ones. The life expectancy of those who suffer from schizophrenia for about 20 to 30 years, compared to those from the general population, as well as to the environments with lower socioeconomic status [6,9].

A large number of research papers show the connection between the sociodemographic characteristics and the course of the illness, specifically the acute and chronic phases in which the positive and negative symptoms are dominating. The positive or psychotic symptoms of schizophrenia are related to delusional ideas, illogical speech and expressions, and hallucinations. The negative symptoms are decreased motivation, lack of willpower, emotional numbness and lack of speech [8]. That is why early treatment is crucial for patients suffering from schizophrenia, and it is necessary to start antipsychotic and psychosocial interventions on time, so that the course of the illness can be influenced on early on.

GOALS OF THE RESEARCH

To make a selection of patients suffering from schizophrenic disorders from the total pool of subjects

To analyze the frequency of schizophrenic disorders; to determine in which year they are most present; to determine whether the appearance rate grows or decreases in the period between 2019-2022

To determine the role of the sociodemographic characteristics (gender, age, marital status, educational status, employment and social status) in patients with an acute and chronic course of the disease

Based on the results of the research, to take measures for appropriate prevention through appropriate treatments, counseling, rehabilitation, during which the medical nurse as part of the multidisciplinary team will have an appropriate role and task.

METHOD

This research represents a retrospective and prospective study, based on the data collected from patients that have been and are still being treated in the Psychiatric Hospital "Skopje" in Skopje. This was done thanks to the official approval and cooperation of the management team of the hospital. The data is collected from 2387 patients with chronic and acute conditions of the illness. These patients were hospitalized in the period between January 2019, to December 2022, and they have been diagnosed with schizophrenia according to the International Classification of Illness (ICD).

Afterwards, based on the data from the illness histories,

structured clinical interviews, and the sociodemographic data received when admitting the patients, there was a conducted analysis of the frequency of appearance of the schizophrenic disorders during the aforementioned time periods, and the distribution of the specified sociodemographic characteristics. Also, a comparison has been done between the patients suffering from an acute and chronic course of the illness, in order to conclude whether there are any differences based on the sociodemographic characteristics.

The identity of the patients is protected and their data were collected and analyzed using identification codes. The statistical analysis on the data was done using the software SPSS (Statistical Package for the Social Science, version 20).

RESULTS

Based on the data from our research, we can see that during 2019 in the Psychiatric Hospital "Skopje" in Skopje, there was a total of 704 patients with schizophrenic disorder out of which 141 (20%) were acute, and 563 (80%) were chronic patients. During 2020, out of 602 patients, 149 (25%) were acute and 453 (75%) were chronic. In 2021, a total of 566 patients were admitted, out of which 128 (22%) were acute, and the other 438 (78%) were chronic. In 2022, the total number saw a decrease to 515 patients in total, out of which 140 (27%) were acute and 375 (73%) were chronic patients. It is noticeable that with each consecutive year, the percentage of chronic patients decreases compared to the acute patients.

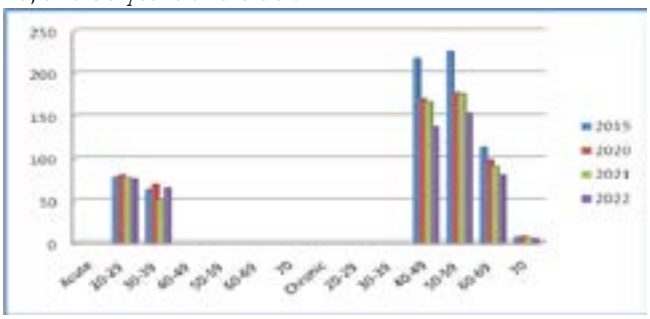
Graph1. Total number of patients in the period 2019 – 2022 divided by duration of illness

On Table1, there is a representation of the total number of patients in the time period between the years 2019-2022, in regards to gender. The analyzed group consists of a total of 2387 patients divided into two groups. The first group consists of 558 patients with a diagnosis of their first schizophrenia episode out of which 429 (77.0%) are men and 129 (23.0%) are women. The second group is consisted of 1829 patients with chronic schizophrenia out of which 1396 (71.0%) are men and 523 (29.0%) are women. The results indicate that the incidence of schizophrenia is much more present in men than in women.

Table 1. Frequency and percentage of respondents among gender

Gender	Acute Frequency/Percentage		Chronic Frequency/Percentage	
Men	429	(77.0 %)	1306	(71.0%)
Female	129	(23.0 %)	523	(29.0%)
Total	558	(100%)	1829	(100%)

Because schizophrenia appears in different stages of life, on Graph2 we have presented the structure of both groups based on their age at the time of treatment. From the results, we can conclude that the patients with acute schizophrenia, mostly belong to the ranges between 20-29 and 30-39 years of age, while in the second group there is a higher percentage of patients in the age ranges of 40-49, and 50 years and older.



Graph 2. Total number of patients in the period 2019 – 2022 divided by age

From the analysis done on the data, we can see that in our pool of subjects in the acute group, the larger number of patients are in the category of those with high school education and elementary school education levels, while a small number of the patients are university graduates. On the other hand, in patients with chronic illness, the larger number are patients who have not finished elementary school (Table3).

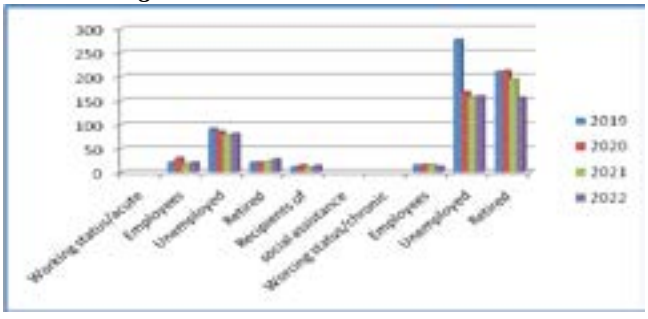
Table 2. Educational status of respondents in acute phase

Education/ acute	2019 year Frequency/ Percentage	2020 year Frequency/ Percentage	2021year Frequency/ Percentage	2022year Frequency/ Percentage
Without	2 (1.0%)	5 (3.0%)	3 (2.0%)	4 (3.0%)
Primary	51 (36.0%)	53 (36.0%)	39 (30.0%)	45 (32.0%)
Secondary	74 (53.0%)	83 (56.0%)	80 (63.0%)	88 (63.0%)
High	14 (10.0%)	8 (5.0%)	6 (5.0%)	3 (2.0%)
Total	141 (100 %)	149 (100 %)	128 (100%)	140 (100 %)

Table 3. Educational status of respondents in chronic phase

Education/ chronic	2019 year Frequency/ Percentage	2020 year Frequency/ Percentage	2021year Frequency/ Percentage	2022 year Frequency/ Percentage
Without	201 (36.0%)	124 (28.0%)	106 (25.0%)	87 (23.0%)
Primary	164 (30.0%)	80 (18.0%)	123 (28.0 %)	136 (36.0%)
Secondary	173 (30.0%)	220 (48.0%)	181 (41.0%)	135 (36.0%)
High	25 (4.0%)	29 (6.0%)	28 (6.0%)	17 (5.0%)
Total	563 (100%)	453 (100%)	438 (100 %)	375 (100%)

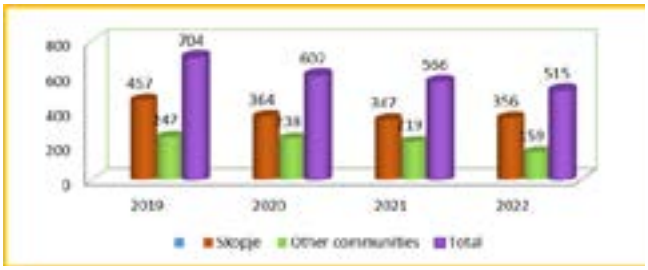
It is known that a person's vocation helps shape the character, structure and lifestyle of an individual. It represents a relationship to society through which a person secures their economic existence and their social status. In our research done on both groups of patients, the percentage of unemployed or retired people is larger than the percentage of employed people (Graph3). In the group of chronic patients, it can be noticed that a large number of them are in socially vulnerable categories and are receiving aid.



Graph 3. Total number of patients in the period 2019 – 2022divided according to working status

The results from our research shows that out of the total number of acute patients, a good number of them fall under the married category, while the largest percentage of them are people who are single (Table4). The same can be seen for chronic patients, where throughout the years, those who are single are in the overwhelming majority of the patients.

On Graph 4, there is a representation of the patient statistics according to the place where they live. It is noticeable that the number of patients from Skopje (the capital city) is significantly larger than other smaller and rural areas.



Graph 4. Total number of patients in the period 2019 – 2022 divided according to the place of residence

DISCUSSION

Schizophrenia represents a chronic mental disorder, a clinical syndrome where there are specific psychological symptoms present, individual variations regarding the clinical state, response to treatment and course of the illness, as well as reduced functional capacity in personal, family, professional and social aspects of life. It begins with a long asymptomatic period – from birth to adolescence – a period in which the functioning of the individual is healthy. Then the prodromal stage appears – the time of early adolescence and the early twenties of one's life – which is characterized by unusual behavior and non-specific negative symptoms with a mild decrease in functional capacity of the individual. Afterwards, the acute phase begins – the period between twenties and thirties – when the positive psychotic symptoms of the illness come to light, as well as remissions and relapses, most often without gaining back the level of functioning before the onset of the illness [4]. The last stage of the illness begins after the fortieth year of age, when negative and cognitive symptoms occur more often, with an occasional improvement of the clinical state. There is a gradual reduction of the patient's functional capacities on a social level, as well as therapeutic resistance to neuroleptic therapy, as well as to psychosocial interventions, which points to the chronic course of the illness.

Sociodemographic factors such as age, gender, marital status, education, employment status and income, are continually identified as important factors in explaining the variability of schizophrenia and its rate of prevalence. Our research results confirm the probability that schizophrenia is a lot more likely to occur in men than

in women, that is more often comes up in people who live in urban areas, while regarding educational levels, it is more common around people with lower educational history. A large number of authors also point out in their papers that schizophrenia is more likely to affect people with low income and a lower level of education [14]. Our research also showed that among our pool of patients, the dominating number of patients are unemployed, retired, or receiving social aid, especially when it comes to chronic patients.

That is why it is necessary to begin treatment of schizophrenia early on, using antipsychotic therapy and psychosocial interventions, so that the natural course of the illness can be influenced better [1]. The role of the medical nurse in treatment of schizophrenia patients is essential, as they take care of the patients, communicate with them, evaluate their needs, and reacts correspondingly in order to establish a relationship which is very important in their recovery process.

CONCLUSION

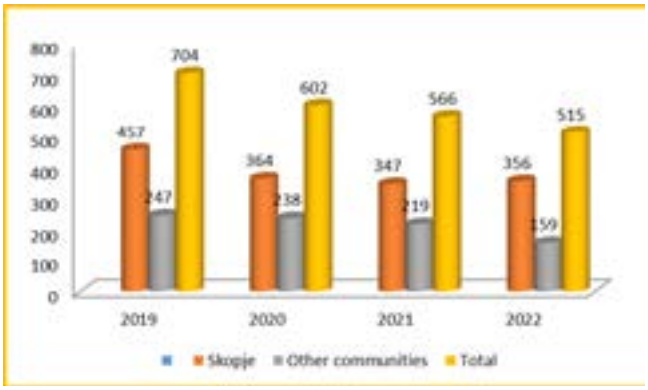
Contemporary psychiatry and psychology today are trying to integrate the different psychological theories and concepts with the contemporary neurophysiological discoveries. This is the basis of all trials and tendencies to integrate different psychotherapeutic and pharmacological interventions. Based on the most recent psychological theories, it is considered that psychological phenomena that appear in somatic and mental disorders, appear because of disrupted self-regulation of the individual. Our internal life, our emotions, imaginations and thoughts affect us and our behavior. The internal life of a person is an important source of their actions, reactions and behavior in general. This concept responds to the latest discoveries, and it is going to enter a phase of development of discovery and better research, based on recent evidence. This would give more specific answers to the current enigma of the relations and mutual influence of the psychological and biological, and the somatic and cerebral, with the functioning, reacting and general behavior of a person.

The results in our research can be of significance for preventing, discovering and treating schizophrenic disorders. These results can be directed towards helping cure schizophrenic illness, in order to prevent or overcome negative consequences. With adequate psychiatric and psychological help, in the form of counseling and psychotherapy, the patients can be helped to more easily accept and overcome the illness. These results can also be of help to the families of patients, as well as to professionals who are dealing with treatment of schizophrenia, through counseling and therapy for adapting to the illness, in creating new lifestyles, and regular use of neuroleptic therapy [7].

That is why it is of great importance to form mental health centers which are meant to stimulate patients in taking part of different activities that will aid their rehabilitation, resocialization, and recreation. Also, for providing them with psychopharmacological therapy, advice, interventions in states of crisis, opportunities to meet up with friends, and activities for prequalification, as well as various forms of support for achieving their own potential.

Disclosure statement

None of the authors report any conflict of interest with this research.



REFERENCES

1. Addington, J., Devoe, D.J., Santesteban-Echarri, O. Multidisciplinary treatment for individuals at clinical high risk of developing psychosis. Curr Treat Options Psychiatry 2019; 6:1–16. doi: 10.1007/s40501-019-0164-6.
2. Adebiyi, M.O., Mosaku, S.K., Irinoye, O.O., Oyelade, O. Socio-demographic and clinical factors associated with relapse in mental illness. IJANS 2018; 8:149–53. doi:10.1016/j.ijans.2018.05.007.
3. Arbanas, G. Psihijatrija, 2008. Zagreb: Naklada Slap.
4. Blom, J. D., Mangoenkarso, E. Sexual Hallucinations in Schizophrenia Spectrum Disorders and Their Relation With Childhood Trauma. Frontiers in psychiatry 2018; 9: 193-198. doi:10.3389/fpsyt.2018.00193
5. Bora, E., Akdede, B.B., Alptekin K. The relationship between cognitive impairment in schizophrenia and

metabolic syndrome: a systematic review and meta-analysis. Psychol Med 2017; 47: 1030–1040. doi: 10.1017/S0033291716003366.

6. Brown, G.W., Monck, E. Influence of family life on the course of schizophrenic disorders. Br J Psychiatry 2002; 16: 55-73.
7. Caqueo-Urízar, A., Rus-Calafell, M., Craig, K. J., Irarraza-val, M., Urzúa, A., Boyer, L., Williams, R. D. Schizophrenia: Impact on Family Dynamics. Current Psychiatry Reports 2017; 19(1): 2-11. doi:10.1007/s11920-017-0756-z
8. Cannon, T.D., Medrick, S.A., Parmas, J. Antecedents of predominantly negative and predominantly positive symptom schizophrenia in high risk population. Arch Gen Psychiatry 2009; 47: 622-632.
9. Curley, A., Agada, E., Emechebe, A., Anamdi, C., Ng, X.T., Duffy, R. Exploring and explaining involuntary care: the relationship between psychiatric admission status, gender and other demographic and clinical variables. Int J Law Psychiatry 2016; 47: 53–9. doi: 10.1016/j.ijlp.2016.02.034.
10. Giraud-Baro, E., Dassa, D., De Vathaire, F., Garay, R. P., Obeid, J. Schizophrenia-spectrum patients treated with long-acting injectable risperidone in real-life clinical settings: Functional recovery in remitted versus stable, non-remitted patients (the EVeREST prospective observational cohort study). BMC Psychiatry 2016; 16: 8. https://doi.org/10.1186/s12888-016-0712-1
11. Hjorthøj, C., Stürup, A. E., McGrath, J. J., Nordentoft, M. Years of potential life lost and life expectancy in schizophrenia: a systematic review and meta-analysis. Lancet Psychiatry 2017; 4(4): 295-301. doi:10.1016/S2215-0366(17)30078-0.
12. Meehan, T., Stedman, T., Parker, S., Curtis, B., Jones, D. Comparing clinical and demographic characteristics of people with mental illness in hospital - and community - based residential rehabilitation units in Queensland. Health Promot J Austr 2017; 41: 139–43. doi: 10.1071/AH15207.
13. Mimica, N., Folnegovič-Šmalc, V. Epidemiologija Shizofrenije. Medix 2006; 12: 74-75. Retrieved from www.researchgate.net/publication/299533681 Epidemiologija shizofrenije.
14. Walker, S., Mackay, E., Barnett, P., Sheridan Rains, L., Leverton M. Clinical and social factors associated with increased risk for involuntary psychiatric hospitalisation: a systematic review, meta-analysis, and narrative synthesis. Lancet Psychiatry 2019; 6: 1039–53. doi: 10.1016/S2215-0366(19)30406-7.