

7. Kuznyetsov VM, Prokhno OI, Koval PB, Kosenko OM. Spivpratsya "dytyna-stomatoloh-batky" - zaporuka uspishnoho likuvannya. Neonatolohiya, khirurhiya ta perynatalna medytsyna. 2015; 4(18): 19-26. [in Ukrainian]
8. Kucher AV, Duda KM. Psykholohichni aspekty povedinky ditey doshkilnoho viku na stomatolohichnomu pryvomi. Klinichna stomatolohiya. 2011; 1, 2: 80-83. [in Ukrainian]
9. Moskalenko VF, Bardov VH, Malanchuk VO. Osnovy stomatolohichnoyi diyalnosti (orhanizatsiyno-pravovi, hihiyenichni, deontolohichni): navchalno-dovidnykovyy posibnyk. Vinnytsya: Nova knyha; 2018. 440 s. [in Ukrainian]
10. Khomenko LO, Maydannik VH, Holubieva IM, Ostapko OI, Bidenko NV. Terapevtychna stomatolohiya dytyachoho viku. Pidruchnyk. Kyiv: Knyha plyus; 2015. 328 s. [in Ukrainian]
11. Alpern GD. Child development basic concepts and considerations. Behavior management in dentistry for children. Philadelphia W. B. Saunders. Handbook of pediatric dentistry. Mosby; 2008. 480 p.
12. McDonald R.E. Dentistry for the child and adolescent. Dean. Mosby; 2004. 769 p.
13. Wright GZ. Behavior Management in Dentistry for Children. Wiley Blackwell; 2014. 264 p.

Стаття надійшла 15.02.2020 р.

DOI 10.26724/2079-8334-2021-1-75-90-95

UDC 616.89-02: 612.014.4.064

V.V. Kravchuk, S.M. Shchepankov, K.V. Shepitko¹, S.M. Pashkovsky²

Ukrainian Military Medical Academy, Kyiv

¹Ukrainian Medical Stomatological Academy, Poltava

²Military Medical Clinical Centre of the Central Region, Vinnytsia

HYGIENIC CHARACTERISTICS OF THE SPECIFIC CONDITIONS IN MODERN MILITARY PILOTS' PROFESSIONAL ACTIVITIES

e-mail: vkravchuk@ukr.net

On the basis of the systems analysis the paper highlights the complex as such and suggests the comparative characteristics of the organizational, climatic, psychogenic, socially and politically stipulated factors, and determines their importance for the particular categories of military pilots of the Peacekeeping Forces and Joint Forces Operation. According to the data of the meteorological surveillance the assessment of the climatic conditions in the area of Robertsfield (Liberia) aerodrome are made and their distinctions as compared to the places of permanent deployment on the territory of Ukraine are presented. It has been established that it is not the persistently high indices of the air temperature which are within the boundaries of the comfort temperature sensing, but the absence of traditional variations during the day, high indices of the air humidity and the considerable amount of precipitations that affect the bodies of the peacekeepers most negatively. The level of perception of vital hazards by military pilots proves considerably lower and less significant as compared to that if the military pilots of the Joint Forces Operation. As a result, the adaptation of peacekeepers to the existing conditions of their professional activities lasts 2,4 times longer, though much more successful, as compared to that of the flight crew of the Joint Forces Operations.

Key words: conditions of professional activities, climatic factors, vital hazard, adaptation, military pilots.

В.В. Кравчук, С.М. Щепанков, К.В. Шепітько, С.М. Пашковський

ГІГІЄНИЧНА ХАРАКТЕРИСТИКА СПЕЦИФІЧНИХ УМОВ ПРОФЕСІЙНОЇ ДІЯЛЬНОСТІ СУЧАСНИХ ВІЙСЬКОВИХ ЛЬОТЧИКІВ

У статті на основі системного аналізу виділено комплекс і подано порівняльну характеристику організаційних, кліматичних, психогенних, соціально та політично зумовлених факторів, а також визначено їх значимість для окремих категорій військових льотчиків миротворчого контингенту та операції Об'єднаних сил. За даними метеорологічного спостереження оцінено кліматичні умови в районі аеродрому Робертсфілд (Ліберія) та їх відмінності в порівнянні з місцем постійної дислокації на території України. Встановлено, що найбільший негативний вплив на організм миротворців мають не стабільно високі показники температури повітря, вони знаходяться у межах сприйняття температурного комфорту, а відсутність звичних для українців перепадів цієї температури протягом доби, високі показники вологості повітря та значна кількість опадів у сезон дощів. Рівень сприйняття вітальної загрози військовими льотчиками миротворчого контингенту є суттєво нижчим та менш значимим у порівнянні з військовими льотчиками операції Об'єднаних сил. Як наслідок, адаптація миротворців до існуючих умов професійної діяльності проходить у 2,4 рази довше, однак більш успішніше, у порівнянні з льотним складом операції Об'єднаних сил.

Ключові слова: умови професійної діяльності, кліматичні фактори, вітальна загроза, адаптація, військові льотчики.

The work is a fragment of the research project "The development of the criteria for assessing the physical qualification level of the aircraft personnel of Ukraine's state aviation, when performing their professional duties", state registration No. 0115U003950.

The most important hygienic characteristic feature of work of contemporary military pilots (MP) of Ukraine's state aviation is the necessity of taking into account the possibility of appearance of the specific conditions and character of their professional activities under the conditions of their being employed for conducting the UN International Peacekeeping Operations (IPO) and Joint Forces Operation (JFO). First and foremost, it is stipulated by the long-term and intensive effects of the entire complex of

particularly hazardous and sometimes critical factors, which in its turn results in deteriorating the adaptation abilities of the body of the contingent specified, as well as in combat psychological disorders progress [0, 0, 0, 0].

During the past years, the sporadic attempts have been made in Ukraine to study the effects of the professional environmental factors on the psychophysiological state of the UN IPO aircraft staff [0, 0, 0]. Nevertheless, the integrated research related to taking into account on the systems level the characteristic features of the hygienically stipulated factors of the professional activities and the peculiarities of their effects on the MP bodies of both UN IPO and JFO still remains overlooked by the researchers at present. As a result, few of the state leadership and medical experts fully realize the real problems and delayed consequences the participants of the process, members of their families, experts of the medical and social spheres have already faced and are about to face [0, 0]. Therefore, the research suggested proves topical for solving the theoretical and practical problems related to the occupational medicine of Ukraine's state aviation aircraft staff.

The purpose of the study was to subjectively estimate effects of the International Peacekeeping Operations and Joint Forces Operation on the military pilots' body in the specific conditions of their professional activities.

Materials and methods. Distinguishing the complex of the specific factors of the professional activities, as well determining their importance for the UN IPO and JFO military pilots were performed based on the systems analysis.

The studies in the climatic conditions were carried out based on the meteorological surveillance data in the area of Robertsfield aerodrome (Liberia) and in the places of the military units' permanent deployment in Ukraine within the period of 1996-2018 in accordance with the mean monthly indices of the air temperature and humidity, the air temperature variations during the day and the amount of precipitations.

In order to obtain the data related to the subjective assessment of the climatic factors perception peculiarities, vital hazard, levels and duration on MP adaptation to the military service specific conditions, specially designed questionnaires were developed. The questionnaire covered 185 MPs: 143 persons from JFO and 42 from UN IPO staff.

Analysis of the data obtained was performed by means of the variation statistics methods, using PC and Excel statistics package.

Results of the study and their discussion. Before representing and discussing the research results obtained, it is noteworthy that the conditions for the professional activities of military pilots of the UN IPO and JFO are worlds apart from the traditional ones observed in the places of permanent deployment of the aircraft units on the territory of Ukraine. The above is primarily envisaged by the long-term (from 3 for JFO to 9 months for the UN IPO) effects of the complex of the specific organizational, climatic, psychogenic, socially and politically stipulated factors. However, it should be noted that except for the respect to the duration of the effects of the complex of factors specified, great importance is attached to the qualitative and quantitative characteristics, that is to say to its importance for various MP contingents (table 1).

It is quite apparent that the climatic factors prove most significant for the MPs of the UN IPO. They are extremely sensible to the risk of forming the signs of psychological disorders which are caused by the longer separation period from the family and traditional vital activity environment, relative isolation from the external environment, the monotony and restraints of the intersocial communication, as well as the hazards to health related to the probability of getting poisoned or falling ill with tropical infections. The cautious attitude of the local population, the religious and ethnic distinctions, the availability of political confrontation and social tension in the region are perceived as exotic ones.

The conditions and character of the professional activities of the JFO MPs are connected with the necessity of the aircraft employment, strongly pronounced vital hazard related to the risk of death or injury, the undisguised hostile attitude of the local population due to the existence of the inter-confessional religious and nationalistic distinctions as well as well-defined political confrontation and social tension in the region.

When using the above positions as the basis for characterizing the conditions and character of the UN IPO MPs professional activities, it should be noted that a priori Liberia's climate utterly differs from that of Ukraine.

As a matter of priority, it affects the organization and conduct of flights, it also results in intensifying the adaptation possibilities of MPs due to the increase in the threshold meteorological sensitivity.

The comparative characteristics of the complex of factors of the professional activities and their significance for MPs separate contingents when deployed on the territory of conducting UN IPO and JFO

Factors of professional activities	Contingents of MPs	
	UN IPO on the territory of Liberia	JFO on the territory of Ukraine
Duration of stay	9 months	3 months
Climatic	Significant	Insignificant
Psychogenic	The necessity of the long-term separation from family and traditional, environment of vital activities	The necessity of the less long-term separation from family and traditional environment of vital activities
	The availability of health hazard due to the fear of getting poisoned or falling ill with tropical infections	The availability of life hazard due to the fear of death or injury
	The availability of relative isolation from the external environment, monotony and communication restrictions	The availability of relative isolation from the external environment, monotony and communication restrictions
Socially and politically stipulated	The availability of cautious (suspicious) attitude of the local population	The availability of hostile attitude of the part of the local population
	The availability of religious and ethnic distinctions	The availability of interconfessional and nationalistic distinctions
	The availability of political confrontation and social tension	The availability of well-defined political confrontation and social tension
Organizational	The availability of necessity of conducting unscheduled flights on unfamiliar territory	The availability of the necessity of conducting unscheduled flights and aircraft combat employment
	The availability of permanent control of storing and handling personal weapons	The availability of permanent control of storing and handling personal weapons

Thus, according to the official data the meteorological surveillance in the period of 1996-2018, the climatic conditions in the area of Robertsfield aerodrome (Liberia) are similar to tropical. Along with it, one can observe the absence of the distinct climatic seasonal character according to the temperature characteristics. On the other hand, the seasonal character is available according to the index of the monthly amount of precipitations during the year. Otherwise speaking, the comparatively dry time period from November to April is followed by the humid season of rains from May to October. Besides, what calls attention to itself is the invariable character of changes in the levels of the average indices of the air temperature variations during the day, which in the period from April to December do not exceed the meteorological sensitivity threshold of man at all. It is only from January to March that they become more aggressive exceeding 6° C.

A somewhat different situation is observed in the place of permanent deployment of the aviation units on the territory of Ukraine. In particular, one can clearly trace the availability of the climatic seasonal character according to the average monthly indices of the air temperature during the year which appears quite conventional for the Ukrainians. From March to October one can observe considerable high (over 6°C) indices of variations of the air temperature during the day, which testify to the excess of the meteorological sensitivity threshold of man and describe the climatic conditions of Ukraine during the most part of the year as aggressive ones. From December to February, the indices of the variations specified do not exceed the meteorological sensitivity threshold of man.

The next stage of our research was aimed at carrying out the comparative analysis of the average monthly indices of the climatic factors on the territory of the permanent deployment of the aircraft units on the territory of Ukraine and in the area of Robertsfield aerodrome (Liberia). In the context of the problem discussed, it should be noted that the annual average indices of the air temperature in the area of Robertsfield aerodrome (Liberia) amount to 27.6±0.3° C, the amount of precipitations during the year – to 833.1±19.8 mm, and the air temperature daily variations – to 5.3±0.3° C. In Ukraine, in the places of permanent deployment of the aircraft units the annual indices of the air temperature and the amount of yearly precipitations definitely have (p<0,001) lower values: 9.3±2.7° C and 51.5±5.8 mm respectively; they definitely have (p<0,001) higher values of the daily air variations amounting to 8.8±0.9° C. With respect to these data the African climate can be described as hotter, more humid and less aggressive as to the meteorological sensitivity in comparison with Ukraine.

It is conceivable that the availability of the above differences can negatively affect the body of the MP. With the aim of revealing the peculiarities of these effects we have carried out the analysis of the subjective assessment results by the contingent specified of the levels of perceiving the air temperature and humidity, its variations during the day and the amount of precipitations during the stay on the African continent.

Thus, according to the 100-grid scale the subjective assessment of the levels of the air temperature perception by MPs during the nine-month-long stay in the area of the UN IPO amounts to 73.5 ± 2.5 points, the daily air temperature variations – to 47.4 ± 4.4 points, the air humidity – to 40.5 ± 4.4 points and the amount of precipitations – to 37.4 ± 4.6 points. In general, the above testifies to a sufficiently high level of the climatic comfort of the contingent specified as to the air temperature indices, and to a much lower level with respect to the variation values of the daily air temperature, air humidity and amount of precipitations.

Otherwise speaking, the area of Robertsfield aerodrome (Liberia) lacks the distinct climatic seasonal orientation according to temperature characteristics and is less aggressive as to the meteorological sensitivity in comparison with Ukraine, but notwithstanding the above mentioned, it is not persistently high air temperature values that affect the body of the contingent specified most negatively. These values are within the limits of the temperature comfort perception, so the absence of the air variations during the day and high values of the air humidity and considerable amounts of precipitations in the period of rains are of great importance for the Ukrainians.

The availability of the vital hazard (to life and health) among the UN IPO and JFO MPs is yet another hygienic factor which can result in the development of the considerable and sustained nervous and emotional stress with the possibility of the further formation of the symptoms of psychological disorders.

With respect to revealing the peculiarities related to the effects of the specified psychogenic factor on the bodies of both contingents, we have carried out the subjective assessment of the levels of the vital hazard they perceived (table 2).

Table 2

The results of the subjective assessment of the level of perceiving vital hazard, levels and duration of adaptation to specific conditions of service by the MPs of the UN IPO and JFO, M \pm m

Subjective values	Contingent of the MPs		Level of reliability
	in the area of the UN NPO	in the area of JFO	
Levels of vital hazard perception, points (according to 100-grid scale)	42.20 ± 3.12	62.56 ± 2.36	$p < 0.001$
Level of MPs adaptation to specific conditions of military service, points (by 100-grid scale)	83.45 ± 2.52	71.26 ± 1.67	$p < 0.001$
Duration of MPs adaptation to specific conditions of military service, days	14.45 ± 1.23	5.64 ± 0.81	$p < 0.001$

Note: p – the level of reliability of differences between subjective values according to t-Student criterion.

When analyzing the data suggested, it is apparent that the hazard of being poisoned or infected with tropical infections during the UN IPO (notwithstanding its longer duration) appears sufficiently lower and less significant, as compared to the risk of being killed or wounded during JFO. And it is naturally determined, since the long-term and mid-term prognostication connected with the quality and duration of life in general, and professional longevity in particular after tropical infectious diseases suffered proves more favorable in contrast to the aftereffects of combat injuries during JFO which, in its turn, appears to be a direct and real threat to both the life duration and quality, and to the preservation of suitability to flight performance and health in general.

With due respect to the suggested research results related to the hygienic assessment of specific conditions of the professional activities of the MPs during their stay in the area of the UN IPO and JFO, there appears one more interesting subject connected with determining the levels and the duration of adaptation to them. With this in view, we have carried out the analysis of the subjective values of the characteristic features specified (table 2).

It is apparent that the subjective values of the level and duration of adaptation of MPs to specific conditions of military service during their stay in the area of the UN IPO definitely exceed the corresponding values of the MPs during their stay in the area of JFO. In other words, the adaptation of the UN Peacekeeping contingent to the specific conditions of the professional activities appears to be 2.4 times longer, though more effective, as compared to that of the JFO MPs. The way we see it, the situation specified can be explained on the plane of taking into account the duration of stay in the area of the UN IPO and JFO; the availability of the unconventional climatic environment and the level of hazard to life. As a matter of fact, the subjective assessment of the duration of adaptation by man in general is connected with the perception of vital activity environment, and in our case – with the availability of climatic differences in the area of the UN IPO and by their absence in the area of JFO. That's why, the adaptation duration of the peacekeeping contingent proves longer, and the stay in the area of the UN IPO within 9 months and the availability of less noticeable vital hazard stipulates a better formedness of the subjective perception of a higher level of adaptation to the existing conditions of professional activities.

When discussing the materials presented, it should be noted that at present, in Ukraine there exists the national system of medical support of the aircraft flights which is entirely based on the yearslong experience of studying the conditions and peculiarities of flight work, mechanisms and consequences of the negative effects of the professional environment factors and working process on the bodies of MPs [0, 0]. Even though the efficiency of the above system did not give rise to doubts by the mid of the 90s of the last millennium, but in the period of 1996–2016 one could observe the advancing and drastic deterioration in the level of the professional health of the contingent specified, when the age margin of this deterioration became displaced for more than 20 years [0]! It's quite natural, there are a lot of reasons to account for the situation. First, it is an aggressive effects of the complex of socially stipulated, demographic, ecological and economic factors [0, 0, 0, 0, 0]. According to the job specification assessment of the work of modern pilots, their work is harmful and especially hard and tense even under normal circumstances [0, 0, 0]. Nevertheless, the obtained results of the hygienic characteristics of the complex of factors of professional activities which appear during the UN IPO and JFO, under the subjective assessment of the levels and duration of adaptation of long-term separation from the habitual environment of life activities; the negative effects of the climatic factors and vital hazard high level testify to the fact that the specific conditions presented are able to substantially complicate the professional activities of MPs, bring about the development of disadaptive disorders, thus necessitating their timely regard under carrying out medical support of the contingents specified with the aim of extending the professional longevity of the above servicemen, as well as for a more efficient and reliable use of the personnel potentials and for increasing the combat readiness of aviation units.

Conclusions

1. The paper suggests the complex and presents the comparative characteristics of organizational, climatic, psychogenic, socially and politically stipulated factors, and determines their importance for the MPs of the UN IPO and JFO. The climatic factors, the significant duration of the separation from the habitual environment of life activities and health hazard which is connected with the risk of being poisoned or infected with tropical infections prove most significant for peacekeepers, whereas the strongly pronounced hazard to life and health due to the risk of death or injury appears most important for JFO MPs.

2. It has been established that the climate in the area of Robertsfield aerodrome (Liberia) is hotter, more humid and less aggressive, as concerns the meteorological sensitivity, as compared to the place of permanent deployment of aircraft units in Ukraine.

3. It has been established that it is not persistently high values of the air temperature (they are within the limits of the temperature comfort perception) but the absence of normal for the Ukrainians variations of this temperature during the day, as well as high indices of the air humidity and considerable amounts of precipitations in the season of rains that affect the bodies of MPs of the UN IPO most negatively.

4. It has been established that the risk of being poisoned or infected with tropical infections during the UN IPO (notwithstanding its longer duration) appears sufficiently lower and less important, as compared to the risk of being killed or injured during JFO.

5. It has been established that though the peacekeeper contingent adaptation to the specific conditions of professional activities lasts 2,4 times longer due to the availability of climatic differences, but more efficient as compared to JFO MPs which can be explained by the longer duration of the UN IPO and by the availability of less pronounced vital hazard which stipulated a better formedness of its subjective perception.

References

1. Blinov OA. *Psykholohiya boyovoyi psykhnichnoyi travmy*. Kyiv: Vydavnytstvo NG. 2016: 183. [in Ukrainian]
2. Yena, AI, Masluk VV, Serhiyenko AV. Aktualnist i orhanizatsiyni zasady medyko-psykholohichnoyi reabilitatsiyni uchasnykiv antyterorystychnoyi operatsiyni. *Naukovyi zhurnal MOZ Ukrainy*. 2014; 1(5): 5–16. [in Ukrainian]
3. Zminy do Pravyl medychnoho zabezpechennya polyotiv derzhavnoyi aviatsiyni Ukrainy. Nakaz Ministerstva oborony Ukrainy vid 19.10.018 poky N. 525, zareyestrovanyi v Ministerstvi yustytzii Ukrainy 12.11.2018 poky N. 1286/32738. [in Ukrainian]
4. Kalnysh VV, Schepankov SM. Dynamika zminy nervovo-emosiynoho napruzhennya za chas перебування особового складу myrotvorchoho kontynhentu v Liberiyni. *Viyskova medytsyna Ukrainy*. 2017; 3-4(17): 99–106. [in Ukrainian]
5. Kokun OM. Kilkisna ta yakisna otsinka tryvaloyi psykholohichnoyi hotovnosti viyskovosluzhbovtziv do myrotvorchoyi diyalnosti. *Visnyk Natsionalnoho universytetu oborony Ukrainy*. 2011; 5(24): 153–158. [in Ukrainian]
6. Kompaniets OA. *Systema zabezpechennya pratsezdatsnosti osib lyotnoho skladu [dysertatsiya]*. Kyiv: DU “Instytut medytsyny pratsi AMN Ukrainy”. 2009: 36. [in Ukrainian]
7. Kotuza AS, Kamalov RKh, Rud VI. Orhanizatsiyni zasady medychnoho zabezpechennya viysk (syl) u riznykh klimato-heohrafichnykh umovakh. Kyiv: UVMA, 2011: 232. [in Ukrainian]
8. Kravchuk VV. Kharakterystyka dynamiky zmin pokaznykiv profesiynoho zdorovya viyskovykh lyotchykiv. *Viyskova medytsyna Ukrainy*. 2018; 4(19): 55–62. [in Ukrainian]

9. Lashyn OI. Funktsionalno-orhanizatsiyna model medychnoho ta medyko-psykholohichnoho suprovodu viyskovosluzhbovtziv z PTSR. Viyskova medytsyna Ukrainy. 2018; 3(18): 122–127. [in Ukrainian]
10. Pravyla medychnoho zabezpechennya polyotiv derzhavnoyi aviatsiyyi Ukrainy. Nakaz Ministerstva oborony Ukrainy vid 30.09.015 roku N. 519, zarejestrovanyi v Ministerstvi yustytzii Ukrainy vid 22.10.2015 roku N. 1287/27732. [in Ukrainian]
11. Psykhiatriya osoblyvoho periodu: Navchalnyi posibnyk. Kyiv: UVMA, 2014: 193. [in Ukrainian]
12. Khatsanovskiy VS. Metodychna systema pidhotovky myrotvorchykh kontyhentiv i myrotvorchoho personalu Zbroynykh Syl Ukrainy. Pedahohika i psykholohiya profesynoyi osvity: naukovy-metodychny zhurnal. 2012; 5: 78–87. [in Ukrainian]
13. Shvets AV, Kalnysh VV. Doslidzhennya umov i kharakteru pratsi ta yikh vplyvu na psykhofiziolohichniy status ukrayinskykh myrotvortsiv u Liberiyyi ta Iraku (povidomlennya druhe). Ukrayinsky zhurnal z problem medytsyny pratsi. 2007; 2: 47–54. [in Ukrainian]
14. Cahill J, Cullen P, Anwer S. The Requirements for New Tools for Use by Pilots and the Aviation Industry to Manage Risks Pertaining to Work-Related Stress (WRS) and Wellbeing, and the Ensuing Impact on Performance and Safety. Technologies. 2020; 8: 40. Doi:10.3390/technologies 8030040.
15. Demerouti E, Veldhuis W, Coombes C, Hunter R. Burnout among pilots: psychosocial factors related to happiness and performance at simulator training. Ergonomics. 2019; 2(62): 233–245.

Стаття надійшла 12.03.2020 р.

DOI 10.26724/2079-8334-2021-1-75-95-100

UDC 618.13-002:616-022.7

T.A. Lisyana, A.K. Salmanov, O.N. Katsalap, I.G. Ponomarova, S.Y. Krishchuk
SI “Institute of Pediatrics, Obstetrics and Gynecology named after Academician O. Lukyanova,
the NAMS of Ukraine”, Kyiv

TRENDS IN CHANGES OF LEADING BACTERIAL CAUSATIVE AGENTS OF PELVIC INFLAMMATORY DISEASES IN WOMEN DURING 2013-2017

e-mail: microbiki@gmail.com

Over the last decade, both in the world and in Ukraine, there has been a significant increase in the incidence of pelvic inflammatory disease in women. The purpose of the study was to evaluate the trends in the leading bacterial causative agents of pelvic inflammatory diseases during 2013-2017 in 554 women in the disease exacerbation. The results of the examination of patients for the period from 2013 to 2017 indicate: inoculation rate fluctuations of individual bacterial inflammatory factors in different years of the study, increasing vaginal contamination of patients with opportunistic pathogens and a significant frequency of contamination with fungi of the genus *Candida* on the background of protective bacteria deficiency. The structure of vaginal bacteriological flora in women was dominated by *S. epidermidis* (haem+), *E. faecalis*, *S. haemolyticus*, *E. coli* and *Kl. pneumoniae*, which frequency and quantitative indices of inoculation in the observation trends tended to increase. The obtained data indicate the need for microbiological monitoring of changes in pathogens of pelvic inflammatory diseases in order to timely identify violations of microecology and prescribe rational therapy regimens.

Key words: trends in changes, bacterial causative agents, pelvic inflammatory diseases.

Т.О. Лісяна, А.Г. Салманов, О.М. Кацалап, І.Г. Пономарьова, С.Ю. Крішук

ДИНАМІКА ЗМІН ПРОВІДНИХ БАКТЕРІАЛЬНИХ ЗБУДНИКІВ ЗАПАЛЬНИХ ЗАХВОРЮВАНЬ ОРГАНІВ МАЛОГО ТАЗА У ЖІНОК ЗА ПЕРІОД 2013-2017 рр.

За останнє десятиріччя, як у світі, так і в Україні, реєструється суттєве зростання частоти запальних захворювань органів малого тазу у жінок. В задачі роботи входило вивчення динаміки провідних бактеріальних збудників запальних захворювань статевих органів на протязі 2013-2017рр у 554 жінок в гострій фазі захворювання. Результати обстеження хворих за період з 2013 року по 2017 рік свідчать про коливання показників висіву окремих бактеріальних чинників запалення в різні роки дослідження, зростання рівня контамінації піхви хворих умовно-патогенною мікрофлорою та значну частоту обсіменіння гр. р. *Candida* на фоні дефіциту захисної мікрофлори. В структурі бактеріологічної флори піхви у жінок переважали *S. epidermidis* (гем+), *E. faecalis*, *S. haemolyticus*, *E. coli* та *Kl. pneumoniae*, частота та кількісні показники висіву яких в динаміці спостереження мали тенденцію до збільшення. Одержані дані свідчать про необхідність мікробіологічного моніторингу за зміною збудників запальних захворювань органів малого тазу з метою своєчасного виявлення порушень мікроекології та призначення раціональних схем терапії.

Ключові слова: динаміка змін, бактеріальні збудники, запальні захворювання органів малого тазу.

The article is a fragment of the research project “To study the possibilities of optimizing cervical erosion treatment in women of childbearing age with chronic inflammatory diseases of the genital organs”, state registration No. 0117U002900.

Over the last decade, both in the world and in Ukraine, there has been a significant increase in the incidence of pelvic inflammatory diseases (PID) in women, which is associated with the deterioration of social-economic and environmental living conditions, migration, sexual behavior of young people, the use of contraception and invasive gynecological methods, the widespread use of antibacterial and hormonal drugs [2, 5].