

Faculty of Medical Sciences University Goce Delcev – Stip, Macedonia

INTERNATIONAL SYMPOSIUM AT FACULTY OF MEDICAL SCIENCES

"Current achievements and future perspectives in medical and biomedical research"

BOOK OF ABSTRACTS

November 24, 2015 - Stip

ORAL PRESENTATIONS	10
Step forward of Macedonian Agency for medicines and medical devices	
Establishment and strategic plan for development	11
Adherence to Therapy: A Modern Pharmacotherapeutic Approach	
Use of disinfectants and antiseptics in selected health institutions in Republic of Macedonia	
Code of Ethics for Pharmacists – Pharmaceutical Chamber of Macedonia	
4-Hydroxynonenal – major bioactive marker of lipid peroxidation	
Nicotinamide adenine dinucleotide biosynthesis and consumption in dysfunctional white	
adipocytes	17
New Insights into the Chemistry and Functions of Coenzyme Q	
Genetically modified systems to study muscular dystrophies	
Counteracting microbial biofilm formation onto dental materials	
The endless potential of the umbilical cord blood for investigation, research and treatment	
The cytokinesis-blocked micronucleus assay: Good choice for detection and evaluation of	
genotoxicity in human cells	23
Multiple predictive model for clinical and subclinical depression in adolescence	
Molecular Imaging and therapy with radionuclides of prostate cancer	
Where Nanotechnology and Nanomedicine meet – Applications and Potential Risks	
The role of molecular cocrystals in drug development	
Drug development based on radiolabeled antibodies	
POSTER PRESENTATIONS	
Correlation between dynamic balance and gait parameters in patients with ischemic stroke in the	
chronic period.	
Effect of kinesitherapy on physical activity in patient with Guillain-Barré syndrome	
Case Report : Oligoasthenoteratozoospermia, treatment with acupuncture	
Treatment of cervical spondylosis with acupuncture	
Effect of kinesitherapy on static and dynamic balance in patient after vertebro-basilar system	
stroke	
Malignant pleural effusions in lung cancer: the condition during the disease	
Systemic fungal infections in hematological malignancies	
Morbidity and mortality of malignant neoplasms in Macedonia	
Cognitive behavioral program in treating insomnia among elderly patients	
Regulations and legal aspects in management of medical waste	
Control of the psychiatric disorders in the Republic of Macedonia	
Monitoring of the renal function in Indometacin treated patients with rheumatoid arthritis	
Incidence of breast cancer in Macedonia	
HPV virus as a cause of cancer of the cervix in R.Macedonia	
Analysis of the Pap test results by age groups in the area of Kriva Palanka	
Giant rhinophyma treated by excision and full thickness skin grafting	
Incidence of patients with chronic renal failure in Skopje	
Calculation of effective dose to family members of patients with thyroid diseases	
Contemporary Microbiological Diagnostic Tests for Rapid Identification and Detection of	
Resistance of Mycobacterium tuberculosis	56
Analysis of clinical features and complications in patients with β -thalassemia in the region of	
Strumica	57
Lymphoepithelioma: A case report	

Contents

F-ra Capitullum Radii L.Dex. – A Case report	.60
Patient with intracranial hemorrhage and arteriovenous malformation detected with transcranial	
color duplex sonography – case report	
Hereditary supracondylar spur of the humerus: Case report	
Prosthetic rehabilitation in patient with advanced degree of functional disorders (case report)	
Marginal Implants Bone Loss – a Case Report	
Ectodermal Dysplasia, a Case Report: Challenge for Prosthodontic Solution	
Alveolar socket preservation and shaping using temporary	
prosthetic construction – cases presentation	
Porcelain veneers produced by refractory die method	
Correlation of Two Different Local Hemostatic Modalities in Oral Surgery Patients with Oral	
Anticoagulants	70
Assessment of orthodontic treatment need among school children by using iotn (index of	,,,
orthodontic treatment need)	72
Oral Hygiene Level Maintenance among Dental Medicine Students	
Poor oral hygiene and show of caries in 12 year old children	
Implant-prosthetic therapy failure in smoker and nonsmoker patients	
Oral surgery treatment in the patients with combination syndrome	
Introgenic mistakes, cause for a failure at surgical treatment of a chronic periapical processes	
Evaluation of Different Preparation of Artificial Teeth and Acrylate Prosthetic Base	
Analysis of the dimensional stability of elastomeric silicone impression materials	
Use of Gypsum Into Working Everyday in Dental Technician	
Mobile dental NOG types used in working dental models	
Determining normal tissue toxicity of non-radioactively Lu/Y-labeled rituximab-conjugates in r animal model	
	.83
Genetically Engineered Mouse Models For Human Pancreatic Cancer: A Review Of The KC,	04
KPC And iKRas*P53* Models	
Mouse Models For Human Prostate Cancer: Xenograft Vs Genetically Engineered Mouse Mode	
LIED2 Trans again Manage Madala, A Way To LIED2 Depart Can age Torget ad Thereas	
HER2 Transgenic Mouse Models: A Way To HER2+ Breast Cancer Targeted Therapy	
Types of scaffolds and their application in bone tissue engineering	.8/
Significance of preparation of tissue samples for electron microscopy for observation and	00
diagnosis	
Design and characterization of nanoparticles as platforms for delivery of curcumin	
Freeze-drying approach to enhance antibody stability	
An overview of phytosomes as a novel herbal drug delivery system	
Determination of active pharmaceutical ingredient – chloropyramine in <i>dragées</i>	
Compariton of volatile aroma compounds between cultivated and spontaneous flowering stems	
Sideritis scardica Griseb. from R. Macedonia	
Bioactive compounds of cold-pressed oil from the seeds of Goji Berry (Lycium barbarum)	.96
Development and validation of HPLC method for determination of flavonoids in herbal	
preparations	.97
Atomic emission spectrometry with inductively coupled plasma (ICP-AES) analysis of trace	
elements in Camellia sinensis teas	.98
Determination of trace elements analyzed by atomic emission spectrometry with inductively	
coupled plasma (ICP-AES) in Matricaria chamomilla L. teas present on macedonian market	.99
Human health risks from heavy metals via consumption of contaminated food1	00

Development of an ultrasonic method for effective extraction of capsaicin as a potent bioactive		
compound		
Electrochemical analysis of the properties of benzene-1,2,4-triol102		
Comparison of the procedure for registration of medicines in the European Union and the		
Republic of Macedonia		
Pharmacoeconomic evaluation of the antibiotic prophylaxis in orthopedic surgeries		
Therapeutic approach in the treatment of benign prostatic hyperplasia105		
Oxidative stress, aging and antioxidants		
Oxidative stress, oxidative DNA damage and prostate cancer108		
RNA interference (RNAi) mechanism as a basis for future successful treatment of chronic		
hepatitis B infection		
Anti-cancer target therapy based on drugs conjugated to hyaluronic acid112		
Cancer-specific conjugated monoclonal antibodies for anticancer therapy113		
Accreditation of the Laboratory of Radiopharmacy – requested requirements or need of challenge		
Quality control of PET radiopharmaceuticals, with reference to its specifics vs quality control of		
conventional pharmaceuticals		
Production of [¹¹ C]Choline in The University Institute for PET – new perspective in diagnostics		
of prostate malignancy in R. of Macedonia118		
PET radiopharmaceuticals in the diagnosis of neurological diseases		
Achievements and perspectives in formulation of stable immunoconjugate of the HER2-targeting		
trastuzumab – potential for rapid labelling with Gallium-68121		

Adherence to Therapy: A Modern Pharmacotherapeutic Approach

Zorica Arsova-Sarafinovska^{1, 2}

¹Institute of Public Health of the Republic of Macedonia, 50 Divizija 6, 1000 Skopje, Republic of Macedonia
²University Goce Delcev – Stip, Faculty of Medical Sciences, Krste Misirkov 10-A, Stip, 2000, Republic of Macedonia
Telephone: (+389-70) 337 572; Fax: (+389-2) 322 33 54; e-mail address: zorica.arsova@ugd.edu.mk

Abstract

Medication adherence is a crucial contributor to effective chronic diseases management. On the contrary, poor adherence leads to significant worsening of disease, death, and Moreover, patient non-adherence is not limited to increased healthcare costs. medications only. It can also take other forms, such as the failure to keep appointments, to follow recommended dietary or other lifestyle changes, and to follow recommended preventive health practices. According to the most recent report of the World Health Organization the global adherence among patients with chronic diseases averages 50 % in developed countries, with rates decreasing as the co-morbidities increase. The rates are lower in developing countries. Over the last decade, extensive research on the efficacy of adherence-enhancing strategies has been done. However, the rates of nonadherence have not changed significantly. One of the most significant improvements has been achieved with the inclusion of the patient in the process of determination of therapy. As a consequence, the term "compliance" was replaced with the term "adherence" seeming to indicate a greater involvement of the patient in the therapy decision making process. The World Health Organization identified five sets of factors that are important for patients to adhere to the long-term therapeutic regimens. These include: the social and economic factors, the health care team and system, the characteristics of the disease (for example, mental or physical disability), the characteristics of the treatment (for example, number of the medicines prescribed, the frequency of administration and side effects), and patient-related factors. In general, medical adherence is better for drugs that provide symptom relief, as opposed to ones used to treat a generally asymptomatic condition. For example, chronic conditions (such as high blood pressure, hyperlipidemia, diabetes, osteoporosis, and depression) are common diseases characterized with few symptoms and poor adherence, consequently. Additionally, studies have shown that compliance rates decrease when the treatment is long-term, involves multiple medications taken concurrently, several times daily. This problem can be overcome by simplifying the therapeutic regime (for example, use of extended-release formulations and / or fixed-dose combination finished pharmaceutical products). Furthermore, medication side effects remain a significant issue. However, the clinical pharmacists can reduce non-adherence suggesting ways to manage minor side effects or identifying alternative treatments with fewer side effects. Educating patients about disease, importance of treatment or prevention, and consequences if not treated, could be successful strategy in enhancing patient adherence. Finally, the frequent followup appointments provide an opportunity to discontinue the medication, change the prescription (e.g., dose, frequency) if needed, and overcome barriers responsible for poor adherence. In conclusion, we should emphasize that a coordinated action from health professionals, researchers and policy makers is needed to achieve progress in this area.

Keywords

Medication adherence; compliance; chronic disease; comorbidity.