

The surface tension experiments were performed using the drop/bubble profile analysis tensiometers PAT2 (SINTERFACE Technologies, Germany). In this study the pendant drop configuration was used. The temperature of the measuring glass cell was controlled at 25 °C [2].

In the process of comparing tensiometric and rheologic characteristics a number of authentic distinctions were revealed: reduction of the level of a stress viscoelasticity module and surface-tension, increase of tangent of slope angle and time of relaxation in a stress experiment in patients with asymptomatic neurosyphilitic. A correlation analysis has been carried out between clinical, serum and tenziometrical indices.

The following results have been obtained at patients with AN: reverse correlation dependence between stress visco-elasticity modulus and pleocytosis – (–0,7), with protein (–0,6); direct correlation with immunofluorescence reaction (0,9). Direct correlation dependence between FTA and time of relaxation (0,6), reverse correlation (–0,5) with surface-tension, as well as reverse correlation (–0,5) between the tangent of maximum angle of slope tenziometric line and content of protein.

The dependencies discussed above show the applicability of the studies of the CSF dilatation rheology for the diagnostics of the neurosyphilis and subsequent differential diagnostics of the concomitant diseases. A value of  $a_1$  above 40 mN/m undoubtedly indicates the absence of nervous system pathologies for the syphilitic patients. If this value is lower than 32 mN/m it can be concluded that the syphilis is accompanied by neurologic diseases, mainly a discirculator or toxic encephalopathy.

The values of the parameters  $a_1$ ,  $a_2$  and  $b_1$  which describe the dilatation rheology at the harmonic oscillations of the drop area, exhibit essential differences ( $p < 0,1$ ) between the group of patients and the reference group. The significant differences ( $p < 0,05$ ) were observed in the  $a_1$  values (the elasticity at the frequency 1 rad/s) for the patients from first and reference group. It should be noted that a strong correlation ( $r = 0,9$ ) exists between the values of  $a_1$  and  $E$  (stress modulus) for groups of patients. This is just what should be expected, because these parameters refer to different method of dilatation rheology studies (stress and harmonic deformation) both involving a quite small contribution of the imaginary constituent into the surface visco-elasticity.

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#### PROTECTING REPRODUCTIVE HEALTH OF YOUTH

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The article presents an evaluation and operational experience of «Youth-friendly clinics» that have been organized in Russia according to a program of the International organization of healthcare in collaboration with infantry fund of UN (UNICEF).

Demographic situation in Russia remains unfavourable in both quantitative (decrease in population) and qualitative (decrease in expected life period, demographic aging) meanings. A high death rate, drop of birth level and natural decrease in population in Russia (since 1992) are defined by a negative impact of economic and social factors that have obtained a stable long-term nature. Increase reproductive behavior of the country does not change and if one-child family remains a prevailing type of Russian families, grave forecasts that predict death of Russian nationality as an ethnos can become scary realistic (A.E. Ivanova, 2008, V.I. Starodubov, L.P. Sukhanova, 2012, O.G. Frolova and others, 1999). The explained facts define the significance of preserving reproductive health of the youth.

A great number of models, aimed to assist a teenager, exist in the world: from separate actions of doctors-specialists to narrow-specialized clinics or centers that provide complex medical and social services to the young. In order to generalize the existing information and experience the International organization of healthcare (IOH) in collaboration with population funds of UN (UNFPA) and Infantry funds of UN (UNICEF) has developed joint program on creating youth-friendly clinics (YFC) in 1995 (T.N. Kozhukhovskaya, L.M. Aliyeva, 2012).

A «youth-friendly clinic» (YFC) is an institution that provides complex medical, psychological, and social assistance to teenagers on problems of preserving health according to the following principles: voluntariness, affordability, amicability, and trust. Over 130 YFC have been created in Russian Federation by now.

Within YFC the consultations of the following doctors-specialists have been organized: obstetrician-gynaecologist, urologist-andrologist, legal adviser, social adviser.

YFC provide the following free services:

– Phone consultation with specialists or direct consultation in a clinic;

- Examination and preventive inspection with specialists;
- Watching video films;
- Receiving brochures, pamphlets, memos on problems of health lifestyle, planning family, contraception, prevention of narcomania, alcoholism, and smoking, infections that are passed on sexually;
- Pregnancy test.

The main requirement towards organization of YFC is placing a clinic in a comfortable and well-equipped building with a separate entrance. A territory, provided to teenagers only, decorated by teenagers, considering their wish and suggestions. Objectives of YFC are:

1. Diagnosis, treatment, and prevention of diseases via organizing consultations and annual preventive examinations.

2. Informational and consultative maintenance, aimed to alter teenager's attitude towards their own health and form a desire to follow a healthy lifestyle among them.

Also «Scholl of preparation for healthy maternity and paternity», educational school «Teenager», «School of training volunteers» operate. A work, aimed to train volunteers from students that are ready to participate in enlightenment work with their peers according to the principle of equality. Volunteers help to carry out information campaign of attracting teenagers and youth to YFC. They participate in development and organization of trainings, design of graphic information, assist in carrying out questioning, distributing sanitary-enlightenment literature.

A web-site for Internet consulting has been created within the system of YFC. A teenager can receive a competent answer anonymously and free of charge, and, in case of necessity, he can continue a discussion directly with a specialist. In order to attract teenagers and youth to YFC, Wi-Fi areas have been organized in clinics.

In order to provide medical-social and psychological assistance to teenagers and the young, contact phones operate in YFC. They are available round-the-clock.

Efficiency of measures, aimed to protect reproductive health of the studying youth, that have been implemented at the base «Youth-friendly clinic», has been defined by an increase in knowledge on risk factors of reproductive system diseases, awareness of contraception and undesired pregnancy, change in reproductive behavior (safe sexual relations – from 69,2% to 89,6%, constant partner – from 72,5 to 80,4%, usage of hormonal contraceptives – from 8,7% to 15,7%).

96 out of 100 respondents consider creation of specialized center, where teenagers and young people can ask for medical assistance, as a necessity.

Efforts of medical workers only are not enough to educate a healthy generation in physical and moral meaning. Inter-agency approach is necessary in this case. YFC collaborates efficiently with institu-

tions of education and social protection of people, guardianship and trusteeship, youth organizations, bodies of inner affairs, means of mass media. YFM refer to new modern technologies of serving teenagers, they should be developed extensively.

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#### CARRYING OUT SELF-EVALUATION OF A MEDICAL INSTITUTION IN TERMS OF QUALITY CONTEST

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The article presents some basic principles of evaluating activity of medical institutions according to a «Self-evaluation» – correspondence to a management model that the institution selects as a standard.

An improvement in activity of a medical institution is grounded upon regular analysis of a real condition of work according to quality of its results (A.A. Kaliniskaya, A.K. Dzuayev, 2009, V.M. Levvanov, 2012, V.O. Schepin, L.F. Molchanova, A.A. Kaliniskaya, E.Y. Shaktova, 2011).

In the world practice comprehensive analysis of an organization activity that is carried out by employees of this company, has been called «Self-evaluation». It is an overall and systematic analysis of an institution's activity and its results in comparison to a selected standard.

Self-evaluation takes place according to a model of management that has been selected by a certain institution as an ideal example. It can be a model of bonuses for quality or any other international standard (e.g. standards of ISO 9000) or a model, developed within the institution.

All models of business perfection base upon eight fundamental principles that correspond to the concept of «Universal management according