



TOM LXXII, 2019, Nr 5 cz I, maj

Rok założenia 1928





**Editor in-Chief:** 

Prof. Władysław Pierzchała

**Deputy Editor in-Chief:** 

Prof. Aleksander Sieroń

**Statistical Editor:** 

Dr Lesia Rudenko

Polskie Towarzystwo Lekarskie:

Prof. Waldemar Kostewicz – President PTL

Prof. Jerzy Woy-Wojciechowski – Honorary President PTL

Prof. Tadeusz Petelenz

# **International Editorial Board – in-Chief:**

Marek Rudnicki Chicago, USA

## International Editorial Board - Members:

Kris Bankiewicz	San Francisco, USA	George Krol	New York, USA
Christopher Bara	Hannover, Germany	Krzysztof Łabuzek	Katowice, Poland
Krzysztof Bielecki	Warsaw, Poland	Henryk Majchrzak	Katowice, Poland
Zana Bumbuliene	Vilnius, Lithuania	Ewa Małecka-Tendera	Katowice, Poland
Ryszarda Chazan	Warsaw, Poland	Stella Nowicki	Memphis, USA
Stanislav Czudek	Ostrava, Czech Republic	Alfred Patyk	Gottingen, Germany
Jacek Dubiel	Cracow, Poland	Palmira Petrova	Yakutsk, Russia
Zbigniew Gasior	Katowice, Poland	Krystyna Pierzchała	Katowice, Poland
Andrzej Gładysz	Wroclaw, Poland	Tadeusz Płusa	Warsaw, Poland
Nataliya Gutorova	Kharkiv, Ukraine	Waldemar Priebe	Houston, USA
Marek Hartleb	Katowice, Poland	Maria Siemionow	Chicago, USA
Roman Jaeschke	Hamilton, Canada	Vladyslav Smiianov	Sumy, Ukraine
Andrzej Jakubowiak	Chicago, USA	Tomasz Szczepański	Katowice, Poland
Oleksandr Katrushov	Poltava, Ukraine	Andrzej Witek	Katowice, Poland
Peter Konturek	Saalfeld, Germany	Zbigniew Wszolek	Jacksonville, USA
Jerzy Korewicki	Warsaw, Poland	Vyacheslav Zhdan	Poltava, Ukraine
Jan Kotarski	Lublin, Poland	Jan Zejda	Katowice, Poland

**Managing Editor:** 

Agnieszka Rosa amarosa@wp.pl

**Graphic design / production:** 

Grzegorz Sztank www.red-studio.eu

**International Editor:** 

Lesia Rudenko l.rudenko@wydawnictwo-aluna.pl

Publisher:

ALUNA Publishing

ul. Przesmyckiego 29, 05-510 Konstancin – Jeziorna www.aluna.waw.pl www.wiadomoscilekarskie.pl

www.medlist.org

**Distribution and Subscriptions:** 

Bartosz Guterman prenumerata@wydawnictwo-aluna.pl



# SPIS TREŚCI

PRACE ORYGINALNE / ORIGINAL ARTICLES /olodymyr H. Hryn, Yuriy P. Kostylenko, Valentyna P. Bilash, Olena B. Ryabushko MICROSCOPIC STRUCTURE OF ALBINO RATS' SMALL INTESTINE	733
Oleksandr Yu. loffe, Mykola S. Kryvopustov, Yuri A. Dibrova, Yuri P. Tsiura TYPE 2 DIABETES MELLITUS REMISSION AND ITS PREDICTION AFTER TWO-STAGE SURGICAL TREATMENT OF PATIENTS WITH MORBID OBESITY	739
Alisa V. Pachevska, Yurii V. Filimonov, Valerij Yu. Filimonov, Olena P. Dudik, Olena I. Popova, Nadiia V. Drachuk, Dmytro M. Kasianenko, Alina V. Biloshitska, Valerij M. Istoshyn LLINICAL AND LABORATORY ASSESSMENT THE LEVELS OF ORAL HYGIENE, TOTAL PROTEIN, HYDROGEN SULFIDE AND NITROGEN METABOLITES IN ORAL FLUID IN THE DEVELOPMENT DF INFLAMMATORY COMPLICATIONS DURING ORTHODONTIC TREATMENT OF CHILDREN	744
Omytro Y. Nikolenko, Dmytro M. Boiko, Olexandr A. Shkurupii, Oksana V. Ovcharenko MORPHOMETRIC AND HISTOCHEMICAL CHARACTERISTICS OF THE CRIBRIFORM TYPE OF INTRADUCTAL CARCINOMA OF THE MAMMARY GLAND	748
Oksana S. Khukhlina, Viktoriia Yu. Drozd, Alona A. Antoniv, Tamara H. Kopchuk, Zoriana Ia. Kotsiubiichuk PATHOGENETIC ROLE OF NITROGEN MONOXIDE EFFICIENCY OF PHARMACOTHERAPY IN PATIENTS WITH GASTROESOPHAGEAL REFLUX DISEASE AND STABLE ANGINA OF TENSION	753
Natalia V. Medvedovska, Valerii I. Bugro, Ivan I. Kasianenko PARENTERAL VIRAL HEPATITIS INFECTION RISK ASSESSMENT BY TEENAGERS	757
Aidyn G. Salmanov, Olena A. Dyndar, Yuriy P. Vdovychenko, Tetiana R. Nykoniuk, Igor V. Maidannyk, Olena O. Chorna, Iryna A. Holovanova SURGICAL SITE INFECTIONS AND ANTIMICROBIAL RESISTANCE IN KYIV CITY HOSPITALS, UKRAINE	760
yubov V. Smahliuk, Dmytro V. Sheshukov PECULIARITIES OF TEETH SIZE IN ADOLESCENTS WHO ARE DIAGNOSED TO HAVE ANGLE'S CLASS I MALOCCLUSION AND DISPLAY DIFFERENT SOMATOTYPES	765
/evhen Ya. Kostenko, Volodymyr S. Melnyk, Liudmyla F. Horzov SOCIO-PSYCHOLOGICAL ASPECTS IN THE PREVENTION OF DENTAL DISEASES	769
ryna V. Markovskaya THE EFFECT OF LOW FREQUENCY ELECTROMAGNETIC RADIATION ON THE MORPHOLOGY OF DENTAL AND PERIODONTAL TISSUES (EXPERIMENTAL INVESTIGATION)	773
fictor A. Ognev, Anna A. Podpriadova, Anna V. Lisova DENTIFICATION AND ASSESSMENT OF RISK FACTORS ROLE IN MYOCARDIAL INFARCTION DEVELOPMENT	779
Tetyana A. Andrushchenko, Sergiy V. Goncharov, Victor E. Dosenko, Konstantin E. Ishhejkin ALLELIC POLYMORPHISMS OF DNA REPAIR GENES AND THEIR INFLUENCE ON THE FORMATION OF RESISTANCE TO THE DEVELOPMENT OF BRONCHOPULMONARY PATHOLOGY JNDER THE ACTION OF INDUSTRIAL AEROSOLS	784
Dleg Y. Kanikovskyi, Yaroslav V. Karyi, Yura V. Babiichuk, Yevhen V. Shaprynskyi MPROVING THE RESULTS OF THE LAPAROSCOPIC CHOLECYSTECTOMY IN PATIENTS WITH COMPLICATED COURSE OF THE CALCULOUS CHOLECYSTITIS	790
Fetiana L. Protsiuk, Olga S. Yablon, Liudmyla O. Protsiuk, Olga A. Bykovska, Olena V. Herasymova, Tetiana V. Kapitan FEATURES OF CLINICAL MANIFESTATIONS OF DISEASE AND PSYCHOLOGICAL STATUS OF ADOLESCENTS WITH BRONCHIAL ASTHMA OF VARIOUS LEVELS OF CONTROL AND THE INFLUENCE OF RISK FACTORS	795
(yrylo V. Makolinets, Vasyl I. Makolinets, Dmytro V. Morozenko, Kateryna V. Gliebova, Svitlana I. Danylchenko DYNAMICS OF BIOCHEMICAL MARKERS OF CONNECTIVE TISSUE METABOLISM IN PATIENTS WITH KNEE OSTEOARTHRITIS DURING CONSERVATIVE TREATMENT WITH LASER THERAPY	802
Olga Ostash, Oksana Shvager, Liudmyla Grygorenko, Svetlana Stepanchuk, Nina Balenko, Igor Chernychenko ON THE ISSUE OF ACCELERATED HYGIENIC ASSESSMENT OF ENVIRONMENTAL GENOTOXIC CARCINOGENS	807
Oksana V. Oriekhova, Oleksandr I. Pavlenko PREDICTION OF RISK IN DEPENDENCE FROM DISEASE AND WORKING CONDITIONS OF EMPLOYEES WHICH EMPLOYED IN EXTRACTION OF IRON ORE	813
Dlena O. Oshyvalova, Oleg L. Ziukov, Vitaliy G. Gurianov PROGNOSTIC MODEL OF SKIN CANCER RISK ASSESSMENT	817
Olga V. Garmash DRAL HEALTH ABNORMALITIES IN CHILDREN BORN WITH MACROSOMIA ESTABLISHED DURING MIXED DENTITION PERIOD	823
yubov Y. Vlasyk, Natalia O. Ryngach, Leonid I. Vlasyk, Hanna Y. Stupnytska STUDY OF THE LIFESTYLE OF ECONOMICALLY ACTIVE POPULATION OF THE CHERNIVTSI REGION: THE PREVALENCE OF RISK FACTORS AMONG BUSINESS ENTITIES IN THE MARKET	832
Pavlo I. Tkachenko, Maryna I. Dmytrenko, Mykola O. Cholovskyi DPTIMIZATION OF SURGICAL-ORTHODONTIC TREATMENT TACTICS IN PATIENTS WITH IMPACTED TEETH	838

# PRACA ORYGINALNA ORIGINAL ARTICLE



# SOCIO-PSYCHOLOGICAL ASPECTS IN THE PREVENTION OF DENTAL DISEASES

# Yevhen Ya. Kostenko, Volodymyr S. Melnyk, Liudmyla F. Horzov

UZHHOROD NATIONAL UNIVERSITY, UZHHOROD, UKRAINE

#### **ABSTRACT**

**Introduction:** Measures to prevent dental diseases are included in the list of medical care provided by dentists. Modern socio-economic transformations, including in health care, have contributed to the gradual evolution of the patient from the recipient of medical care to the consumer of services.

**The aim:** To study the position of patients regarding the need and effectiveness of preventive dental care.

**Materials and methods:** Study was conducted among 310 patients who were admitted in various municipal and state medical institutions, dental clinics and private dental offices in Uzhhorod. The average age of respondents is 26 years. The survey was conducted using questionnaires.

**Results:** 90% of respondents are willing to pay for dental treatment based on the use of innovative technologies; 64% of people refer to paid services aesthetic therapeutic treatment; 87% of patients agree to pay for orthopedic treatment and 48% - for surgical intervention. Only 16% of respondents consider additional professional hygiene services and ready to pay for it themselves. Survey data show that 43.2% of patients give a doctor the main role in the treatment process. 42.8% of respondents need medical help in the form of advice or counseling for a decision on treatment. 14% of patients prefer to choose their own medical care and control the treatment.

**Conclusions:** Dental prophylactic measures that are implemented in the practice of regulating social and labor relations, the presence of relationships between the physician and the patient develop by socio-psychological laws.

**KEY WORDS:** patient, the social aspect, dental diseases, prevention, treatment

Wiad Lek 2019, 72, 5 cz. I, 769-772

#### INTRODUCTION

Measures to prevent dental diseases provided by dentists are included in the list of medical care. Modern socio-economic transformations, including in health care, have contributed to the gradual evolution of the patient from the recipient of medical care to the consumer of services. Increasingly, the patient becomes a participant in the decision on the method of treatment, has the right to choose a doctor, medical treatment [1].

Providing medical dental care is becoming one of the varieties of market services. This imprints on professional ethics in the field of medicine. For dentistry, this problem arose earlier, since it is one of the first medical practices that provide commercial and additional services on a paid basis.

Market relations, in general, have a beneficial effect on the work of state dental institutions. At the expense of attracting money from the population ("paid services"), it is possible not only to buy new equipment and materials but also to carry out repairs of premises, all this certainly affects the attitude of patients to the dental service. The growth of prices for dental services, which has taken place in recent years, was mainly due to external macroeconomic factors. It led to the transition of the market to a higher price level while maintaining demand at the same level [2].

Such changes lead to the emergence of new models of relations a "doctor-patient", because consumer firstly, always

produces higher requirements to the producer ofservices, and secondly, participates in thedrawing up a plan of measures. The population's awareness level about the necessity of prophylaxis measures of different stomatological diseases is high enough. In this context, the social constituent of the profession of doctor goes outinto first place, in particular, that, as far as a doctor is able to convince a patient to accept correct decisions [3].

All-around competence means not only an experienced clinicianthat owns luggage of medical and biological knowledge but also the man, prepared to effective communications. Mutual relations between a doctor and patient, their positions, behavioral options and real actions of these subjects of social relations, in an eventual result, determine quality and result of therendered stomatological service, in our case are prophylaxes of stomatological diseases. A situation becomes complicated that a patient does not see atransparent necessity for prophylactic measures, and is the consumer of stomatological services, he can be charged with an unnecessary treatment at his expense [4].

#### **THE AIM**

The aim of the research to study the position of patients regarding the need and effectiveness of preventive dental care.

#### MATERIALS AND METHODS

Analyzed 310 responses of patients who were admitted in various municipal and state medical institutions, dental clinics and private dental offices in Uzhhorod. The average age of respondents is 26 years. The survey was conducted using questionnaires. All calculations were performed on a PC using a licensed software for operating system Windows and standard software package STATISTICA 6.1. Statistical data processing was carried out using Student's probability t-test. This study was approved by the local ethical committee [5].

#### **RESULTS**

The status of the patient in the dental profile acts as a consumer of medical care and stomatological services. However, if it comes to the prevention of dental diseases, then the patient, in general, may not fully understand its necessity. In this regard, we were curious to find out how much the patient is prepared for preventive measures, how to assess the dentist's service to date, and what quality criteria it operates.

In the course of the survey, we found that almost half of the patients choose dental care in communal and public health care institutions - 46%, 15% of patients are willing to pay extra for additional medical services, 39% of patients use services in private dental offices. Despite the fact that public medicine covers only the minimum amount of dental care, for most social groups this is the only way to maintain a satisfactory oral cavity. 47% of respondents who participated in our survey can be attributed to a socially vulnerable low-income group. It should be noted that preventive measures are often carried out only in the presence of hygienists in polyclinics and offices, which is still far from every medical institution. In this case, there is a problem not only of the socio-economic but also of the moral and ethical plan. On the one hand, every person has the right to medical care, including services related to the prevention of dental diseases, on the other hand, when buying a service, medical care becomes inaccessible to those patients who need it. In this case, even if the patient is aware of its importance and the need for preventive measures, it simply cannot afford it.

However, the development of modern society involves fundamental changes in the structure of the population, affected by the polarization of its strata, social groups, which excludes the possibility of a monotonous approach to the organization of medical care. The aesthetic requirements of patients, which include additional expenses for treatment, have grown. There was an awareness of the need for preventive measures.

According to our research, patients who were willing to pay for preventive measures included people with an average age of 26 years, mainly those patients who had higher or secondary special education and who had the income of more than 6,000 hryvnias per month.

The results of the questionnaire allowed to reveal a list of dental services, which patients agree to pay extra. As respondents were able to select several responses, we received the following data: 90% of respondents are willing to pay for dental treatment based on the use of innovative technologies; 64% of people refer to paid services aesthetic therapeutic treatment; 87% of patients agree to pay for orthopedic treatment and 48% - for surgical intervention. Only 16% of respondents consider additional professional hygiene services and are ready to pay for it themselves. Basically, the patient as an active consumer is focused on the paid nature of dental care, but the innovation of technology is considered a priority choice for them, considering them both health-preserving and aesthetically justifiable. And there is almost no understanding that health precautionary measures are precisely preventive measures.

The quality of dental care (services) is determined not only by the volume and level of professionalism of the doctor but also by the degree of its availability, the effectiveness of interaction between the physician and the patient, entering into relations in the public sphere providing dental care to the population.

What model of relationship do patients choose for a dental practice? What position do they adhere to as a consumer of dental care? Survey data show that 43.2% of patients give a doctor the main role in the treatment process. The paternalistic (authoritarian, traditional) model of a doctor-patient relationship is that the doctor takes a decision in the treatment, informs the patient to the extent that he considers fit, and the patient is passive, fully subordinates to the doctor. to a greater extent inherent in patients whose behavior is formed on the basis of a low level of competence in medicine. However, medical paternalism can be justified in terms of the concept of medical humanism: the attitude to the patient from the position of mercy, especially when the patient personifies suffering, helplessness. 42.8% of respondents need medical help in the form of advice or counseling (interpretative model) for a decision on treatment, while the autonomy of the patient lies not only in the freedom of choice but also in understanding the arguments in favor of the right choice. 14% of patients prefer to choose their own medical care and control the treatment. In this case, the information model of the relationship between the physician and the patient is realized. The obtained data testify to the high trust of the patients of the dentist and confidence in his professional competence, despite the fact that the patient himself is increasingly positioned himself as an active consumer of dental services. And despite this, a number of patients noted that dentist rarely mentioned the existence of any prevention program. Unfortunately, not only the average patient is not ready for preventive measures, the doctors themselves are under-conscious of the importance of this issue.

The therapeutic alliance in dentistry is due to a rather specific interaction between a physician and a patient, therefore, the psychological characteristics of each of them determine the success of treatment. In our opinion, even now, when dental care is transformed into one of the varieties of market services, the patient positions himself primarily as a person in need of specific treatment, and

then as a consumer of medical services. In this case, we can talk about the usual understanding of the activities of the doctor as an artist of a certain professional role. The results of the survey showed that the most valuable qualities of a doctor for a patient are traditionally his professional knowledge and skills. This fact was noted by all respondents. In the second place, according to patients, the quality of a doctor is the ability to empathize with the condition of the patient - 77.5% of respondents. Important qualities characteristic of a doctor is "responsibility" - 73% of the respondents, "moral and ethical" - 44.7% of patients. None of the patients left out of the attention as a doctor's positive quality of his desire and ability to send dental care in the prophylactic direction.

Satisfaction of the patient with dental help is formed in the process of communication in the interaction of "doctor-patient". An important role in this interaction belongs to the personal characteristics of the dentist himself. 83% of the patients who participated in the survey are of the opinion that 12% of the respondents do not have a doctor's personal qualities, the remaining 5% could not determine the answer.

#### DISCUSSION

The transition of health care to market relations requires the dentistry and dental managers the profound theoretical knowledge in the field of marketing. There is practically no systematized fundamental knowledge in the field of marketing of the dental service for this problem in the literature. Marketing is a complex system of organization of production and sales of products, focused on satisfying the needs of specific consumers and making profits on the basis of research and market forecasting, developing strategies and tactics of market behavior.

The marketing of dental services means achieving goals based on the orientation of the entire organization's activities to meet the needs of patients in various types of preventive, diagnostic, therapeutic and rehabilitation services. Dental marketing is defined as the process by which the market of dental care or dental services is managed and implemented. Marketing is required for all dental institutions, both private and public, as the amount of paid dental care increases annually. The population that serves as a consumer of dental care can choose any dental office, and if you pay for dental care at your own expense, you can dictate their conditions. The basic principle of marketing is the orientation of the results of treatment to real requirements and wishes of consumers. In this situation, the doctor should be the connecting link that combines all the possibilities of dental prophylaxis and the patient's aspiration. Information should be communicated in such a way that the patient first thought about preventive measures, and moreover, considered this way the only true [6].

In the middle of the twentieth century, the paternalistic model of the relationship between patient and patient faced with serious difficulties, the main of which was the growing self-awareness of man as a citizen and as a patient; increase of the status of health, life as the highest value of a person, put at risk by modern medical technologies. The time has come for new models of relations "doctor-patient", including models of "informed consent" [7,8,9].

The analysis of the results allowed to determine the position of the patient in the dental profile regarding the personal characteristics of the dentist, who form the patient's installation of satisfaction with the quality of the service provided. The opinion that the doctor should be diplomatically shared by 74% of the respondents, organized - 82% of respondents, have knowledge and skills of communication with the patient - 97% of respondents, initiative - 68% and intellectually flexible - 65% of patients. 97% of the polled responded respectfully to doctors who seek to prevent dental disease, but less than half were not prepared for such actions by the doctor and were not sure that they would agree to take preventive measures for dental diseases.

#### **CONCLUSIONS**

Thus, dental prophylactic measures that are implemented in the practice of regulating social and labor relations, the presence of relationships between the physician and the patient develop by socio-psychological laws. The high trust of patients in the work of a dentist and confidence in his professional competence should be properly used by physicians to focus not only on modern methods of treatment but especially on prevention. The development of prevention of dental diseases is primarily due to the development of a culture of both patients and doctors, the relationship between the doctor and the patient, which includes not only economic problems but also social and ethical issues.

#### REFERENCES

- 1. Savychuk N.O., Klitynska O.V. Analiz prohram profilaktykyosnovnykh stomatolohichnykh zakhvoriuvanu rozvynenykh krainakh[Analysis of prevention programs for main dental diseases in developed countries]. Sovremennaia stomatolohyia.2014; 4: 64-66. (UA)
- 2. Mihalchenko D. V. Ethics of consumption of medical services. Bioetika. 2010; 2(6): 48-49.
- Canadian Centre for Policy Alternatives. Putting our money where our mouth is: the future of dental care in Canada. Ottawa, ON: CCPA; 2011. Available from: http://www.policyalternatives.ca/sites/default/files/ uploads/.
- 4. Isaieva N. S., Yakubova I. I. Psykholohichni osoblyvosti nadannia stomatolohichnoi dopomohy patsiientam dytiachoho viku[Psychological features of providing dental care to children of childhood]. Novynystomatolohii. 2013; 2 (75): 16–20. (UA)
- 5. Suplyk-Didenko D.M. Sotsialno-psykholohichni osoblyvosti roboty likaria-stomatoloha shchodo zberezhennia psykhichnoho zdorovia patsiientiv [Socio-psychological peculiarities of the work of the dentist concerning the preservation of mental health of patients] Visnyk Natsionalnoi akademii Derzhavnoi prykordonnoi sluzhby Ukrainy. 2016; 1 (IIA)
- 6. Aristidis Arhakis, Eirini Athanasiadou, Christina Vlachou. Social and psychological aspects of dental trauma, behavior management of young patients who have suffered dental trauma. Open Dent J. 2017; 11: 41–47.

- 7. Kobiyasova I. V. Psihologiya v stomatologii: vazhneyshie aspektyi gramotnogo obscheniya s patsientom [Psychology in dentistry: the most important aspects of competent communication with the patient] // Saratovskiy nauchno-meditsinskiy zhurnal. 2011; 1: 297-300. (Ru)
- 8. World Health Organization. Oral Health Surveys: Basic Methods. 4th. Geneva, Switzerland: World Health Organization; 1997.
- 9. Earl Clarkson, Sanjeev Bhatia. Management and Marketing for the General Practice Dental Office. Dental Clinics of North America. 2008; 52 (3): 495-505.

This work is a fragment of the research work of pediatric dentistry department Uzhhorod National University "Prevention, diagnosis, treatment of basic dental diseases in children of Transcarpathia", state registration number 0116U003555.

#### **Authors' contributions:**

According to the order of the Authorship.

#### **Conflict of interest:**

The Authors declare no conflict of interest.

#### **CORRESPONDING AUTHOR**

Liudmyla F. Horzov

Dovzhenka Str., 18/3, 88000, Uzhhorod, Ukraine

tel: +380507626129

e-mail: liudmyla.horzov@uzhnu.edu.ua

**Received:** 12.03.2019 **Accepted:** 24.04.2019