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<i>ASLANYAN A.H., MKRTCHYAN S.H.</i>	HYGENIC CHARACTERISTICS OF MORBIDITY OF HIGH SCHOOL STUDENTS OF YEREVAN	124.
<i>AVETISYAN K.S.</i>	SELF-ATTITUDE FORMATION IN PSYCHOLOGY	125.
<i>CHOPIKYAN A.S., MARDIYAN M.A., DUNAMALYAN R.A.</i>	EVALUATION OF QUALITY OF LIFE OF CARDIOVASCULAR PATIENTS WITH HEART FAILURE IN SHIRAK REGION	126.
<i>DANIELYAN I.E., BABALYAN V.N.</i>	CHARACTERISTIC FEATURES OF OSTEOPOROSIS RISK FACTORS AMONG WOMEN IN YEREVAN	127.
<i>DANIELYAN L.M., DUNAMALYAN R.A., MARDIYAN M.A., CHOPIKYAN A.S.</i>	QL CHANGES AS A CRITERION FOR EVALUATION THE EFFECTIVENESS OF TREATMENT	128.
<i>DAVTYAN ZH.Y., HOVHANNISYAN S.G.</i>	HEALTHCARE QUALITY ASSESSMENT AND IMPROVEMENT IN PRIMARY HEALTHCARE FACILITIES	129.
<i>DUNAMALYAN R.A., SIMONYAN K.H., MARDIYAN M.A.</i>	CHANGES IN QUALITY OF LIFE OF PRETERM CHILDREN AT EARLY CHILDHOOD	130.
<i>GYURJYAN K.T., POGHOSYAN K.S.</i>	AMR STEWARDSHIP AND INFECTION PREVENTION AND CONTROL IN HERATSI AND MURATSAN HOSPITALS OF YEREVAN STATE MEDICAL UNIVERSITY OF ARMENIA	131.
<i>HAKOBYAN H.H., MANVELYAN H.M.</i>	SILENT TORMENT: HEALTH ISSUES OF FAMILIES OF CHILDREN WITH CEREBRAL PALSY. THE INITIAL RESULTS OF PRELIMINARY STUDY	132.
<i>HARUTYUNYAN A., ABRAHAMYAN A., HAYRUMYAN V., DANIELYAN A., PETROSYAN V.</i>	SMOKING CESSATION TRAINING FOR PRIMARY HEALTHCARE PHYSICIANS IN ARMENIA	133.
<i>KARAPETYAN H.D., TER-STEPANYAN M.M., HAMBARDZUMYAN A.Dz.</i>	THE EFFECT OF NARINE'S METABOLITES ON METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	134.
<i>KHACHATRYAN B.G., POGOSYAN S.B., MURADYAN S.A., TER-ZAKARYAN S.O., GULOYAN A.A., TADEVOSYAN N.S.</i>	COMPARATIVE ANALYSIS OF THE METHODS FOR ESTIMATION OF PHYTOTOXIC ACTIVITY OF THE ENVIRONMENT IN ARARAT MARZ	135.
<i>MANUKYAN A.L., HUNANYAN L.S., GRIGORYAN A.S., MKRTCHYAN V.S., MELKONYAN M.M.</i>	THE ACTION OF CHRONIC ACOUSTIC STRESS ON THE OPEN FIELD TEST	136.
<i>MELIK-NUBARYAN D.G., HAYRAPETYAN A.K., RUBENYAN A.</i>	PRICE REGULATION AS A MECHANISM OF REDUCTION OF CATASTROPHIC HEALTH EXPENDITURE RISK	137.
<i>MELKONYAN N.S., HOVHANNISYAN H.S.</i>	THE EPIDEMIOLOGICAL PECULIARITIES OF ROTAVIRUS INFECTION AND IMMUNOPROFILAXIS IN ARMENIA	138.
<i>MEYMARYAN M.A.</i>	MODERN ASPECTS OF DIAGNOSTICS OF INTESTINAL PROTOZOSES	139.
<i>SAKANYAN G.H., GRIGORYAN A.A., HAYRAPETYAN A.K.</i>	THE MAJOR TRENDS OF CHILDHOOD DISABILITY IN RA	140.
<i>TADEVOSYAN N.S., KHACHATRYAN B.G., MURADYAN S.A., HAYRAPETYAN A.A., GULOYAN A.A.</i>	ANALYSIS OF THE STATUS AND MUTAGENIC ACTIVITY OF THE ENVIRONMENTAL IN ARARAT AND LORI MARZES	141.
<i>TER-STEPANYAN M.M., QOCHARYAN K.S., HAMBARDZUMYAN A. Dz.</i>	HOSPITAL MICROECOSYSTEMS IN DIFFERENT-PROFILE HEALTHCARE FACILITIES	142.



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HYGIENIC CHARACTERISTICS OF MORBIDITY OF HIGH SCHOOL STUDENTS OF YEREVAN

INTRODUCTION. Over the past two decades negative changes in the health status of school-aged children (in particular adolescents) are registered in both official statistical and scientific. The morbidity of students aged 15-17 increased by 37.5% in the period from 2002 to 2012. The morbidity increase was mainly represented by diseases of the respiratory system, diseases of the eye and adnexa, diseases of the musculoskeletal system and connective tissue, diseases of the digestive system, diseases of the nervous system, the injuries, poisonings and certain other consequences of external causes. What is more, a morbidity structure is comprised of these diseases by the 80%.

Health problems of this age can affect both human health, as well as the health of generations.

The aim of the following research was investigation of morbidity of high school students of Yerevan during education.

METHOD USED. 1382 students of X-XII grades of high schools of Yerevan were examined. Medical check-ups were conducted two times: both at the beginning and at the end of the education. Prevalence of functional disorders and chronic diseases in 1000, as well as morbidity by ICD-10 was investigated.

RESULTS AND DISCUSSION. Results of investigation of functional disorders and chronic diseases among high school students have shown increase of indicator from 936 to 962. Moreover, the rise of indicator is conditioned by increase of chronic disease. Thus, if the prevalence of chronic diseases was 617 ‰ at the beginning of the high school, then the index increased by 1.2 times at the end of education. Nevertheless prevalence of functional disorders decreased from 319 ‰ to 241 ‰ during 3 years of education.

Results of dynamic three-year study have revealed negative changes in the morbidity, that is mainly represented by the increase of impairments of nervous, digestive, endocrine and visual systems. Thus, the prevalence of nervous system disorders varies from 163,72 ‰ to 212,16 ‰, digestive tract - from 97,35 ‰ to 122,97 ‰, disorders in endocrine system - from 92,92 ‰ to 135,14 ‰, and the prevalence of visual impairments - from 553.1 ‰ to 583.78 ‰. It was also registered morbidity decrease in some cases, in particular concerning diseases of respiratory system, as well as skin and subcutaneous tissue.

CONCLUSION. Based on results of the study, we can state the increases of prevalence of chronic diseases among students of high schools by 1,2 times during 3 years of education.

Analyzing the dynamic three-year study results we can mention both negative and positive changes in the diseases prevalence. What is more, negative changes are mainly represented by the increase of impairments in nervous and endocrine systems, rising in 1.3 and 1.5 times correspondingly.

Thus, all mentioned above results allow us to conclude that it is necessary to work out a complex of preventive measures directed at health maintenance and diseases prevention among high school students.

KEYWORDS:

high school student,
morbidity

SELF-ATTITUDE FORMATION IN PSYCHOLOGY

INTRODUCTION. Self-attitude as a socio-psychological phenomenon was first considered in the famous work of Rosenberg M. [1]. Rosenberg M. objectively specifies the illogicality of the “self-attitude” concept, the essence of which is the fact that the person, in fact, is not responsible for their attitude to themselves as that attitude is imposed by others, by the primary reference group. Hattie J. highlights and develops Rosenberg M. thesis about the necessity of socio-psychological approach to self-attitude problem. In his famous thesis about the mirror nature of self-attitude he writes that if we want to properly understand a person’s self-attitude, we must penetrate into the social original referential for them[2].

“I-concept” is the integrity of all the self-concepts of a person which is combined with their assessment. “I-concept” determines not only what a person is, but also what they think about themselves, how they perceive their own activity and possible development in future [3]. Self-attitude forms on two levels of self-recognition, starting from childhood and undergoing certain changes. On the first “I-Another” comparison level emotional and value self-attitude appears as a result of relation of a person and social environment where the main forms of self-recognition are self-perception and self-observation. On the second, more mature level of self-recognition the formation of self-attitude is realized within the “I-I” comparison, by means of internal dialogue where the main forms of self-recognition are self-analysis and self-consciousness.

The self-attitude of a person is divided into two main types:

- a) self-attitude, which is inspired by the social environment (exo-self-attitude) and
- b) self-attitude, which is exposed in the thoughts of a person and is about himself, about the place he occupies in life.

METHOD USED.

- 1.V.V. Stolin’s test of self-attitude.
- 2.H.Eysenck’s test of mental states.
- 3.Karelin’s test of self-esteem level.
4. Survey.
- 5.Interview.

Self-attitude is a dynamic phenomenon. During social self-attitude a person relies on external moments and the real, complete understanding of their own personality is still absent. It is programmed by the social environment. Existential is a more mature level and it is the period of internal dialogue, in case of which a person stays alone with their essence, trying to deeply understand the meaning of their own life.

RESULTS AND DISCUSSION.

1. Self –attitude formation passes two main levels: social (dependent) and existential (independent).
2. In the process of self-attitude development we distinguish two main notions: exo-self-attitude and endo-self-attitude.



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“I-concept”,
exo-self-attitude,
endo-self-attitude*



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EVALUATION OF QUALITY OF LIFE OF CARDIOVASCULAR PATIENTS WITH HEART FAILURE IN SHIRAK REGION

INTRODUCTION. Nowadays, the healthcare sciences have progressed from just saving lives to improving quality of life (QL), an outcome that is increasingly being recognized as a major aim of heart failure patient treatment. The prevalence of Heart Failure has increased in recent decades. In addition, it is known that the assessment of patients' quality of life is an integrated and independent indicator for the evaluation of treatment effectiveness and complication of disease of patients with cardiovascular diseases. There are two forms of QL measuring questionnaires, the first being generic in its content and the second disease-specific. The Minnesota Living with Heart Failure Questionnaire (MLHFQ) is a most used disease-specific HRQOL instrument. This tool has been adapted for use in more languages and has demonstrated good psychometric properties in numerous studies. The aim study is assessment of quality of life of patients with Heart Failure by using of MLHFQ questionnaire.

METHOD USED. A total of 264 participants (adults ≥ 18 years) from the Shirak region population included in study. The sample is based on a stratified, multistage, cluster area probability design. To measure the effects of symptoms, functional limitations and psychological distress on an individual's quality of life the MLHFQ questionnaire was used. The questionnaire asks each person to indicate using a 6-point, zero to five, Likert scale how much each of 21 facets prevented them from living as they desired. The MLHFQ encompasses dimensions: a physical dimension (items 2, 3, 4, 5, 6, 7, 12, 13), emotional dimension, referring to questions 17 to 21. The other questions) are related to lifestyle, financial situations and side effects of medication (social dimension). These, together with the previous dimensions, form the total score. Higher scores indicate worse QL, and lower scores, better QL. Some socio-demographic variables were used for the statistical analyses, such as age, gender, living arrangement, educational level, employment and financial status.

RESULTS AND DISCUSSION. The studied population's 45,5% were man and 54,5% - woman. The age description were: 18-20 years - 6,1%(n=16), 21-40yaers - 20,1%(n=53), 41-60 years - 40,2%(n=106), 61-70 years -22,3% (n=59) and > 70 - 11,4% (n=30). The total score of QL were $48,1 \pm 3,0$, among males - $49,5 \pm 3,1$ and among females - $46,8 \pm 2,9$. There were detected some associations between QL and social-demographic factors. In the > 40 years age group the QL of widows and widowers were lower (64.1), than it among married patients (49.0).

CONCLUSION. As shown the results of research HRQOL were affected in case of Heart Failure. The total score of QL is higher among males, which indicates a lower QL. It should be noted that the physical and social subscales of QL most affected in case of HF among male, while the emotional subscale-among women.

KEYWORDS:

quality of life,
heart failure,
Minnesota Living with Heart
Failure Questionnaire

CHARACTERISTIC FEATURES OF OSTEOPOROSIS RISK FACTORS AMONG WOMEN IN YEREVAN

INTRODUCTION. Within the framework of a joint project with the Armenian Osteoporosis Association, a search for the risk factors for osteoporosis (OP) was conducted among female patients of primary health care service, irrespective of the reasons for seeking treatment. The study aimed to analyze frequency of occurrence and nature of the OP risk factors among women aged over 55 in Yerevan, depending on age. The detection and prevention of osteoporosis risk factors are urgent all over the world as the complications of the disease, bone fractures have serious social and economic significance.

METHOD USED. Female patients of a number of polyclinics were offered to fill in questionnaires on assessment of OP risk factors, irrespective of reasons for seeking treatment and type of treatment. The survey was conducted by the mentioned physicians of primary health care service at the following polyclinics: "Armenia" medical center (J. Dambayan, A. Gasparian), polyclinic №13 (A. Ohanyan, A. Mosinyan), 2nd medical center (S. Karapetyan), polyclinic after K. Yesayan (L. Tadevosyan), polyclinic of St. Grigor Lusavorich medical center (A. Zhamadyan), polyclinic №12 (A. Asatryan), polyclinic №11 (G. Grigoryan).

87 women were surveyed. For the purpose of identification of correlation between the age and nature of the risk factors all the participants of the survey were divided into two groups: group I – 68 patients, age 55-69 and group II – 19 patients, age 70-86.

For the realization of the survey the test of the International Osteoporosis Foundation (IOF) on osteoporosis risk assessment, taken as a basis, was modified and supplemented. The questions covered the following information: height, weight, body mass index (BMI), whether parents have been diagnosed with a broken bone as a result of minor injuries, whether the surveyed patients have been diagnosed with a broken bone, propensity to falling, decrease in height for more than 3cm. after the age of 40, menopause before 45 or earlier, smoking, number of smoked cigarettes, amount of alcohol drunk, amount and type of dairy products, type and duration of physical activity, duration and frequency of spending time outdoors with exposure to sunlight, existence of back pain, psychological condition (anxiety, disturbance, depression), results of previously undertaken densitometry if applicable.

RESULTS AND DISCUSSION: Among the results of the data analysis the following facts were particularly remarkable: high falling frequency during the last year - 43% (Igr.) and 63% (IIgr.), low daily physical activity of less than 30 minutes - 23,5% (Igr.) and 36,8% (IIgr.), lack of regular physical exercises - 54,4% (Igr.) and 42,1% (IIgr.), frequent back pains - 61,7% (Igr.) and 42,1% (IIgr.), decrease in height for more than 3cm. after 40- 54,4% (Igr.) and 73,6% (IIgr.).

Frequent or almost permanent subjective feeling of nervousness and anxiety was revealed with 60% (Igr.) and 79% (IIgr.). Only 47,3% of women in the group of patients aged 70-86 had undertaken densitometry within the preceding 2 years.

CONCLUSION: According to the obtained data the risk factors are observed more frequently among the elder age group.

Consideration of the obtained data can be useful for the organization of educational and preventive programs for patients of different age groups at polyclinics and development of more specific recommendations for prevention of osteoporosis, taking into consideration some specific features of lifestyle of the local population.



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QL CHANGES AS A CRITERION FOR EVALUATION THE EFFECTIVENESS OF TREATMENT

INTRODUCTION. Understanding and assessing of Quality of Life (QL) is essential for the development of public health policy and improved care. Since the early 2000s, a large body of research has focused on the issue in pediatric and adult populations. Nowadays the studies dedicated to QL research are of high interest all over the world. Foreign researchers use life quality indicators during population surveys, age and sex standards development, as well as during the monitoring of preventive measures' effectiveness evaluation. Many researchers have studied the peculiarities of QL scores among healthy and sick children. In this perspective, QL has been described as a "broad ranging concept, incorporating in a complex way individuals' physical health, psychological state, level of independence, social relationships, personal beliefs, and their relationship to salient features of the environment". The aim of research was evaluation of treatment effectiveness with using of QL changes before and after treatment among early aged children.

METHOD USED. The objects of the research were early aged children (3months-3years old). We have analyzed changes of QL of early aged treated at Mouratsan" University Pediatrics Clinic. In this prospective case-control study were included 400 children of 0-3 years old. We have formed two groups and measured QL changes as an additional criterion for evaluating the effectiveness of treatment. Case group were formed children with twice hospitalization and the other children formed control group. We measured changes of QL of early aged children before and after treatment. For QL measured were used QUALIN international questionnaire. QUALIN consists of 34 questions and comprises four subscales: Behavior and communication; Ability to stay alone; Family environment; Neuropsychological development and physical health. The overall grade of the quality of life is given by mean scores. Mean scores are calculated based on a 5-point response scale for each item, in which a higher scores representing better quality of life. Prior to the research implementation parents and pediatricians filled in an agreement questionnaire with compliance to participate in the research.

RESULTS AND DISCUSSION. According to the data, trends in the QL improvement (after treatment) in case group were lower than it in control group. Thus "Behavior and communication" subscale in case of pneumonia was improved by 5,7% (BC score improvement after treatment in the control group was 21.9%). After the treatment in case group "Ability to stay alone" subscale's score improved only by 3.4% (in the control group improved by 14.3%). "Family environment" subscale in case group improved by 2.9% and in control group – by 25.8%.

CONCLUSION. Thus, it is possible to say that the features of QL score changes can be used as additional criteria to evaluate the effectiveness of treatment. Data from early aged children QL research can provide scientifically justified recommendations for optimal approaches for improving of treatment effectiveness and medical care.

KEYWORDS:

quality of life,
twice hospitalization,
early aged children

HEALTHCARE QUALITY ASSESSMENT AND IMPROVEMENT IN PRIMARY HEALTHCARE FACILITIES

INTRODUCTION. Quality care is a multi-faceted phenomenon. Improving quality of care requires intervention and monitoring of all aspects of health care. Improving only one area without focus on all dimensions of quality results in wasted resources. The main goal of this study is to develop science-based approaches to improve and control the quality of medical care in the Primary Health Care (PHC) sector using the quality assurance methods and tools based on the results obtained at healthcare facilities of Kotayk region. Objectives:

- Analyze and evaluate the quality of care at PHC facilities of Kotayk region based on the monitoring of specific quality indicators.
- Perform an analysis of internal evaluation of PHC facilities against the following dimensions of healthcare quality - accessibility, physical environment, clinical skills, provider – patient relationship and management.
- Survey and assess patients' satisfaction with the quality of care.
- Develop novel approaches to PHC quality control and improvement.

The following scientific and practical methods were used throughout the study: statistical (One-way ANOVA in software package (SPSS Inc.), etc.), sociological and expert assessments. The study was conducted at four healthcare facilities in Kotayk Region. The data was obtained from 5077 outpatient medical records, 227 patient survey forms, 214 outpatient medical records review forms, etc.

RESULTS AND DISCUSSION. Compliance of the performance as measured by the quality indicators with the established standards of quality (Pearson's chi-squared test (χ^2)) showed that in the Rural Outpatient Clinics the family physicians performed their functions in the full range, as opposed to those family physicians who worked in Polyclinics. The Health Care Facility Assessment and Healthcare Providers Self-Assessment tools revealed improvement in the overall quality of care and statistically significant increase in the quality indicators in Abovian Medical Center ($\eta^2=63\%$, $F_i=6.7$) ($F > F_{st}$, $P < 0,05$, $P < 0,01$), in Byureghavan Polyclinic ($\eta^2=65\%$, $F_i=6.7$), in Nor-Geghi Health Center ($\eta^2=29.7\%$, $F_i=1.6$), and in Argel Health Center ($\eta^2=84\%$, $F_i=19.4$). The impact of the tool to improve the quality of care was particularly high Argel Health Center due to lower baseline performance as measured by the quality indicators. Based on the results of the single-variable variance analysis the Patients Satisfaction Survey tool was not considered to be valid for the Health Care Quality Assessment purposes ($F < F_{st}$, $P < 1.0$).

CONCLUSION. - The quality assessment at PHC facilities to become a continuous and developing process based on the mechanisms for external (supportive supervision) and internal (Quality Improvement Board) quality control.

- The Patient Satisfaction Survey questionnaire developed by our team and approved by the Republic of Armenia Minister of Health Order N815-A, issued May 4, 2011, to be regularly used at different types of outpatient medical facilities of the Province of Kotayk.
- Differentiated use of the patient medical records review tool in different types of outpatient medical facilities. In particular, active implementation of the Brief Clinical Practice Protocols related to the quality indicators monitored, to be arranged at Polyclinics, alternatively, the medical records to be reviewed in the presence of the Quality Coordinator.



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CHANGES IN QUALITY OF LIFE OF PRETERM CHILDREN AT EARLY CHILDHOOD

INTRODUCTION. The causes of premature birth may be related to both the mother's and the fetus's development complexity. Survival of preterm babies has increased worldwide, with a concomitant decrease in severe neonatal morbidity. However, the risk of developmental and behavioral disabilities remains high in children and in adults who were born preterm. In this case assessment of quality of life of preterm infants can be very informative and interesting.

Evaluating of quality of life of preterm infants provides additional information about health status of the child. We examined the peculiarities of QL changes in the early aged children with premature birth in Armenia. The aim of this research was to reveal an impact of preterm on the QL score, as well as on different subscales of QL.

METHOD USED. The objects of the research were early aged children (3months-3years old) from two biggest polyclinic in Yerevan. In this prospective case-control study were included 2362 children of 0-3 years old and there were 71 infants of birth weights (BWs) <1500g and gestational ages (GAs) of less than 32 weeks. 71 infants were formed case and other children control groups. QUALIN international questionnaire was used to assess QL of early aged Armenian children. QUALIN consists of 34 questions and comprises four subscales: Behavior and communication; Ability to stay alone; Family environment; Neuropsychological development and physical health. The overall grade of the quality of life is given by means scores. Mean scores are calculated based on a 5-point response scale for each item, in which a higher scores representing better quality of life. Prior to the research implementation parents and pediatricians filled in an agreement questionnaire with compliance to participate in the research. We measured changes of QL of preterm infants at 3, 6, 9 and 12 months. We also compared QL scores of preterm children with control group.

RESULTS AND DISCUSSION. The studied population's 48,1% were boys and 51,9% - girls, the majority of which were born from the first pregnancy, 15,8% - from the second pregnancy, 1,7% - from the third one. Among preterm children 32,4% were boys and 67,6% - girls. QL characteristics of preterm infants: at 3 months most affected subscales were "Ability to stay alone" ($2,5\pm 0,06$)(in control group were $3,6\pm 0,06$) and "Behavior and communication" ($3,0\pm 0,08$)(in control group were $4,2\pm 0,07$)($p<0.05$). At 6 months most affected subscales were "Ability to stay alone" ($3,0\pm 0,08$) and "Total Score" ($3,1\pm 0,06$). At 9 months most affected subscales were "Ability to stay alone" and "Neuropsychological development and physical health". At 12 months most affected subscale was "Ability to stay alone".

CONCLUSION. This study has demonstrated relationship between HRQOL and premature birth ($p<0.001$). The lowest QL score among preterm children were detected at 3 months. Improvement of QL score was observed in the next age groups.

KEYWORDS:

quality of life,
preterm children,
early aged children

AMR STEWARDSHIP AND INFECTION PREVENTION AND CONTROL IN HERATSI AND MURATSAN HOSPITALS OF YEREVAN STATE MEDICAL UNIVERSITY OF ARMENIA

INTRODUCTION. Antimicrobial resistance (AMR) is a threat to adequate treatment and prevention of infectious diseases for individual patients. Armenia has not established a formal antibiotic resistance (AMR) surveillance system program yet. An important limiting factor to conducting routine AMR surveillance is the underutilization of bacteriological diagnostics in routine clinical practice.

The 'Proof-of-principle AMR surveillance study' was set up, with the aim to stimulate blood culture taking from patients with suspected bloodstream infections (BSIs) by providing materials and start assessing the antibiotic susceptibility patterns in the main pathogens causing community-acquired and hospital-acquired BSIs. Thereby, the expected outcomes of the study are:

Establishment and support of a surveillance infrastructure as point of departure for a national sentinel laboratory-based surveillance system for AMR,

Demonstration of the value of clinical microbiological diagnostics in routine patient care by providing timely feedback of laboratory results to clinicians to guide antibiotic treatment of BSI,

Establishment of the good clinical practice for routine clinical work-up in hospitals and strengthening the AMR reference and surveillance capacity at the national reference laboratory.

METHOD USED. Clinicians are requested to send blood cultures for all cases which meet a standardized case definition of sepsis. Local diagnostic laboratories underwent capacity building on standardized detection of AMR according to EUCAST methodology. Confirmation of AMR laboratory results conducted by hospital laboratories is provided by NCDC reference laboratory, Data management is provided by NCDC. Data analysing is provided by epidemiologists and reported as part of surveillance program, to inform stewardship and IPC.

The 'Proof-of-principle AMR surveillance study' was started in Armenia as a pilot project in 29th of May 2017. The process of data collection started from 1st of June and is still in the process. The following hospitals are involved in the study: Heratsi (206 beds) and Muratsan (236 beds) Hospitals of YSMU. The study is coordinated by Ministry of Health and National Center for Disease Control (NCDC) of Armenia. The study team at NCDC consists of a project manager, a research coordinator, bacteriologists, epidemiologists and support personnel. The study team is supported by WHO/EURO AMR team and AMR surveillance experts from the National Institute for Public Health (RIVM) in the Netherlands and microbiology experts from the University Hospital of Infectious Disease in Zagreb in Croatia. The clinical hospitals participated for the CAESAR EQA assessment of external quality.

RESULTS AND DISCUSSION. 312 patients with suspected BSI took part in this surveillance. There are 4 positive (13.8%) out of 29 blood samples taken from adults and 4 positive (1,4%) out of 283 blood cultures taken from children. Among adults the main blood culture isolates are *Enterococcus faecalis* (6.9%), *E. Coli* (3.4%), *ESBL*(3.4%) and among children the main blood culture isolates are *St. aureus* (0.3%), *E. Coli* (0,3%), *CONS*(0.7%).

As a result of this study, baseline data on main pathogens causing BSIs and their antimicrobial susceptibility patterns will become available. Capacity for diagnostic bacteriologic testing at the local hospital laboratory and at the national reference laboratory level will be strengthened.

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SILENT TORMENT: HEALTH ISSUES OF FAMILIES OF CHILDREN WITH CEREBRAL PALSY. THE INITIAL RESULTS OF PRELIMINARY STUDY

INTRODUCTION. The negative influence of caregiving a child with Cerebral Palsy (CP) on multiple aspects of physical and mental health of family members (FM) is under the scope of research of involved professionals last decades. Taking care of everyday life and specific challenges of CP children may affect not only the mental (leading to anxiety, depression, and stress) but also the physical (e.g. different pain syndromes, musculoskeletal deformations, sleep deprivation, fatigue, etc.) health of FMs. The time-consuming period for appropriate care of child is also higher for FMs of CP child. To our knowledge little is done to investigate this issue for FMs of CP children in Armenia. The aim of this study is to provide a preliminary understanding about consequences of caregiving a child with CP on FMs physical health and the time demands for caregiving.

METHOD USED. One hundred twenty children with CP and their FM undergoing treatment course in «Ararat» Mothers and Child's health center have been recruited. CP severity level was defined by Gross Motor Function Classification System (GMFCS-E&R), Manual Ability Classification System (MACS), and Communication Function Classification System (CFCS). FMs underwent a neurological examination to find out the existence of generalized pain syndrome, primary headaches, and low back pain. The visual analogue pain scale (VAS) was used to determine the pain intensity.

RESULTS AND DISCUSSION. Complete data collection was done from 99 (male/female=1.75/1) CP children and their FMs. Data analysis provides significant evidence for positive correlation between child's GMFCS level and low back pain among FMs ($\alpha=0.05$). The pain intensity was distributed 57.6% against 40.4% for the pain level 1-5 and more than 5 respectively according to VAS scale. There were no significant association between GMFCS levels and primary headaches and overall general pain syndromes among FMs.

The current CP management strategy is based on delivering Family Centered Services (FCS). Having family as the important and indistinguishable part of CP management emphasizes again the importance of considering the FM caregivers as the part of interventions: as their own health is under a higher risk and there are permanent multicomponent interactions/interrelations between the health and well being of CP children and FM caregivers. This study preliminary results emphasizing the urge of conducting of larger studies to define the CP characteristics and the need of more detailed analysis of FM caregivers health risks with further development of programs and policy to control this important issue.

KEYWORDS:

Cerebral Palsy,
Caregiving,
Pain Syndromes,
Low Back Pain.

SMOKING CESSATION TRAINING FOR PRIMARY HEALTHCARE PHYSICIANS IN ARMENIA

INTRODUCTION. Armenia was the first former Soviet Union country to accede to the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC) in 2004. The WHO FCTC Article 14 states that healthcare providers should play a central role in promoting tobacco cessation and offering support to tobacco users who want to quit. Patients getting advice from physicians are 1.6 times more likely to quit, and trained physicians are twice as likely to offer assistance to patients. However, most smokers do not receive recommended smoking cessation counselling because of inadequate training and lack of knowledge. This study aimed to design, implement and evaluate the first smoking cessation training for primary healthcare physicians (PHP) in Armenia.

METHOD USED. We recruited 58 participants for a two-day training (intervention group) and 51 PHPs in the control group from the two biggest cities in Armenia. We utilized a quasi-experimental design to evaluate training effectiveness using a self-administered structured questionnaire at baseline and 4-months follow-up. The study questionnaire was adapted from validated instruments. We used non-parametric Wilcoxon test to compare the baseline and follow-up performances of 5 "A's" model: Ask, Advice, Assess, Assist and Arrange. The 5 "A's" score was calculated by awarding one point to each of the five "A's" when reported to be "Always" performed in practice.

RESULTS AND DISCUSSION. Overall, 105 PHPs (57-intervention, 48-control) participated in both baseline and follow-up surveys. At baseline the PHPs self-reported high performance in terms of the first "A" (Ask) and the difference was not significant in both groups at follow-up. At follow-up a higher proportion of the participants, in both the intervention and control groups, reported about always advising (Advice) smoking patients on the need to quit, but the difference was statistically significant only in the intervention group (91.23% vs. 100.0%, $p=0.025$). A significantly higher proportion of intervention group participants reported that they assess patients' willingness to quit (Assess) at follow-up as compared to the baseline (49.12% vs. 66.67%, $p=0.005$). Similarly, the study results revealed that more intervention group physicians in the follow-up were always proposing their help to patients in quitting (Assist) (45.61% vs. 85.96%, $p<0.001$). The follow-up results also highlighted that more physicians in the intervention group set up a follow-up appointment to review the patients' progress in quitting (Arrange) (21.05% vs. 50.88%, $p<0.001$). The mean 5 "A's" score increased significantly in the intervention (2.86 vs. 3.81, $p<0.001$) but not in the control group (2.67 vs. 2.77, $p=0.871$).

Two-day tobacco dependence treatment training of healthcare primary healthcare providers can greatly improve compliance with the recommended evidence based smoking cessation "A's" approach. Similar trainings should be incorporated into graduate and post-graduate medical curricula of all health professionals and be part of continuous professional development to ensure provision of evidence-based assistance on quitting to all patients at any medical contact.



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THE EFFECT OF NARINE'S METABOLITES ON METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS

INTRODUCTION. The fight against drug-resistant bacteria can not be organized using only antibiotics, so active research is needed to find new and effective alternative means. To that end, it was also suggested to use antagonistic properties of various microorganisms. In particular, the research has shown that using metabolites of 317/402 strain of lactobacilli (Narine) can suppress the growth and reproduction of Staphylococcus aureus, and most importantly, Staphylococcus aureus have not shown resistance over time to the substance investigated. Based on recent data, it was decided to investigate the effects of Narine's metabolites on methicillin-resistant Staphylococcus aureus.

METHOD USED. The research has been done with epidemiological, microbiological and statistical methods.

48 different strains of identified MRSA were sowed on a slim agar and stored in the thermostat at 37°C for 24-48 hours, after which 2 ml physiological solution was added to the tubes with slim agar, and the swabs containing particular strain of MRSA was obtained by shaking the test tube. Thereafter, 6 test tubes were taken for each strain of MRSA which were numbered from 1 to 6 respectively.

1 ml of 100%, 50%, 25%, 12.50% and 6.25% solutions of Narine's metabolites have been added into test tubes from 1 to 5 respectively, and 1 ml of physiological solution in test tube 6 and the last was a control. After performing the above mentioned actions, 0.1 ml of pre-prepared swab containing MRSA was added to the all test tubes respectively. After shaking the test tubes, sowing was made on the nutrient medium and stored at 37°C for 24 hours, after which the results were recorded.

RESULTS AND DISCUSSION. The complete absence of MRSA growth was registered in all samples of the sowings made in the 1-st and 2-nd test tubes. In case of sowings made in the test tubes from 3 to 5 the MRSA growth was observed from unique colonies to dense growth depending on Narine's metabolites density. In the case of the 6-th test tube, which was a control, the widespread growth was observed in all samples.

Analyzing the research data, it becomes clear that metabolites of 317/402 strain of lactobacilli have antibacterial properties which are maintained even after multiple dilution. It most importantly, that Narine's antibacterial properties affect even the drug-resistant bacteria, particularly MRSA, while the last have demonstrated distinct resistance over multiple antibiotics. That makes it possible to apply Narine's metabolites when organizing measures against MRSA infection.

KEYWORDS:

MRSA,
Lactobacillus,
antagonistic property,
drug-resistance

COMPARATIVE ANALYSIS OF THE METHODS FOR ESTIMATION OF PHYTOTOXIC ACTIVITY OF THE ENVIRONMENT IN ARARAT MARZ

INTRODUCTION. One of the central issues in public health is the assessment of the environmental status due to its inevitable negative impact on humans despite the healthiest personal lifestyle. The soil is an important environmental component as it plays central role in circulation and accumulation of different pollutants mainly due to the use of pesticides and fertilizers. Certain pesticides have mutagenic characteristics and their circulating residues result in number of genetic damages that gradually accumulate becoming the reason for increased point mutations, chromosomal aberrations that lead to development of tumors, congenital developmental anomalies, etc. The synthetic surfactants as an essential component of agrochemical preparations can also adversely affect the human organism.

The assessment of the mutagenic background is urgent task for preventing environmental contamination with genetically active substances while the intensive use of agricultural chemicals is continuing. The complex research was carried out in the most active agricultural regions based on application of various test objects.

METHOD USED. In the Ararat marz the study focused on determination of contamination levels of surface water, soil and sludge by certain organochlorine pesticides (OChP) - γ -HCH, DDT (DDE, DDD) and surfactants (2017). A comprehensive assessment of phytotoxicity of the environmental media was carried out based on the determined levels of pollutants and a number of test objects - sterility of the pollen of wild plants (%), seed germination of *Taraxacum officinale* Wigg. (% reduction rate), the length of the main root of *Avena sativa* seeds (cm) and the germinating energy (%). Dynamic studies during all seasons (spring, summer, fall) were performed using sanitary-chemical, genetic-hygienic, analytical methods. The standard statistics and comparative analysis of the data were carried out; the significance of results was estimated at a level of $p < 0.05$.

RESULTS AND DISCUSSION. A comparative assessment of detected concentrations of pollutants in the environmental media showed significantly higher levels of surfactants and γ -HCH in soil and sludge samples mainly in summer (16.4 mg/kg and 7.26×10^{-3} mg/kg, correspondingly). The determined levels of OChP did not exceed the established hygienic norms. The average concentrations of surfactants in soil and sludge samples were significantly higher (20-30 times) of accepted standards (0.1 mg/kg).

The data of the phytotoxic activity studies based on various test objects (*Taraxacum officinale* Wigg. and *Avena sativa*) grown in extracts of soil samples completely correlated with monitoring data. In particular, the reduced degree of germinating capacity of *Taraxacum officinale* Wigg., as well as the length of the main root of *Avena sativa* seeds recorded in the summer-fall seasons corresponded to the higher concentrations of pollutants determined in the environmental media.

Summarizing the results obtained in the phytotoxic activity studies of the environment in the Ararat marz, it can be concluded that the data of various test objects completely correlates with each other, reflecting the dynamics of sanitary-chemical research. These methods are appropriate for comprehensive assessment of the mutagenic background of the agricultural regions to control the contamination with genetically active substances.



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THE ACTION OF CHRONIC ACOUSTIC STRESS ON THE OPEN FIELD TEST

INTRODUCTION. In the modern world the surrounding us environment is characterized by an increased level of noise, which leads to the development of several pathologies, particularly cardiovascular, neuroses, cognitive disorders, particularly affect learning, memory, the problem solving. The goal of this study is to estimate behavioral activity, recording Total distance travelled, Average speed, Number of line crossings, Total freezing episodes, Total time freezing, Average freezing score, Number of entries to the center zone, Time in the Center zone, Distance travelled in the Center zone, Corrected integrated path length for the Center zone, Time in the Periphery zone, Number of entries to the Periphery zone, Distance travelled in the Periphery zone, Time freezing in the Periphery zone, Corrected integrated path length for the Periphery zone. For this purpose was chosen method of Open field test, which is a successful device for evaluating behavioral damage in animal under the stress.

METHOD USED. Investigations were carried out on the white male rats, which were divided into 4 groups: rats of the 1st group serve as a control, rats of the 2nd, 3rd and 4th groups underwent 91 dB(A) noise influence; the duration of noise influence was 7, 30 and 60 days, each day 8hr noise exposition; animals of the 3rd and 4th group were injected intraperitoneally Mesedin (10mg/kg) and Beditin (2mg/kg) respectively.

Open field is represented by the wooden square-shaped plate, which divided into the “peripheral zone” and the “central zone”. The animal was placed in the center and the behavioral items are recorded for a period ranging from 5 min. Each trial was recorded for latter analysis, using a video camcorder positioned above the apparatus.

RESULTS AND DISCUSSION. In the given research we discussed the following 3 parameters: Total distance travelled, Average speed, Total freezing episodes. Total distance travelled, Average speed, Total freezing episodes of white rats reveal significant decrease under the chronic noise action, while permanent administration of α 2-adrenoblockers partly protect from drastic changes in activity of experimental animals. Efficiency of regulatory effects depends on the α 2-adrenoblocker, used in a case.

CONCLUSION. Our results indicate that chronic acoustic stress generally lowered locomotor behavioral activity and increased anxiety, intensity of which depend on the duration of noise action. Administration of α 2-adrenoblockers to the animals reveals a regulatory effect under the chronic acoustic stress conditions, the efficiency of which depends both on the duration of noise action and the studied examples.

KEYWORDS:

Open field,
noise,
 α 2--adrenoblockers,
behavioral activity,
stress

PRICE REGULATION AS A MECHANISM OF REDUCTION OF CATASTROPHIC HEALTH EXPENDITURE RISK

INTRODUCTION. With the disintegration of the USSR, the healthcare system which was providing to the population accessible and mainly free of charge medical care was also collapsed. One of the peculiarities of the healthcare system in transition is formal and informal direct out-of-pocket payments. Such unexpected payments are leading cause of the impoverishment of the population. These payments in the specialized literature are known as catastrophic. The payments are considered catastrophic if the household spent on the health more than 10% of its annual income and not being reimbursed.

METHOD USED. A survey among representative 2392 households was conducted during 2011-2012 based on specially developed questionnaire. Several statistical analysis methods were used to process the collected data. The survey results were described by high statistically significance level: 95% confidence interval and $p \leq 0.01$.

RESULTS AND DISCUSSION. The results of study clearly show that 46.78% of the households have to cover the health bills (average 85798,53 ± 7689,53 AMD) by so-called direct, or out of pocket payments, which are the main prerequisite of financial disaster. Moreover, 8,41-11,57% of the households of Yerevan obliged to pay for medical bills borrow funds in debt (including bank credit), which naturally affect the welfare and financial well-being of the households. As a result, 52.80% of these households were forced to reduce spending in the short term, 42.29% for a long period, and 3.27% have dramatically changed their lifestyle. It was revealed that there is discrepancy between the prices of medical services and household capacity to pay.

On the background of the above mentioned negative developments, the study revealed that 1,20-2,60% of the households of the capital city face financial disaster during the year, at that the catastrophic health expenditures can occur among the relatively affluent, as well as among poor families. The main risk factors which can lead to the financial catastrophe are: absence of the permanent employment among household heads, preference of the hospital facilities, presence of the several ill household members, presence of the household members with disease exacerbations, surgical medical care, presentation for payment multiple bills instead one.

Thus, the results indicate, in general, the low accessibility of medical services in the city of Yerevan, discrepancy between the prices of medical services and HCP, existence of a problem of catastrophic health expenditures that could arise from both a surgical and therapeutic care, which can be assigned both at the inpatient and outpatient facilities.

The continuing decline of HCP shows that the regulation of price formation process by implementing effective model is of an urgent necessity.

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price,
regulation,
medical service



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THE EPIDEMIOLOGICAL PECULIARITIES OF ROTAVIRUS INFECTION AND IMMUNOPROFILAXIS IN ARMENIA

INTRODUCTION. Rotaviruses (RV) are the most common cause of severe gastroenteritis in infants and young children up to 5 years of age worldwide. According to estimation of WHO before initiation of the rotavirus immunization program, each year rotavirus causes 592000 deaths and 2 million hospitalizations in children. In 2009 WHO suggested to include rotavirus vaccine in immunization program of all countries. Two oral rotavirus vaccines are applied internationally: the monovalent Rotarix and the pentavalent RotaTeq. In Armenia Rotarix has been used since 2012 in a 2 doses at 1,5 and 3 months of age. The objective of this research is to assess the epidemiological characteristics of rotavirus infection and immunoprophylaxis in Armenia.

METHOD USED. The subjects of the study were official statistical records of NCDPC of Armenia. There were applied epidemiological and statistical methods: intensive and extensive indices, indicators of coverage with vaccination, correlation analysis.

RESULTS AND DISCUSSION. It was studied dynamics of the morbidity of RV infection among children at the age of 0-14 years in Armenia during 2011-2016. The intensive index was 55 in 2011, 84 in 2012, 58 in 2013, 47 in 2014, 48 in 2015 and 29 in 2016 (per 100000 of population). It was marked decrease of morbidity in children at the age of 0-14 years in Armenia after 2012. The analysis of morbidity of age groups of children showed that most of cases of RV infection were common in children at the age group of 0-2 years, which was 70% out of total cases. After 2012 decrease of cases was mainly expressed in children at the age of 0-2 years, it was 78% in 2011 and 45% in 2016 out of total cases. It was marked increase of cases in children of 3-6 and 7-14 age groups. They were 19% and 42% at the age group of 3-6 years in 2011 and 2016, 1,6% and 11% at the age group of 7-14 years in 2011 and 2016. Coverage with 2 doses of RV vaccine of children up to 1 year of age was 90% in 2013, 91% in 2014, 93% in 2015 and 94% in 2016 (target indicator of coverage $\geq 95\%$ in nationally and in districts). Coverage was lower than 90% in some subnational administrative territories. It was determined link between coverage with vaccination to RV infection and morbidity of RV infection by correlation analysis method. The coefficient of correlation was $r=-0,86$, $m=0,15$ which indicates the strong opposite link.

Conducted research shows that the general morbidity of RV infection has been reduced in children at the age of 0-14 years in Armenia after introduction of RV vaccine. However morbidity has been increased in children at the age groups of 3-6 and 7-14 years. In order to enable to achieve the most possible decrease of morbidity of RV infection in all population providing $\geq 95\%$ coverage with vaccination in all districts is needed, as correlation analysis shows the existence of strong opposite link between coverage with vaccination to RV infection and morbidity of RV infection.

KEYWORDS:

rotavirus,
morbidity,
vaccination

MODERN ASPECTS OF DIAGNOSTICS OF INTESTINAL PROTOZOSES

INTRODUCTION. In the general structure of infectious morbidity, parasitic diseases take one of the leading positions. In recent years, the clinical and epidemiological situation in the world for parasite infestation is characterized by an increase in the number of clinically significant species of parasites, including intestinal protozoa (1). *Cryptosporidium* spp. is an important intestinal protozoan causing diarrhea in humans, livestock, and wild animals(2). *Cryptosporidium* infection remains a major public health issue, but its epidemiology in humans is still unclear. Over the past decades, numerous outbreaks and many isolated cases of cryptosporidiosis have been reported in various regions of the world (3).

The aim of the study was to examine patients with diseases of the gastrointestinal tract to detect *C.hominis*, to study the effectiveness of an alternative method for diagnosing these protozooses.

METHOD USED. Persons (14 years old and older - 46 people) with prolonged diarrhea, as well as children of younger age (1-14 years - 65 people) with gastroenteritis of unspecified etiology were examined. Material for research were samples of feces.

In the period from 2010 to 2016, a series of studies was conducted on the basis of the laboratory-diagnostic center "Gisane" to study the frequency of detection of *Cryptosporidium hominis* in various groups of patients, as well as comparison of the effectiveness of traditional methods of diagnosis of these invasions and immunological methods. RIDA®Quick *Cryptosporidium* / *Giardia* Combi is a one-step test based on the immunochromatographic principle.

RESULTS AND DISCUSSION. Our studies were aimed, in addition to determining the frequency of occurrence of *C.hominis*, as well as the evaluation of the diagnostic method which we used for the first time. Studies have shown that the total incidence of *C.hominis* was 33.8%. Most often *C.hominis* was found in young children with gastroenteritis (26%). The analysis of the obtained data showed that cryptosporidia infestation in rare cases is present in its pure form and, as a rule, is combined with giardiasis. *L.intestinalis* was detected by us among persons 14 years and older in 10.4% of cases. This confirms the data of other authors who have repeatedly demonstrated that cryptosporidiosis is not an isolated disease, but proceeds as a mixed pathology, since the severity of the disease is often due to concomitant diseases (immunodeficiency, secondary infection, chronic diseases of the gastrointestinal tract).

With clinical symptoms of diseases of the gastrointestinal tract, it is useful to identify possible pathogens of infection for the correct diagnosis and the appointment of adequate treatment. Etiological laboratory diagnostics includes visual detection of cryptosporidia and lamblia using microscopy, detection of antigens and DNA of these pathogens, detection of specific antibodies to microorganism antigens.

CONCLUSION. An equivalent diagnostic method is an immunochromatographic test for the detection of *C.hominis* and *G.lamblia* antigens in feces samples. The method demonstrates the same sensitivity as microscopy, it is easy to perform, does not take much time, and does not require intact organisms to be present in feces samples.

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disability,
children,
trends.

THE MAJOR TRENDS OF CHILDHOOD DISABILITY IN RA

INTRODUCTION. Due to economic and social hardships of the 1990s in Armenia all indicators of children health status had stable negative dynamics. Effective measures of RA Ministry of Health resulted in notable decline of infant mortality, particularly mortality from acute respiratory diseases, controlled infectious diseases. Despite of the indicated achievements, currently there are still a number of important issues in the Republic associated with the health status of children. Among these problems the most actual one is the problem of high level of childhood disability.

The present paper is a segment of research on the problem of childhood disability in RA dedicated to the assessment of recent trends of the mentioned phenomenon.

METHOD USED. As a research data RA Ministry of Labor and Social Affairs Medical and Social Expertise Agency data about disabled children aged 0 to 18 registered in the Republic were used.

RESULTS AND DISCUSSION. According to the research results the prevalence of childhood disability in children aged 0 to 18 has continued to increase, growing by 39.2% from 88.6 per 10,000 in 2003 to 123.3 in 2014. The increase in reported cases of disabilities tends to cover almost all diseases. Growth rates were the lowest in children aged 0-4 (+45.8%) and highest in 10-14 and 15-18 years old children (+60.1% and +59.9% correspondingly).

The prevalence of disability is always higher in boys than in girls and the older are children, the greater is the difference. In 2003 disability rate in children aged 0-4 was higher in boys in comparison with girls by 91.2%, in age group 5-9 - by, 87.7%, in age group 10-14-by 114.0% and in 15-17 years old-by 132.0%. In 2014 the difference between boys and girls disability prevalence has decreased in all age strata, except children aged 5-9. The analogical percentages were 73.2%, 90.6%, 90.7% and 94.4%. The cause of the mentioned changes was that the growth rates of disability prevalence were higher in girls than in boys in all age strata, except 5-9 years old children.

At the same time incidence of disability has decreased by 27.6% from 18.1 per 10,000 in 2003 to 13.1 in 2014. This reduction was the highest in children aged 10-14 (-48.4% in boys and -44.6% in girls) and 15-18 years (-64.3% in boys and -55.3% in girls). In early childhood disability incidence rates were on the rise (+11.9% in boys and +26.5% in girls).

CONCLUSION. The rising trend in the prevalence of disability among children in all age groups along with the reduction of incidence rate indicates increase of the number of handicapped children experiencing long-term disability. The main cause of the mentioned process is a low quality of medical rehabilitation services provided to disabled children.

Although additional research is necessary, the obtained results indicate the necessity of improvement of treatment and rehabilitation strategies in order to meet better the needs of handicapped children.

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ANALYSIS OF THE STATUS AND MUTAGENIC ACTIVITY OF THE ENVIRONMENTAL IN ARARAT AND LORI MARZES

INTRODUCTION. One of the major challenges and threats that the public health is currently facing is a result of growing chemical pressure on the environment that has a significant impact on chronic non-infection morbidity. Special attention is paid to persistent pollutants, including organochlorine pesticides (OChP), since these compounds are associated with different functions' abnormalities. Hence, monitoring of the environmental status and mutagenic background to assess possible changes in environmental media is a key task for the development and implementation of preventive measures for health protection.

METHOD USED. In the Ararat and Lori marzes the contamination levels of surface water, snow, soil and sludge with γ -HCH, DDT (DDE, DDD) and their content in agricultural products of plant and animal origin were studied (2016-2017). A comprehensive assessment of the mutagenic background based on the determined levels of OChP was also performed proceeding from sterility of pollen of wild plants, seed germination of *Taraxacum officinale* Wigg., meristem root cells of *Allium cepa* Z., Ames test indices. Studies capturing the seasonal dynamics (spring, summer, and fall) were carried out with the use of sanitary-hygienic, sanitary-chemical, genetic-hygienic, and analytical methods. The standard statistics and comparative analysis of the data were carried out; the significance of results was estimated at a level of $p < 0.05$.

RESULTS AND DISCUSSION. A comparative assessment of the environmental status showed significantly higher levels of γ -HCH in surface water samples in Ararat marz than in Lori (0.14×10^{-3} mg/L, 0.002×10^{-3} mg/L). In snow, soil and sludge the differences in the OChP average concentrations were not statistically significant. In Ararat marz, unlike in Lori, all pollutants were concurrently detected with relative increase in both concentrations and detection rates during the summer. In soil and sludge samples the concentrations exceeded (50-100 or more) the levels found in surface water, once again confirming a "depot" role for POPs. The content of OChP in plant and animal products correlated with the monitoring data - in grains of Ararat marz the concentrations were higher (γ -HCH - 2.08 and 1.51×10^{-3} mg/kg, DDE - 0.095 and 0.086×10^{-3} mg/kg, respectively), in eggs the differences reached statistical significance: γ -HCH - 2.63 and 1.08×10^{-3} mg/kg; DDE - 5.11 and 0.86×10^{-3} mg/kg; DDT - 1.16 and 0.26×10^{-3} mg/kg, respectively ($p < 0.001$). The determined levels of OChP did not exceed the established hygienic standards.

The results of mutagenic background studies completely correlated with the monitoring data. The sterility levels of the pollen of wild plants, phytotoxic and genotoxic activity of soil and sludge samples of Ararat marz were rather higher than in the Lori, mainly during the summer season, without reaching statistical significance.

Based on comprehensive assessment results of the environmental status and mutagenic background it can be concluded that the recorded changes in the genetic-hygienic studies' indices reflect the dynamics of sanitary-hygienic, sanitary-chemical research and there are no significant changes in the mutagenic background of the regions included in this study.



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HOSPITAL MICROECOSYSTEMS IN DIFFERENT-PROFILE HEALTHCARE FACILITIES

INTRODUCTION. The role of microbial contamination of the outer environment in the hospital is a subject of many debates today. Western authors' findings indicate that the isolation of microbes from the outer environment of the hospital has nothing to do with an inpatient infection and such research should only be undertaken with epidemiological indications to clarify the transmission factors in a specific situation. From the point of view of prevention and control of infection in our region for many years, a great deal of attention has been paid to microflora circulating in the outer environment of the hospital and measures have been taken to combat it. Nonetheless, there are also few works in foreign literature that directly affirm the role of the elements of the external environment in the transfer of hospital acquired infections. Without discussing these two contradictory approaches, based on the sanitary norms adopted in our country, the analysis of the results of our research is intended to clarify circulating microflora of the two types of different profile healthcare facilities - the pediatric multi-profile hospital and maternity home.

METHOD USED. The researches were carried out at the Medical center Arabkir, Research center of Maternal and child health protection in Yerevan and in the Department of Epidemiology of YSMU in 2009-2014. In general 13554 microbiological tests have been conducted.

Thus, 3941 swabs were taken from different departments of "Arabkir" MC. In the taken samples the conditionally-pathogenic bacteria were found in 212 cases, which was 5.4%. Speaking about the conditionally-pathogenic microflora species, it is clear that the predominant in this micro-ecology is gram-negative microflora, a total of 76.9% and only 23.1% of the *S.aureus*.

RESULTS AND DISCUSSION. In the mentioned period 9613 swabs were taken from the environmental objects of maternity home. As a result of the study, it was revealed that conditionally-pathogenic bacteria were separated in 234 cases - 2.4%. At the same time, it should be noted that in the 234 positive specimens the *Staphylococcus aureus* was detected in 133 cases (56.8%), and the remaining 101 samples were contaminated by the gram-negative microorganisms (43.2%), i.e. *S.aureus* frequency has exceeded 1.3 times more intensive than gram-negative microflora.

CONCLUSION. Thus, comparing the frequency of conditionally-pathogenic microflora in the two facilities, it should be noted that the circulation of these microbes in pediatric hospital is 2.3 times more frequent than in the maternity home, which is due to overloading of the patients, the patient and medical staff more close contact etc. There are also different types of bacteria in two clinics, with the more intensive circulation of gram-negative microflora in pediatric hospital (1.8 times) and, in contrast, the most common in the maternity hospital is the *Staphylococcus aureus* circulation, which is 2.5 times more frequent in this facility. This is a basis for taking anti-epidemic measures to reduce their turnover.

KEYWORDS:

hospital microflora,
pediatric hospital,
maternity home



AUTORS INDEX

- ABRAHAMYAN A. -133
 ABRAHAMYAN H.T. - 10
 ABRAHAMYAN S.S. - 42
 ABROYAN L.O. - 9, 29
 ADAMYAN K.G. - 54
 ADAMYAN S.H. - 10
 AFRIKYAN Sh.G. - 30
 AGABABOVA A. - 11
 AGHAJANOV M.I. - 25, 46
 AGHAJANOVA E.M. - 57
 AGHAJANYAN H. - 108
 AGHAYAN L.D. - 81
 AKOBYAN A. - 11
 ALCHUJYAN N.Kh. - 57
 ALEKSANYAN L.V. - 76
 ALEQSANIYAN N.A. - 154
 ALEXANYAN L.T. - 104
 AMIRKHANYAN A.A. - 12
 AMROYAN H.R. - 121
 ANANYAN A.G. - 48, 50
 ANASTASYAN R.A. - 145, 146, 159
 ANTONYAN I.V. - 16
 ARAKELYAN A.N. - 67
 ARAKELYAN E.H. - 160
 ARISTAKESYAN Z.A. - 146, 148,
 ASATRYAN A.M. - 155, 161
 ASATRYAN N.L. - 15
 ASATRYAN O.A. - 100
 ASATRYAN O.M. - 97
 ASATRYAN T.A. - 61
 ASAYAN A.G. - 158
 ASLYANYAN A.H. - 124
 ASOYAN A.V. - 53, 59
 AVAGYAN M.R. - 145, 151,
 AVAGYAN S.A. - 13, 14, 33, 48,
 49, 50, 107,
 AVAGYAN T.G. - 69, 70, 71
 AVETISYAN K.S. - 125
 AVETISYAN L.A. - 100
 AVETISYAN S.A. - 22, 36
 AVETISYAN Z.A. - 31
 AYRAPETYAN M.E. - 34
 AYVAZYAN G.S. - 100
 AZATYAN N.G. - 112
 AZATYAN R.E. - 113, 117
 AZATYAN V.Yu. - 73
 AZIZYAN N.G. - 52
 AZNAURYAN A.V. - 73
 AZNAURYAN V.A. - 89
 BABALYAN V.N. - 127
 BABAYAN B.G. - 15
 BABAYAN L.A. - 115
 BADALYAN S.H. - 62
 BAGDASARYAN B.V. - 9
 BAGHDASARYAN A.S. - 66
 BAGHDASARYAN N.G. - 100
 BAGHDASARYAN V. - 105
 BAGHRAMYAN A.E. - 146, 147, 157
 BAKUNTS H.H. - 121
 BALASANYAN M.G. - 30
 BALAYAN G.Z. - 63
 BALAYAN H.Z. - 64, 69, 71
 BAREGHAMYAN H.H. - 101,
 102, 107
 BARKHUDARYAN N.H. - 27
 BAROYAN K.M. - 48
 BARSEGHYAN H.A. - 63, 64, 65,
 66, 69, 70, 71
 BAZINYAN L.E. - 82
 BEGLARYAN G.A. - 13, 101,
 102, 107
 BEGLARYAN I.G. - 107
 BEGLARYAN M.H. - 40
 BERBERYAN S. A. - 152
 BRSIKYAN N.A. - 74
 CHAVUSHYAN V.A. - 46
 CHAZARYAN D.M. - 36
 CHICHOYAN N.B. - 20, 28, 35, 43
 CHOBANYAN K.M. - 9
 CHOPIKYAN A.S. - 126, 128
 DALLAKYAN K.H. - 71
 DANIELYAN A. - 133
 DANIELYAN I.E. - 127
 DANIELYAN L.M. - 128
 DANIELYAN M.H. - 16
 DAVTYAN M.P. - 152
 DAVTYAN T.K. - 36, 42, 46
 DAVTYAN Zh.Y. - 129
 DUNAMALYAN R.A. - 126, 128, 130
 FANARJYAN R.V. - 13, 62,
 FERESHETYAN K.S. - 17, 34, 46
 FROLOV G.V. - 107
 GALSTYAN A.A. - 18
 GALSTYAN A.M. - 43
 GALSTYAN H.M. - 28, 35
 GALSTYAN L.R. - 96
 GALSTYAN R.K. - 147
 GALSTYAN S.A. - 149, 150
 GASPARYAN Kh.V. - 114
 GASPARYAN S.S. - 149, 150
 GEVORGYAN N.V. - 100
 GEVORGYAN T.R. - 83
 GEVORGYAN V.S. - 157
 GEVORHYAN G.A. - 74
 GHANDILYAN E.A. - 159
 GHARIBJANYAN H.A. - 87
 GHAZARYAN A.V. - 49
 GHAZARYAN G.H. - 115
 GHAZARYAN H.A. - 108
 GHAZARYAN R.K. - 18
 GHAZARYAN V.J. - 13
 GHEVONDYAN T.H. - 19
 GHUKASYAN N. H. - 20
 GOMTSYAN G.A. - 63, 64, 66, 71
 GRIGORYAN A.A. - 140, 144
 GRIGORYAN A.D. - 116
 GRIGORYAN A.M. - 15, 21, 100
 GRIGORYAN A.S. - 22, 34, 45, 136
 GRIGORYAN H. - 103
 GRIGORYAN L.N. - 63, 65
 GRIGORYAN M.A. - 151
 GRIGORYAN M.L. - 41
 GRIGORYAN M.M. - 149, 150
 GRIGORYAN M.Y. - 100
 GRIGORYAN S.V. - 54, 133
 GULAZYAN N.M. - 53
 GULOYAN A.A. - 135, 141
 GYULAMIRYAN K.H. - 23
 GYULAZYAN N.M. - 55, 58, 59
 GYURJYAN K.T. - 131
 HAKOBYAN A. - 24
 HAKOBYAN A.E. - 117, 119,
 HAKOBYAN A.G. - 74
 HAKOBYAN A.H. - 156
 HAKOBYAN A.V. - 118
 HAKOBYAN G.S. - 36
 HAKOBYAN G.V. - 75
 HAKOBYAN H.H. - 132
 HAMBARDZUMYAN A.Dz. - 134, 142,
 HAMBARDZUMYAN A.G. - 91
 HAMBARDZUMYAN S.G. - 74, 79
 HAMBARDZUMYAN A. - 21
 HAMBARTSOUMIAN E. - 103,
 109, 110
 HARUTUNYAN K.R. - 10
 HARUTYUNYAN A. - 133
 HARUTYUNYAN A.A. - 46, 79
 HARUTYUNYAN E.B. - 155, 161
 HARUTYUNYAN E.M. - 146
 HARUTYUNYAN H.S. - 25
 HARUTYUNYAN L.A. - 53
 HARUTYUNYAN S. - 105
 HARUTYUNYAN S.A. - 104
 HARUTYUNYAN T.A. - 145, 146,
 147, 148, 151, 159
 HAYRAPETYAN A.A. - 46, 141
 HAYRAPETYAN A.K. - 137, 140
 HAYRAPETYAN H. - 105
 HAYRAPETYAN L.M. - 45, 149,
 150, 159
 HAYRUMYAN V. - 133
 HAZARAPETYAN L.G. - 54
 HOVEYAN A.G. - 26, 32
 HOVEYAN G.A. - 26, 32
 HOVHANNISYAN S.A. - 94
 HOVHANNISYAN A.A. - 26, 32
 HOVHANNISYAN A.H. - 55
 HOVHANNISYAN G.A. - 27
 HOVHANNISYAN G.O. - 67
 HOVHANNISYAN H.S. - 138
 HOVHANNISYAN L.E. - 145, 146,
 147, 148, 151, 152,
 HOVHANNISYAN M.R. - 57
 HOVHANNISYAN S.G. - 129
 HOVHANNISYAN V.G. - 28
 HOVSEPYAN H.H. - 153
 HUNANYAN L.S. - 136
 HUNANYAN O.V. - 27

- KAGHRAMANYAN A.M. - 149, 150
 KALIKYAN Z.G. - 56
 KARAGULLEIAN O.R. - 155, 161,
 KARALYAN N.YU. - 29
 KARAMYAN S.T. - 30
 KARAPETYAN H.D. - 134
 KARAPETYAN K.V. - 31
 KASHIRSKAYA N. - 105
 KAZARYAN I.A. - 12, 39, 44
 KAZARYAN N.S. - 66
 KEHYAN V.S. - 156
 KEROPYAN V.V. - 106
 KEVORKIAN G.A. - 26, 32
 KHACHATRYAN A.S. - 71
 KHACHATRYAN B.G. - 135, 141,
 KHACHATRYAN L.A. - 161
 KHACHATRYAN L.M. - 154
 KHACHATRYAN L.R. - 118
 KHACHATRYAN V.P. - 16
 KHACHATRYAN V.V. - 159
 KHACHATRYAN M.S. - 155, 161
 KHAMPERYAN A.K. - 146
 KHAMPERYAN A.Kh. - 156, 159
 KHONDKARYAN R.H. - 70
 KHUDAVERDYAN D.N. - 10
 KOCHARYAN G.R. - 78
 KOCHARYAN K.M. - 26, 32
 KOCHARYAN N.V. - 42
 KOZLOV K. K. - 66

 LEVONYAN A.H. - 68

 MAKLETSOVA M.G. - 33
 MALKHASYAN I.E. - 67, 77
 MALKHASYAN S.V. - 63, 64, 69, 70
 MALKHASYAN V.N. - 66
 MANUCHARYAN G.K. - 77
 MANUKYAN A.L. - 136
 MANUKYAN E.M. - 66, 69, 70, 71
 MANVELYAN H.M. - 118, 132
 MANVELYAN L.R. - 41
 MARANDYAN M.A. - 155, 157, 161
 MARDIROSSIAN A.S. - 144
 MARDIYAN M.A. - 126, 128, 130,
 MARGARYAN A.V. - 41
 MARGARYAN T.S. - 13, 46
 MARTIROSYAN M.A. - 158
 MATINYAN S.V. - 159
 MAZMANYAN P.A. - 106
 MELIK-NUBARYAN D.G. - 137
 MELIKSETYAN V.F. - 97
 MELKONYAN A.M. - 57
 MELKONYAN M.M. - 21, 26, 32, 136
 MELKONYAN N.S. - 138
 MELKUMYAN K.G. - 161,
 MESROPYAN H.B. - 91
 MEYMARYAN M.A. - 139
 MIKAELYAN A.R. - 15, 21
 MINASYAN A.M. - 89, 91
 MINASYAN A.V. - 10
 MINASYAN E.A. - 159
 MIRAKYAN G.A. - 95
 MIRUMYAN M.L. - 34
 MKHITARYAN D.S. - 63
 MKHOYAN A.A. - 58
 MKRTCHYAN A.A. - 59
 MKRTCHYAN G.L. - 50
 MKRTCHYAN S.A. - 90
 MKRTCHYAN S.H. - 124
 MKRTCHYAN V.S. - 136, 149, 150
 MKRTUMYAN V.R. - 45
 MNATSAKANYAN N.R. - 104
 MOGHROVYAN A.V. - 35
 MORSIKYAN I.K. - 92
 MURADYAN A.A. - 68
 MURADYAN N.S. - 160
 MURADYAN S.A. - 135, 141
 MURUGAN K. - 149, 150

 NAHAPETYAN N.A. - 101, 107
 NAHAPETYAN N.R. - 91, 97
 NALBANDYAN V.M. - 89
 NAVASARDYAN G.A. - 22, 45
 NAVRATILOVA. Z. - 24
 NAZANYAN A.Kh. - 92
 NAZARYAN M.Kh. - 93
 NAZARYAN O.H. - 16
 NERSISYAN N.R. - 119
 NIKOGHOSYAN A.K. - 154

 OGANOV T.A. - 68
 OHANYAN H.M. - 93
 ORDUYAN S.L. - 69, 70
 OSIPIYAN M.A. - 34
 PALANDUSYAN A.H. - 158

 PAPIKYAN A.A. - 108
 PETREK M. - 24
 PETROSYAN D.I. - 66, 70
 PETROSYAN G.V. - 156
 PETROSYAN L.J. - 36
 PETROSYAN M.K. - 101, 107
 PETROSYAN V. - 133
 PKHRIKYAN S.Zh. - 94
 PKHRIKYAN T.M. - 95
 POGHOSYAN A.YU. - 76, 77, 96
 POGHOSYAN G.A. - 38
 POGHOSYAN K.P. - 104
 POGHOSYAN K.S. - 131
 POGHOSYAN M.A. - 45
 POGHOSYAN M.V. - 31
 POGOSYAN S.B. - 135
 POLESHCHUK B.B. - 33
 PSTIKYAN L.A. - 37

 QOCHARYAN K.S. - 142
 QRISTOSDURYAN A. - 105

 RAHNE T. - 98
 RUBENYAN A. - 137

 SAFARYAN M.D. - 52
 SAHAKYAN A.S. - 37
 SAHAKYAN G.V. - 38
 SAHAKYAN I.K. - 42
 SAHAKYAN K.T. - 50
 SAHAKYAN L.A. - 18
 SAHAKYAN S. - 119
 SAHAKYAN S.A. - 116
 SAHAKYAN S.G. - 68
 SAKANYAN G.H. - 140
 SARGSYAN A.S. - 15
 SARGSYAN A.V. - 84
 SARGSYAN G.V. - 91, 97
 SARGSYAN I.S. - 85
 SARGSYAN S.A. - 98
 SARKISSIAN A.A. - 108
 SARKISSIAN J.S. - 16, 31
 SARUKHANYAN F.P. - 27
 SEDRAKYAN A.G. - 65
 SEMERJYAN A.B. - 9
 SEVIKYAN A.L. - 12, 39
 SEYRANYAN A.A. - 75
 SHAGHOYAN Sh.A. - 154
 SHAHINYAN H.A. - 86
 SHAHPARONYAN R.G. - 77
 SHAHRAMANYAN V.A. - 120
 SHAHSUVARYAN G. - 105
 SHAHSUVARYAN G.S. - 78
 SHAKARYAN A.A. - 82, 83, 84,
 85, 87,
 SHMAVONYAN M.V. - 59,
 SHUQURYAN A.K. - 90
 SIMONYAN K. - 105
 SIMONYAN K.H. - 130
 SISAKYAN H.S. - 13
 SOGHOMONYAN A.N. - 38
 STEPANYAN H.V. - 155, 157, 161
 SULASHVILI N.V. - 40

 TADEVOSYAN G.S. - 154, 158
 TADEVOSYAN N.S. - 135, 141
 TADEVOSYAN S.A. - 146, 148
 TATINTSYAN V.G. - 79
 TAVADYAN Z.D. - 121
 TER-MARKOSYAN A.S. - 10
 TER-STEPANYAN M.M. - 134, 142,
 TER-ZAKARYAN S.O. - 135
 TERZYAN D.O. - 41
 TOROSYAN M.T. - 158
 TOVMASYAN A.G. - 18
 TSATURYAN A.A. - 68
 TSHZMACHYAN R. - 109
 TUMANYAN A. - 110
 TUMASYAN N.V. - 42

 ULIKHANYAN G.R. - 43
 ULIKHANYAN Gh.I. - 43

 VANYAN N.H. - 74
 VARDANYAN G.S. - 25
 VARDANYAN L.N. - 44
 VARDAZARYAN M.S. - 67
 VARDERESYAN S.G. - 45
 VARZHAPETYAN A.M. - 63, 64, 65,
 66, 69, 70, 71,

 YEGHYAN L.K. - 121,
 YENKOYAN K.B. - 17, 34, 38, 46
 YENOKYAN B.J. - 37
 YESSAYAN L.K. - 73

 ZAKARYAN M.H. - 122
 ZAKARYAN H.H. - 27
 ZARGARYAN A.L. - 50, 96
 ZHAMHARYAN A.G. - 37
 ZILFYAN A.V. - 13, 14, 33, 47,
 48, 49, 50, 107