

Social conditionality of genesial behaviour of patients with inflammatory diseases of generative organs

Spółeczne uwarunkowania zachowań rozrodczych u pacjentek z chorobami zapalnymi narządów rozrodczych

IGOR A. NAUMOV^{1/}, EVGENIY M. TISHCHENKO^{1/}, ALEXANDR S. ALEKSANDROVICH^{2/}

^{1/} Education Establishment, Grodno State Medical University, Grodno, Belarus

^{2/} Establishment of Public Health, Grodno Region Clinical Perinatal Centre, Grodno, Belarus

Pacjentki z chorobami zapalnymi narządów rozrodczych (dalej – IDGO) stanowią szczególną grupę podwyższonego ryzyka społecznego, charakteryzującą się niską świadomością dotyczącą dbania o zdrowie rozrodcze, rozrodczą aktywnością, jak również pewnymi cechami społecznymi oraz medycznymi.

Słowa kluczowe: zdrowie rozrodcze, choroby zapalne narządów rozrodczych

Patients with inflammatory diseases of generative organs (further – IDGO) represent the special group of raised social „risk” for which characteristic is low awareness in conservation and strengthening of genesial health, genesial and medical activity, and also a number of the social and medical organizational features.

Key words: genesial health, inflammatory diseases of generative organs

© Hygeia Public Health 2011, 46(1): 71-76

www.h-ph.pl

Nadesłano: 10.11.2010

Zakwalifikowano do druku: 25.01.2011

Adres do korespondencji / Address for correspondence

Professor Eugeniusz Tishchenko
Dean of Medical-Diagnostics Faculty
Grodno State Medical University
Gorkogo str: 80, Grodno, Belarus, 230009
e-mail: mailbox@grsmu.by
e-mail: medsestrgrodno@grsmu.by

Introduction

Conservation and strengthening of genesial health of women is a priority direction of development of medical science.

In modern conditions one of the groups of raised social risk are women suffering from IDGO, whose health status to the full defines potential and genesial possibilities of a society [1, 2] are.

Inflammatory diseases of female generative organs take an essential place in structure of a gynecologic pathology: their specific gravity exceeds 55%, and, last years constant growth of a case rate [3, 4] has been registered. Despite appreciable influence of inflammatory processes on genesial function (10-15% of those women suffer sterility), and on perinatal outcomes, the influence of social factors on genesial behaviour of patients has been insufficiently studied. Therefore the further research of these prominent aspects is actual [5, 6].

Aim

To study the degree of influence of social medical factors on genesial behaviour of women of fertility age with IDGO.

Material and methods

1000 women with IDGO, receiving medical aid in the organisations of public health services of the Grodno area, were divided into 2 peer subgroups – at the age of 18-22 years and 23-27 years.

With the application of regressive analysis the degree of influence of social factors on expected quantity of children in patients was defined. Regression calculation was spent for a surveyed variable and the causes which could affect its formation.

For revealing the risk factors of development of an extragenital pathology the factor analysis was used.

Statistical data processing was made with the use of STATISTICA 6.0.

Results

During a regressive analysis of 18 social indicators interfering with genesial plans, there appeared 4 most significant variables.

The major terminator of the genesial equipments of women with IDGO was the disadvantage of material agents ($\beta = -0.1012$), noted in 64.0% of the subjects. During a correlation analysis it was established that for the majority of women with the decrease of their material security lower were not only the genesial equipments, but also a self-rating of conditions of life ($r = -0.6953$).

The second significant terminator of births of children in women with IDGO were unsatisfactory living conditions ($\beta = -0.0793$) – 22.0% of answers. Thus, however, it was established that in the majority of patients (52.0%) 38.0% lived in the private house, and in a separate apartment, and 10.0% – in a hostel. Estimating such important indicator of quality of life as the residing conditions, it was established that patients with high satisfaction of life basically lived separately (60.1% – at the age of 18-22 years, 82.0% – at the age of 23-27 years), and with low satisfaction – together with parents (47.8% and 83.4%, accordingly).

From medical factors the unsatisfactory state of genesial system ($\beta = -0.0772$), noted at 36.8% of the patients appeared the most significant for a predicted childbearing indicator. Disturbances of a menstrual cycle were registered in 50.0% of the respondents at the age of 18-22 years and in 24.0% – at the age of 23-27 years.

Despite that, the assessment of frequency of visitation of the doctor female consultations (further – FC) women at the age of 18-22 years (among not consisting on the dispensary account on pregnancy) appeared as follows: once in half a year and more often – 7.91% (23-27 years – 15.96%, $p < 0.05$), once a year – 32.08% (23-27 years – 48.07%, $p < 0.05$), alternate years – 47.91% (23-27 years – 34.03%, $p < 0.05$), more rarely than 1 time in 2 years – 12.08% (23-27 years – 1.92%, $p < 0.05$). Principal causes behind medical aid in FC in case of a disease were named: «presence of sufficient medical knowledge for independent treatment» (noted in 19.16% to 40.0% of the respondents from both groups, $p < 0.05$), hope that «illness itself will pass» (noted in 38.33% to 45.38%), shyness – (from 22.08% to 44.03%, $p < 0.05$), the big turns at reception to the doctor – (20.0% and 25.96%).

The analysis of references in FC showed that the expected number of birth giving formation of medico-social preconditions to pregnancy planning appeared as the important element. Thus, in the structure of the surveyed birth giving patients at the age of 18-22

years, 70.0% in the affirmative answered a question on planning a pregnancy and course transit pregravidal improvements, however in 42.0% – incomplete. At the age of 23-27 years pregnancy was planned by less than 30% of the surveyed, and only 14.0% passed pregravidal preparation in the conditions of FC ($p < 0.05$), that testifies to rising in the last fifth anniversary (2004-2008) the efficacy of actions for informing teenage girls and women of young genesial age about the advantage of preconceptive improvements.

During the study it was established that pregnancy most often became complicated by threat of discontinuity, an anaemia and gestosis of slight degree. Pregnancy without complications proceeded only in 43.95% of cases among women at the age of 18-22 years and in 24.03% – in more senior age-grade ($p < 0.05$), that also testifies to the efficacy of pregravidal improvements.

The results of an assessment of patients of the priority measures promoting childbirth are the following: the measures reflecting to the politician of the state, referred on support of young monogynopaediums should become the most significant, according to 44.0% of the subjects. Lower importance was assigned to the measures focused on encouragement of motherhood (9.0%) and the organisation of adequate health services of youth, their monogynopaediums, maintenance of genesial function (4.0%). In 42.0% of cases the subjects considered that no measures would help, i.e. the birth of the child would not be planned.

Among the surveyed 24.6% of women experienced one pregnancy, 12.93% – two pregnancies, 4.71% – three pregnancies. Pregnancy outcomes were: artificial abortion – in 82.92%, spontaneous abortion – in 4.13%, labours – in 13.16% of cases. The group of the women who tolerated one medical abortion, compounded 75.9%, two abortions – 17.7%, three – 6.4%.

It was established that among women at the age of 18–22 years in 76.04% of cases the decision on an abortion was accepted by the patient (23-27 years – 65.96%, $p < 0.05$), parents – 13.95% (23-27 years – 0%), together with the husband (the partner) – 10% (23-27 years – 34.03%, $p < 0.05$). Availability of abortion in FC was noted by 100% of the respondents of both groups.

The cause of abortions in the respondents at the age of 18-22 years in 17.91% of the cases was unwillingness (inability) to use contraceptives (23-27 years – 14.03%), housing problems – 10% (23-27 years – 28.07%, $p < 0.05$), difficult financial position – 8.12% (23-27 years – 20%, $p < 0.05$), absence of husband – 8.12% (23-27 years – 8.07%), study

– 8.12% (23-27 years – 1.92%, $p < 0.05$), presence of children of preschool age – 3.95% (23-27 years – 10.0%, $p < 0.05$). Thus the knowledge of women about probable consequences of abortion was insufficient, as 78.0% named only one complication – sterility, only 5.0% – knew two, 2.5% – three complications, and 14.5% of the respondents did not name any or specified erroneous data.

In genesial behaviour low level of literacy concerning the use of contraception methods also had great influence. The appreciable majority of women (94.4%) used contraception methods. However only 38.4% of the questioned applied them regularly, and 11.6% – extremely irregularly. The number of women who were not using contraception, as well as irregularly applying contraceptive methods, was the highest among women of younger genesial age – 20.8% ($p < 0.05$). Actual basic sources of information on contraceptives among women of both groups were mass media, popular literature and opinion of girlfriends. However among women at the age of 23-27 years the information of doctors on contraceptives, and also opinion of parents and sexual partner (fig. 1) were more significant. The contribution of teachers (among students and pupils) in noegenesis on sexual questions was practically absent.

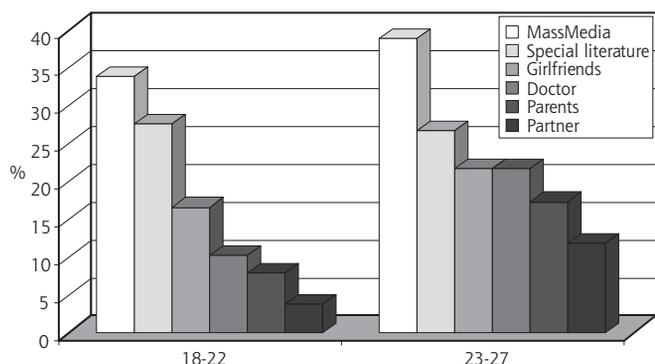


Fig. 1. Actual sources of information on contraceptives among women with IDGO

Among the women of younger genesial age who were not using contraceptives, 27.91% of the patients spoke against their application (23-27 years – 20.0%) as were afraid of side-effects – 16.04% of the respondents (23-27 years – 11.92%) and their harmful influence on health – 10.0% (23-27 years – 8.07%) did not know about them or could not get them – 2.0% of the respondents. At a choice of contraceptives the preference was given to their efficacy – 41.87% (23-27 years – 58.07%), safety – 27.91% (23-27 years – 28.07%), simplicity in application – 11.87% (23-27 years – 4.03%). It is characteristic that 66.03% of the patients felt fear against becoming pregnant.

The significant medical factor for the expected quantity of children at patients with IDGO were also disorders in somatic health status ($\beta = -0.0697$), 26.0% of the women considered their health as bad (fig. 2). The following tendency of change of a self-rating of health of women was thus noted with the years: 14.0% of the surveyed at the age of 18-22 years and 34.0% of the patients of more senior genesial age ($p < 0.05$) estimated the health as „bad”.

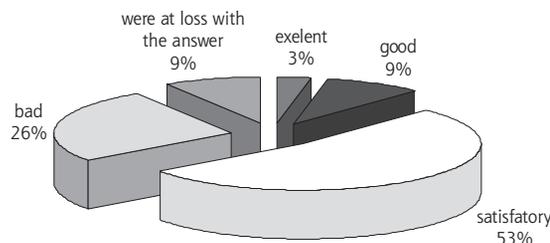


Fig. 2. Patients' self-assessment of somatic health status on a 5-mark scale

It was established that disorders in somatic health status were a consequence of defects in health behaviour of patients with IDGO. During the survey among women at the age of 18-22 years the „health” ranging place appeared the last – 18.33%. During the research on the influence of other vital priorities (a personal component) as a regulator of genesial behaviour, it was established that a group of the most important values of private life included: «presence of good and loyal friends» (74.71%), „self-trust” (73.53%), „development” (71.15%), „freedom” (68.73%), «interesting work» (67.51%), „love” (66.15%).

The most important life sense orientations at patients of more senior genesial age differed a little, and among them „health” was not a priority – 41.13% while «active life» was noted by 68.95% of the subjects, «interesting work» – 62.27%, „love” – 60%, „social recognition” – 55.63%, „development” – 53.37%.

On the basis of a factor analysis 5 phylums of life sense orientations of patients were secured. The first phylum – indicators of a personal orientation: „monogynopaedium” (0.7551), „self-realisation” (0.7452), „friends” (0.7338), „self-trust” (0.7094), „self-development” (0.6566), „freedom” (0.6012), „health” (0.5439). The second phylum – professional values: «active active life» (0.8417), «vital wisdom» (0.6333), «interesting work» (0.6258). The third phylum presented aesthetic values: „creativity” (0.8826), «beauty of the nature and art» (0.8482). The fourth – included values of a hedonistic orientation: «material security» (0.7726), „social recognition” (0.7315), „entertainments” (0.7319). And only

the fifth phylum presented more significant values in a context of strengthening genesial health (further – GH) and genesial behaviour: «Love» (0.7724), «childbearing» (0.5286). It was established that in patients the personal-focused values prevailed, and presence of the specified variables in the first phylum was defined, first of all, by age of respondents. It is remarkable that altruistic values which have basic value in strengthening GH, did not enter into the first factor.

The comparison showed insignificant differences in the hierarchy of values: at the age of 18-22 years of big importance was „rationalism”, „erudition”, „accuracy”, „responsibility”, «efficacy in affairs»; patients of more senior genesial age noticed „cheerfulness”, „rationalism”, «efficacy in affairs», „erudition”, „responsibility” which testifies that for them the concrete personal vital purposes were more important.

During the factor analysis two phylums of values were noted. The first phylum included variables: „responsibility” (0.8244), „sense of duty” (0.7777), „erudition” (0.7701), „rationalism” (0.7695), „self-checking” (0.7537), «efficacy in affairs» (0.7216), „accuracy” (0.6513), „broad views” (0.4086). The second phylum presented such values as: „honesty” (0.7981), „keenness” (0.6589), «irreconcilability with disadvantages of others» (0.6524), „independence” (0.6269). It was established that significant vital equipments represent personal-focused values which are not carrying an altruistic component that is bound, first of all, with the age of the respondents ($r=0.6972$).

It was established that the greatest influence on formation of communicative culture, sex and genesial behaviour of patients had the following factors: girlfriends – 80.3%, sexual partner – 65.3%, and also fellow workers – 63.4%. Despite active dialogue by means of Internet reports, this channel has not rendered appreciable influence on formation of their communicative culture and genesial behaviour.

During the study it was established that the patients showed health care and started to realise its value after numerous acute diseases which considerably lowered quality of life (76.7%), or after an establishment of the fact of a chronic disease (10.8%), 12.2% of the patients were influenced by a negative experience of close relatives and only for 0.3% of the women health care was the standard introduced since childhood, in monogynopaedium (fig. 3).

That health is not the major vital priority at patients with IDGO, proves to be true in 30.0% of the subjects at the age of 18-22 years, and at 33.07% of the respondents of more senior age-grade. They had an

opinion that «it is necessary to care about health in the presence of disease signs». 38.12% of the respondents at the age of 18-22 years were assured that «while young, it is not necessary to reflect about health».

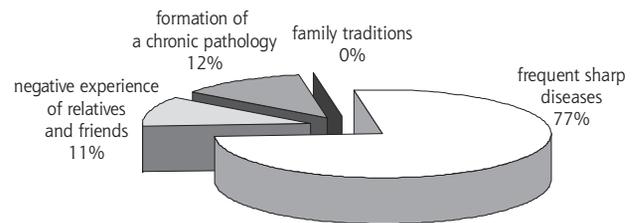


Fig. 3. Structure of the causes forcing care about health

In our opinion, absence in awareness of women of younger genesial age of accurate range of vital priorities testifies to a necessity to actively form in them the conscious and responsible attitude to own health. Higher priority values of health in women at the age of 23-27 years testify about high enough degree of readiness to receive instruction on a healthy mode of life.

During the survey of theoretical readiness of patients with IDGO to health care it was established that, in their opinion, conservation and health strengthening promotes firstly, the rational regimen of work and rest, secondly, timely and high-grade treatment of the present diseases, thirdly, psychologic comfort, fourthly, a motoric fitness, fifthly, abandonment of bad habits (fig. 4).

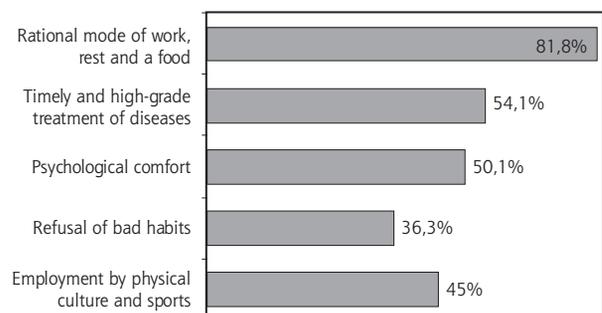


Fig. 4. The factors promoting health conservation, according to patients

However basic elements of rest at women with IDGO were characterized by prevalence of passive forms, and only 12.0% of the respondents went in for sports, 5.83% of the women of younger genesial age and 4.61% of the women at the age of 23-27 years were engaged in physical exercises daily. Physical efficiency defined on a standard load of the Harward step-test, authentically decreased with the years (with 39.1 to 32.8%, $p<0.05$), that, obviously, indicates progressing depression of a motor performance of patients and reveals the subjects' attitude towards a physical component of quality of life. At the same time, 72.0%

of all the subjects noticed that they practically had no free time, and 92.0% – were not satisfied by means of spending it. It is necessary to notice that women of younger genesial age almost equally explained the discontent as a disadvantage of money (40.0%), and own disorganisation (34.16%).

Studying the problems of health has shown that 34.2% of the patients with IDGO manifested sleep problems, 11.8% of the women suffered from insomnia and chronic weariness. The presence of an extragenital pathology (further – EGP) in the chronic form revealed 32.8% of patients, including illnesses of cardiovascular system – 58.2%, respiratory organs – 35.2%, a locomotorium – 13.2%. The youth season (34.6% of women) and maturity (35.1%) was the period of a chronic pathology development. In 70.2% of the subjects chronic disease was generated in school years.

With factor analysis application of 4 factors defining risk of EGP development in patients, explaining 53.0% of a full dispersion of sample were secured. The first factor explains 20.0% of the full dispersion, the second – 13.5%, the third – 10.5%, the fourth – 9.4%. After procedure rotations (varimaks-criterion) the factorial template was obtained (tab. I).

From the data presented in table 1 it follows that the first factor – „smoking” – is significant for risk in the occurrence of chronic EGP. The second factor characterises low physical activity (LFA) patients; the third – the attitude to food – superfluous mass of a body (SMB); the fourth – the attitude to the use of alcohol, narcotic and psychoactive materials (PAM).

From the correlation fields presented in figure 5 it follows that interrelation is absent between factors 1 and 4. At the same time such communication exists

Table I. Risk factors of chronic EGP at patients with IDGO

Variables	Factors			
	1	2	3	4
Later reproductive age	0.1189	-0.1122	0.6871	0.1467
Low educational qualification	-0.0182	0.0230	0.7125	-0.0664
Professional work (low qualification workers)	0.7255	-0.0767	0.1997	0.0257
Material neediness	0.6163	-0.0459	-0.0388	0.2354
Unsatisfactory living conditions	0.2137	-0.0071	0.5566	-0.2614
Unsatisfactory conditions of life	0.1122	0.0837	0.5263	0.0932
Education in an incomplete family	0.6355	-0.0720	0.06886	0.2512
Features of food	0.7217	0.1901	-0.0821	-0.1926
Early beginning of sexual life	0.26481	-0.0833	0.0129	0.76285
changing sexual partners	0.5670	-0.0805	0.2435	-0.1106
Unregistered marriage	-0.0876	0.1281	0.0917	0.8201
Late age of introduction into marriage	0.5764	0.1595	0.1538	-0.0113
Presence of children	0.02629	0.9397	-0.0551	0.0140
Presence of friends	0.01266	0.9386	0.0679	0.0330

The note: the fat font allocates the loadings of variables concerning the certain factor

between the factor 1 and the factor 3. The calculated first initial correlation coefficient is peer $r_c = 0.5893$ ($p < 0.05$).

Negative dynamics of prevalence of risk factors was established with the years: LFA – from 58.1% to 56.9%, SMB – from 9.9% to 17.6%, smoking – from 26.7% to 71.2%, alcohol use – from 45.0% to 60.1%.

And, at 19.2% of the questioned 2 factors, and at 2.2% – three and more risk factors were noted. High indicators of dynamics of reproducibility of risk factors of chronic EGP cause high relative risk of their stabilisation – 44.2-100.0% (depending on the factor and age of patients). Studying the frequency of occurrence of new cases of risk factors in patients of 18-22 years of age and patients of more senior genesial

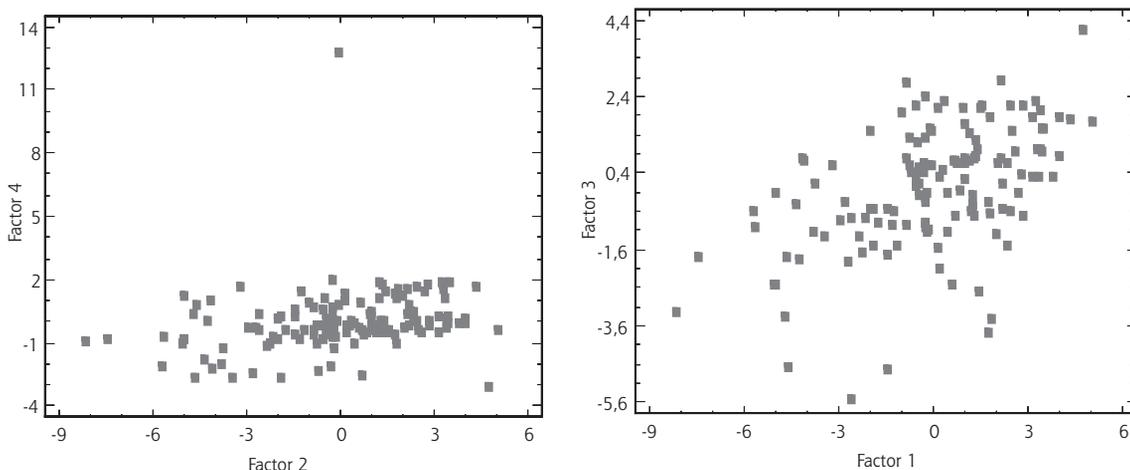


Fig. 5. Correlation fields

age the augmentation for LFA was noted – from 26.6% to 50.0%, alcohol use – from 22.5% to 69.5%, smoking – from 10.5% to 16.9%, SMB – from 4.8% to 9.9%.

It was also established that both smoking and alcohol use had negative influence not only on a health self-rating ($r = -0.6432$), but also on the degree of satisfaction of IDGO patients with quality of life ($r = -0.6823$).

The interrelation between a financial position and actual frequency of EGP in patients with IDGO ($r = -0.6947$) was noted. Over 35% of more financially secure respondents answered that they were actually not ill, and among women with an average prosperity such was already only 10.0% ($p < 0.05$). Continuation of process of reproduction with socially-

caused diseases – tobacco smoking, alcoholism and narcomania, sexually transferred infections – were social consequences among patients with low level of material maintenance.

Conclusion

Patients with IDGO represent the special group of raised medico-social risk, which is characterized by low awareness in questions of conservation and strengthening of GH, genesial and medical activity, and also a number of the features caused by the social and medico-organizational causes. In this connection, conservation and strengthening of GH is the multicomponent problem where decisions can be reached only at the complex social approach.

Piśmiennictwo / References

1. Seddon ME, et al. A systematic review of studies of quality of clinical care in general practice in the UK, Australia and New Zealand. *Qual Health Care* 2001, 10: 152-158.
2. Ross JDC, Jensen JS. *Mycoplasma genitalium* as a sexually transmitted infection: implications for screening, testing, and treatment. *Sex Transm Infect* 2006, 82: 269-271.
3. Gray Y, Libbey NP. Xanthogranulomatous salpingitis and oophoritis: a case report and review of the literature. *Arch Pathol Lab Med* 2001, 125, 2: 260-263.
4. Mardh PA. Tubal factor infertility, with special regard to chlamydial salpingitis. *Curr Opin Infect Dis* 2004, 17(1): 49-52.
5. Horner P. The case for further treatment studies of uncomplicated genital *Chlamydia trachomatis* infection. *Sex Transm Infect* 2006, 82: 340-343.
6. McIlhaney JS Jr. Sexually transmitted infection and teenage sexuality. *Am J Obstet Gynecol* 2000, 183(2): 334-339.