ABSTRACT BOOK

INTERNATIONAL PUBLIC HEALTH CONFERENCE «PUBLIC HEALTH IN UKRAINE – MODERN CHALLENGES AND DEVELOPING PROSPECTS», 23-24 APRIL 2020, SUMY, UKRAINE

DOI: 10.36740/WLek202005141

Scientific-organizational conference committee

Head
Vladyslav A. Smiianov – Doctor of Medical Sciences, Professor, Head of Public Health Department, Medical institute, SSU

Deputy head
Lesia A. Rudenko – Scientific editor, moderator of project of ALUNA publisher

Secretary
Viktoria Kurhanska – Associate professor of Public Health Department, Medical institute, SSU

Committee members:
1. Oleksandr Smiyan – Doctor of Medical Sciences, Professor, Head of the Department of Paediatrics, Medical institute, SSU.
2. Lyudmyla Prystupa – Doctor of Medical Sciences, Professor, Head of Internal Medicine Department of Postgraduation Education, Medical institute, SSU.
3. Yuriy Lakhtin – Doctor of Medical Sciences, Professor, Head of Dentistry Department, Medical institute, SSU
4. Bartosz Guterman – Head of Subscription Department of ALUNA publisher, Coordinator of Association of Polish Health Resorts` Patients project
5. Viktor Orlovski – Doctor of Medical Sciences, Professor, Head of Family Medicine and Dermatovenerology Department, Medical institute, SSU
6. Alexander Potapov – Doctor of Medical Sciences, Professor, Head of Department of Neurosurgery and Neurology, Medical institute, SSU
7. Mykola Chemych – Doctor of Medical Sciences, Professor, Head of the Department of Infectious Diseases and Epidemiology, Medical institute, SSU
8. Viktoriia Kasianchuk – Doctor of Veterinary Sciences, Professor of Public Health Department, Medical institute, SSU

Abstracts were published in the alphabetical order of authors' last names.

HEALTH PROMOTION OPPORTUNITIES FOR STUDENTS THROUGH THE USE OF MODERN INFORMATION AND COMMUNICATION CHANNELS

Valeriya V. Brych, Gabriella V. Dudash, Nadiia Y. Khodakovska, Mariana M. Dub
STATE HIGHER EDUCATIONAL INSTITUTION «UZHHOROD NATIONAL UNIVERSITY», UZHHOROD, UKRAINE

Introduction: Among the 10 key operational public health functions identified by WHO in the European Action Plan for Strengthening Public Health Capacities and Services, emphasis is made on the function of informing, awareness raising, communication and social mobilization for health. This function aims to create opportunities to access, understand and use information to promote health and reduce the risk of disease among the general population and specific target groups. The choice of communication channels should take into account the peculiarities of these groups, and ensure effective health promotion to adapt to those sources of communication that are most trusted by the target group. Particular attention should be paid to the group of university students who are in the process of forming a lifestyle and are the largest consumer of information of modern communication channels.

The aim is to determine the optimal information and communication channels to promote health among students.

Materials and methods: The study was based on sociological, statistical methods and the method of system analysis. A sociological survey was conducted with the help of a specially designed questionnaire on 25 questions and covered 330 students of the Uzhhorod National University.

Results: An analysis of the responses identified three social networks that are most used by respondents: Instagram (90,8%), Telegram (53,1%) and Facebook (40,2%). Health and beauty issues ranked second in priority among students after watching feature films online, 50.3% of respondents said. Only 33.4% of the survey participants indicated the topic "Sport and Fitness". According to students, Instagram (72.2%), Facebook (64.2%) and Telegram (36.7%) should be used to promote health among youth. At the same time, only 43.4% of the students surveyed want reliable information about health and healthy lifestyles from social networks. Half of the study participants (55%) cited the websites of well-known physicians as the desirable source of such information, slightly less (47.1%) referred to official health care sites. It should be noted that most students are interested in information about nutrition (73.7%), physical activity (61.8%), rest and sleep (59.6%) and safe sexual behavior (41.6%).

Conclusions: For young students a high level of Internet usage is characteristic; in particular, they typically browse information and communication channels devoted to health and a healthy lifestyle. Therefore, successful health promotion for the specified target group is possible through the provision of reliable information when using priority social networks (Instagram, Facebook, Telegram), websites of famous doctors and official sites of healthcare institutions. The results of the study allow us to plan and develop effective health promotion measures among the target group of population

KEY WORDS: health promotion, information and communication channels, students

DEPENDENCE OF CLINICAL AND LABORATORY CHANGES IN CHRONIC VIRAL HEPATITIS C ON THE DEGREE OF FIBROSIS

Mykola D. Chemych, Anastasia G. Lishnevska, Artem O. Horbachevskyi
SUMY STATE UNIVERSITY, DEPARTMENT OF INFECTIOUS DISEASES WITH EPIDEMIOLOGY, SUMY, UKRAINE

Introduction: Viral lesions of the liver progress from inflammation to the development of fibrosis and cirrhosis. The degree of liver fibrosis is important for determining therapeutic tactics and follow-up.

The aim: To study the peculiarities of changes in hematological and biochemical parameters from patients with chronic viral hepatitis C (CVHC), their dependence on the degree of fibrosis, establish correlation between them and values of non-invasive methods of calculation of liver fibrosis.

Materials and methods: 287 patients with CVHC were examined, divided into groups according to the degree of fibrosis (F0 (n = 51), F1 (n = 43), F2 (n = 90), F3 (n = 24), F4 (n = 79)) and 55 healthy individuals (comparison group). The degree of fibrosis was calculated by METAVIR (grades the stage of fibrosis on a five-point scale), FIB-4 (Fibrosis-4), APRI (AST to Platelet Ratio Index). Statistical processing was performed in Microsoft Office Excel 2013 and IBM SPSS Statistic 23 software.

Results: Among the patients, the greatest number were persons with moderate (F2) fibrosis, male. With increasing fibrosis, the age of the patients increased ($p<0.05$). Most had the 1b genotype and minimal activity.

Direct correlations were found between the degree of fibrosis (F) by METAVIR and FIB-4 ($p <0.05$), FIB-4 and APRI ($p <0.05$) and the trend toward correlations between F (METAVIR) and APRI. There was a direct correlation between F (METAVIR), APRI, FIB-4 and age, BMI ($p <0.05$).

A direct proportional correlation was established between the results of all non-invasive methods and edematous ascites syndrome, telangiectasia, enlargement of the spleen; between F (METAVIR), FIB-4 with asthenovegetative syndrome, and between F (METAVIR), APRI and liver enlargement ($p<0.05$).

Established inversely proportional correlation between the results of all methods for assessing the degree of fibrosis and the level of platelets; between APRI, FIB-4 and leukocyte count; FIB-4 and erythrocyte count ($p<0.05$). Direct relationships were observed between APRI, FIB-4, and ESR ($p<0.05$). Data from all three methods correlated directly with total bilirubin; F (METAVIR) was inverse and APRI, FIB-4 was direct with ALT, AST, and GGTP ($p<0.05$). Also, F (METAVIR) scores had a direct correlation with AlPh and FIB-4 correlated with de Ritis factor ($p <0.05$).

Conclusion: With the increase of the degree of fibrosis in patients, the detection of edema-ascitic, asthenovegetative syndrome, telangiectasia, enlargement of the spleen and liver became more frequent. The number of platelets, leukocytes and erythrocytes decreased, but the ESR and the bilirubin content increased. A connection was made between ALT, AST and GGTP and F (METAVIR), and a direct connection was made between APRI, FIB-4. F (METAVIR) had a direct correlation with AlPh, and FIB-4 correlated with the de Ritis factor.

KEY WORDS: fibrosis, liver, hepatitis C

LYME DISEASE IN UKRAINE

Mykola D. Chemych, Inna V. Lutai, Tetiana A. Husieva, Anna S. Ivanova
SUMY STATE UNIVERSITY, DEPARTMENT OF INFECTIOUS DISEASES WITH EPIDEMIOLOGY, SUMY, UKRAINE

Introduction: Lyme disease (A69.2) is an infectious transmissible natural focal disease caused by spirochetes of B. burgdorferi s. l. complex characterized by predominant lesions of the skin, musculoskeletal system, heart and nervous system, prone to protracted recurrent development and ability to chronization.
The epidemiological situation of Lyme disease (LD) in Ukraine remains difficult. The increasing number of cases of the disease indicates the mass spread of pathogens and is relevant for the analysis of morbidity rate for this disease.
The aim: To analyse and study the epidemiological features of Lyme borreliosis in Ukraine.
Material and methods: The state statistical reporting form (f. No. 1) in the period from 2017 to 2019; materials of Sumy Regional Laboratory Center of the Ministry of Health of Ukraine; data on medical records of patients treated at SRICH (Sumy Regional Infectious Clinical Hospital) were used.
Results: In 2018 the epidemiological situation with LD in comparison with previous years got worse. The morbidity rate since 2017 (9,36 per 100 thousand of the population) has grown almost one and a half times (in 2018 it was 12,78 per 100 thousand). Exceeding average rates are registered in Cherkasy (41,46), Vinnytsia (32,65), Kyiv (30,08), Sumy (23,04) regions. The peak of tick activity in Ukraine is recorded in May which increased 4,23 times in comparison with 2017. The biggest percentage of the sick persons falls on the able-bodied population causing significant losses to the state.
Incidence of this disease among rural residents increased 3, 48 times. Morbidity among city residents in 2017 amounted 95,18% and in 2018 - 82,87% correspondingly. According to gender specifications women prevailed at the ratio 1,68:1 (2017 - 1,57:1). Laboratory diagnostics was performed for 4328 patients, a positive result was obtained in 80,7%. The greater number of people affected by the tick had consulted infectious disease physicians (92, 82%). According to the Public Health Center of the Ministry of Health of Ukraine, infectious morbidity for the 11 months of 2018 amounted to 12,3 per 100 thousand of the population, in 2019 there is a tendency to decrease (10,1 per 100 thousand).
Conclusions: Lyme borreliosis morbidity in Ukraine tends to increase. Its decrease in 2019 is likely connected with diagnostic mistakes caused by the lack of awareness of primary care physicians with this nosology.

KEY WORDS: Lyme borreliosis, morbidity, tick activity

EFFICIENCY OF TREATMENT OF JAW MINERALIZATION DISORDERS IN WOMEN WITH ESTROGEN IMBALANCE

Leonid D. Chulak[1], Oleksandr S. Barylo[2], Nataliia G. Gadzhula[2], Georgij M. Varava [1], Ruslan L. Furman[2], Kyryl V. Agafonov [1]
[1]ODESA MEDICAL INSTITUTE OF THE INTERNATIONAL HUMANITARIAN UNIVERSITY, ODESA, UKRAINE
[2]NATIONAL PIROGOV MEMORIAL MEDICAL UNIVERSITY, VINNYTSIA, UKRAINE

Introduction: Estrogen imbalance in women affects dental health and leads to the occurrence of osteoporosis of bones and demineralization of hard tooth tissues.
The aim: To improve the effectiveness of treatment and prevention of bone osteoporosis and demineralization of hard tooth tissues in females with estrogen imbalance.
Materials and methods: Clinical and laboratory studies were carried out in female patients aged 45-60 years with confirmed estrogen dysfunction. 3 groups of patients were selected for the study (20 females in each): the control group – the patients receiving no additional treatment, experimental group 1 – the patients receiving general therapy with complex calcium medicines, experimental group 2 – those who received general therapy of complex calcium medicines combined with aminobisphosphonates. Three 4-week courses of treatment with four week intervals between them were administered. To quantify bone density of the jaws by computed tomography method, X-ray attenuation scale, called the Hounsfield scale was used. Bone tissues of the jaws were studied using 3D cone beam computed tomography scanner Planmeca ProMax. Planmeca Romexis® software was used for data processing and interpretation. The level of serum acid phosphatase was determined by Bessey-Lowry-Brock method based on enzymatic hydrolysis of p-nitrophenyl phosphate. The analysis of statistical data was performed using the method of the Student parametric criterion according to the principle of variation statistics. Values of $p < 0.05$ were considered statistically significant.
Results: At the beginning of the study, significant bone demineralization and increased level of acidic phosphatase were revealed in all groups of women. Mandibular mineralization index was rather low: 1495±89 HU in the control group, 1488±75 HU in experimental group 1 and 1479±84 HU in experimental group 2 (normal value – 1600-1700 HU, $p<0.05$). All patients were found to have significantly increased level of acid phosphatase: 6.75±0.29 IU/l, 6.81±0.56 IU/l, 6.79±0.73 IU/l, respectively (normal value – 0-5.5 IU/l, $p<0.05$). In 6 months of treatment the Hounsfield index and the level of acidic phosphatase in the control group were almost unchanged; in experimental group 1 – 1571±44 HU and 4.93±0.26 IU/l ($p<0.05$); in experimental group 2 – 1701±48 HU and 2.43±0.18 IU/l ($p<0.05$). Having analyzed the results, the conclusion was made that complex of calcium