

RESULTS OF MASS PROPHYLACTICAL AND OCCUPATIONAL EXPERT EXAMINATION OF WORKERS FROM THE SHIPBUILDING PLANT "G. DIMITROV" — VARNA

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The Eleventh Party Congress has reached important decisions in the field of public health, having a character of a long-term program of development. The chief task emanating from the program adopted is to secure further development and expansion of prophylactical activities in all their aspects. A decision was also taken to organize a gradual transition towards an overall dispensarization of the population on a nationwide scale.

A concrete expression of the line adopted by the Council of Ministers is the "Program for General Dispensarization and Mass Prophylactical Examination of the Population".

Guided by the health care priority for industrial workers, we directed our efforts towards the mass prophylactical and occupational expert examination of workers from the shipbuilding plant "G. Dimitrov" the latter being the most important industrial plant, both on a district and nationwide scale.

To provide for maximum economy of production time, a network timetable was worked out for carrying out the expert examinations of the workers. It was conducted during the months February through April, 1978.

All methods of functional and paraclinical investigations adopted in the practice, as well as examinations by skilled specialists were used. In the contingent under study more than 24 types of laboratory investigations of blood and urine were performed (hemoglobin, erythrocytes, leukocytes, erythrocyte sedimentation rate, differential count, cholesterol, blood sugar, methemoglobin, thrombocytes, reticulocytes, punctate erythrocytes, bleeding time, coagulation time, pH, specific weight, acetone, albumin, sugar, sediment, bilirubin, urobilinogen, titration acidity, ammonia, chlorides, coproporphyrin etc), as well as more than 22 physical and functional examinations (visual acuity, ocular pressure, anthropometry, dynamometry, spirometry, ECG, cold test, capillaroscopy, X-rays, audiometry, oscillography and the like). The examinations were conducted by a functional mass prophylactical and occupational expert examination (MPOEE) team, including mandatorily a neurologist, dermatologist, ophthalmologist, otorhinolaryngologist, surgeon, cardiologist, an expert in occupational pathology and the working shop physician. When indications were present, additional consultative examinations of cases, screened by the routine clinical investigation, were carried out by specialists such as pulmonologists, endocrinologists, orthopaedic surgeons and gastroenterologists.

From all individuals requiring additional investigation and consultation, bioproducts for study were obtained on the site, and the patients were referred to the respective consulting experts in the polyclinic. Within

a week or maximum ten days, they receive the expert examination conclusion.

The results of the examinations performed are the following:

The relative share of women, covered by prophylactical expert examinations, amounts to 40.74 per cent, and that of the men — to 59.26 per cent. The relative share of cases with variations amounts to 35.48 per cent of the total number of cases under study.

The mean number of variations per single patients is 1.13 per cent. In women this indicator is insignificantly lower, as compared to men.

Table 1 shows the structure of actual (moment) morbidity established at the prophylactical examination. The impression is that the relative share of the newly discovered morbidity is very high — 28.55 per cent, and of the confirmed one — 6.93 per cent, or 80.40 per cent of the newly discovered actual morbidity. Having in mind the requirements in the instruction for carrying out systematic periodic prophylactical examinations of persons exposed to occupational noxae, the established fact proves a rather unfavourable criterion about the work done by the medical service staff in the plant.

Table 1

Structure of the Actual Morbid State Established by the Prophylactical Examination

	Men	Women	Total
Subjects with newly discovered diseases	30.12	16.74	28.55
Subjects with confirmed diseases	6.56	9.77	6.93
Healthy subjects	63.32	73.49	64.52

The structure and incidence of newly discovered diseases by class and sex is noteworthy (Table 2).

Diseases of the nervous system and sensory organs display the highest incidence — 159.39‰, and of them inflammatory diseases of the eyes, and lesions of the peripheral nerves rank first. They constitute more than half of the newly discovered diseases at the examination. The latter fact demands special awareness on behalf of the health officers in terms of this particular pathology. Second by relative share (12.68 per cent) rank diseases of the circulation organs. Their incidence amounts to 39.30‰ of the affections in this particular class, and special attention is called to hypertension and chronic rheumatic cardiopathology. Close to their incidence is that of psychosis and nonpsychotic conditions (28.38‰), which rank third in the structure of newly discovered infirmity. The further classification of diseases by relative share and incidence shows that fourth come the noise-vibration diseases, and fifth — the condition of mixed deafness. The latter two occupational diseases constitute a medicosocial problem of utmost importance for the shipbuilding plant. The diseases of four classes, e. g. diseases of the nervous system and sensory organs, circulation organs, psychoses and psychoneuroses, and the class of accidents, injuries and poisonings, account for 87.11 per cent of the newly discovered morbidity.

Table 2

**Newly Discovered Diseases by Class and Sex
(per ‰ of population)**

Class of disease	Relative share			Incidence per ‰		
	men	women	total	men	women	total
Endocrine and metabolic diseases	1.13	5.72	1.41	3.71	9.36	4.37
Diseases of blood and hematopoietic organs	0.19	2.86	0.35	0.62	4.65	1.09
Mental disorders	8.63	17.14	9.15	28.45	27.91	28.38
Diseases of nervous sys. and sensory organs	52.16	40.00	51.40	171.92	65.12	159.39
Diseases of circulation organs	12.38	17.15	12.68	40.82	27.90	39.30
Diseases of respiratory system	1.14	2.86	1.23	3.72	4.65	3.82
Diseases of digestive system	5.44	2.86	5.29	17.94	4.65	16.38
Diseases of urogenital system						
Diseases of musculoskeletal system+connective tissues	1.12	2.86	1.23	3.72	4.65	3.82
Accidents, poisonings, violence/ aggression	2.25	2.86	2.29	7.42	4.65	7.10
Noise-vibration disease	0.94	—	0.88	3.09	—	2.73
Mixed (sensorineural) deafness	7.88	2.86	7.57	25.97	4.65	28.47
	6.75	2.86	6.51	22.26	4.65	20.20
Total				329.62	162.78	310.05

An analogical classification of diseases on the basis of relative share and incidence is observed in men too. In women there are some differences. Fourth and fifth place are occupied by thyrotoxicosis with or without gout, diabetes and anemias, instead of the noise-vibration disease and mixed deafness.

Table 3

**Total Morbidity by Class of Diseases and Sex
(per ‰ of population)**

Class of disease	Relative share			Incidence per ‰		
	men	women	total	men	women	total
Endocrine and metabolic diseases	1.23	5.00	1.55	4.95	13.95	6.00
Diseases of blood and hematopoietic organs	0.15	3.33	0.42	0.62	9.30	1.64
Mental disorders	9.13	20.00	10.06	36.49	55.81	38.76
Diseases of nervous sys. and sensory organs	45.50	33.53	44.47	181.83	93.03	171.40
Diseases of circulation organs	13.62	18.34	14.02	53.52	51.16	54.03
Diseases of respiratory system	2.31	1.67	2.26	9.28	4.65	8.74
Diseases of the digestive system	10.84	8.34	10.61	43.29	23.25	40.94
Diseases of urogenital system	1.70	5.00	1.98	6.80	13.95	7.65
Diseases of the musculoskeletal system+connective tissues	2.17	1.67	2.12	8.66	4.65	8.19
Accidents, poisonings, violence/aggression	0.93	—	0.85	3.71	—	3.28
Noise-vibration disease	6.81	1.67	6.37	27.21	4.65	24.56
Mixed deafness	5.57	1.67	5.24	22.26	4.65	20.20

The above data concerning classification of diseases by relative share and incidence of newly discovered morbidity is characteristic of the established actual morbidity also (Table 3).

Our research is in course, and is aimed at discovering an eventual correlation between the different classes of diseases and some biological, social and psychological factors, characteristic of workers employed in the shipbuilding plant, and of the working conditions in its various departments.

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РЕЗУЛЬТАТЫ МАССОВОГО ПРОФИЛАКТИЧЕСКОГО И ПРОФПАТОЛОГИЧЕСКОГО ОСВИДЕТЕЛЬСТВОВАНИЯ РАБОЧИХ ЗАВОДА КОРАБЛЕСТРОЕНИЯ «ГЕОРГИ ДИМИТРОВ» ГОРОДА ВАРНЫ

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РЕЗЮМЕ

Проведено массовое профилактическое и профпатологическое освидетельствование рабочих КЗ «Г. Димитров» путем специально созданного сетевого графика. Вновь обнаруженная заболеваемость составляет 80,40% общей заболеваемости. Этот факт указывает на недостаточную несистемную профилактическую работу медицинских работников.

Структура заболеваемости по отдельным классом заболеваний показывает, что наибольший удельный вес приходится на болезни нервной системы и органов чувств (51,40%), затем следуют заболевания органов кровообращения (12,68%), психозы и психоневрозы (9,15%). Проблемой для кораблестроения являются шумо-вибрационная болезнь (7,57%) и смешанная глухота (6,51%).