USSR Letter

Some social influences on workers' morbidity

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Even in a totalitarian State, it may be said, disinterested intellectual curiosity will prompt some doctors to reflect on the social causation of disease and disorders. Moreover, the rulers of such a State may have good cause to instigate inquiries into the influence on morbidity of domestic circumstances and related factors. In the Soviet Union, at least, concern to reduce the number of days that workers spend "off sick" has given rise to limited studies of this type among the economically active population.

It is unnecessary to hypothesise about the reasons underlying this policy, since the censorship makes no attempt to conceal or qualify the overtly utilitarian objectives of reducing production losses and the level of social security expenditure. Indeed, a recently published article concludes with a calculation of the value in roubles of the additional production, reduction in sickness benefit, and savings in health service costs that would have accrued in one factory given the absence of what is termed an "unsatisfactory" group of manual workers.¹

An unnamed factory

If health economists in the West are apt to regard such a calculus as naive, probably epidemiologists and sociologists would raise methodological objections to other details of the study in question. In giving an account of it, however, my intention is to focus not on methodology but on the substantive findings that help to illuminate some of the shadowy outlines of daily life for the Russian urban proletariat.

The authors of the study are staff at the medical institute of Sverdlovsk, a city of some 1 200 000 people in the Ural mountains. It is "closed" to visitors from the West, possibly owing to the presence of military installations, munitions factories, and the like. Contrary to convention, moreover, the authors do not specify the precise employment of the manual workers whose sickness absence they investigated. To avoid the differential impact on health of different occupations, they chose to study workers in a single enterprise; there were 2670 in this "homogeneous industrial group." Two sources provided information about them: sickness certificates covering a four-year period and replies to a questionnaire administered to those who had been employed at the enterprise for over three years.

Burden of housework

The basic analysis by sex and age showed that 63% were women and that 74% of the workers were over 40. Among respondents to the questionnaire, 12% were childless, 4% had

not less than three children, while the remaining majority had one or two children each. According to the 1979 census, the average size of an urban family unit in the Russian Republic (in which Sverdlovsk is located) was 3.2 persons.

Despite the fact that few women had large families to care for, as many as 63% reported spending over three hours a day on housework. To appreciate the extent of a Russian wife's "double burden"—at home and at work—it is essential to bear in mind the shortage of convenience foods and the comparatively low rates of ownership for labour-saving equipment such as dish-washers. But the ability of the Soviet economy to satisfy demand for these (and many other) consumer durables is compounded by a sociocultural factor—namely, the Russian man's unwillingness to help with household and child-rearing chores.

The study found a direct correlation between time spent on housework and incidence of illness, as measured by certificated days of sickness absence. Women occupied by housework for over three hours a day had more days "off sick" in respect of necroses and diseases of the circulatory system, the peripheral nervous system, and the digestive system. In comment on this finding, the authors write: "The prevalence of the above-mentioned illnesses among women spending a great deal of time on domestic work can be explained by continuous nervous and physical tension, overtiredness, and possibly by irregularity of meals."

Drinking, smoking, and marital tensions

Among the male workers 74% smoked and 58% consumed alcohol (to what extent the article does not state), and the harmful effects of these habits emerged sharply. Taking them in order, it was found that for smokers the days off sick per 100 persons were higher than for non-smokers in respect of: chronic respiratory diseases (by 7.8 days), diseases of the digestive organs (26.6), and of the circulatory system (43.0). Among those men who were considered to have "abused" alcohol, sickness absences per 100 persons were higher for: neuroses (by 11.7 days), neoplasms (12.9), diseases of the urogenital system (24.5), hypertonic disease (28.8), and gall stones (42.5).

Although the authors do not attempt to tease out the influence of drinking on marital tensions, they certainly display an interest in the relevance of "good family relationships" to workers' health. Presumably on the basis of self-reporting in the replies to the questionnaire, they recorded "harmonious family conditions" among the vast majority of workers—79%: nevertheless, 20% of respondents "voiced complaints of continual conflicts in the family." Incidentally, it would be erroneous to seize on that figure as providing evidence that many marriages whose reality is ended have to be maintained as legal entities due to the difficulties or cost of undertaking divorce proceedings: divorce in the Soviet Union is cheap and entails a minimum of formalities. In fact the high rate of divorce among

ethnic Russians is perceived by the Government as an alarming trend, which needs to be countered by new social policies and propaganda designed to strengthen marriage.

According to the article, significant differences in morbidity experience emerged between workers living in harmonious domestic conditions and those from homes where continuous conflicts were reported. The days of sickness absence among the latter group were higher—not unpredictably—in respect of neuroses, diseases of the heart, ulcerous conditions of the stomach, and hypertension.

As for the association between ill-health and income, which might be supposed a fruitful topic for investigation, what little the article has to say is imprecise and obscure. It gives no figures for wages per worker, but points to variations in family income: 29% of respondents were members of households where the per capita income was above 90 roubles a month and 23% were members of households with an income of below 60 roubles a month per head. Whether these figures denote what the researchers call “material security” cannot be established—since they do not define the concept—but it seems highly probable. Their conclusion, whatever problems of interpretation it may raise, was as follows: “The investigation did not reveal significant variations in the morbidity of workers who had different levels of material security. The correlation was not altered by standardisation in respect of age and sex.”

Influence of housing

By contrast, the quality of housing was shown to have significant explanatory power. It may appear puzzling that the study did not identify housing as an intermediate variable linking income with sickness. Almost certainly, though, the explanation for this omission lies in the fact that the matching of urban flats and urban families is achieved largely through administrative action and not through market forces. It is also relevant that, generally speaking, payment of rent accounts for only a small proportion of outgoings, even for low-income families.

If accommodation costs as met by the householder are invariably low, amenities and amount of space per person often leave much to be desired, at least by British standards. A substantial proportion of the urban population still lives in communal flats, which are units where kitchen, bathroom, and lavatory facilities are shared by several households. Although the Russians acknowledge the positive aspects of this situation, such as camaraderie and mutual support, they also recognise

the reverse side of the medal: enforced proximity easily gives rise to problems of relationship which, at worst, become unmanageable.

Given the variation in housing conditions of the workers, the researchers decided to take account of this feature by means of a simple weighting scheme. They allocated the highest number of points to workers whose flats were self-contained, had “all the modern conveniences” (which means central heating, hot and cold running water, etc), and contained living space of over nine square metres per person. The lowest number of points were allocated to workers living in an “ordinary communal flat” which lacked modern conveniences, or some of them, and contained living space of under six square metres per person. It seems that 18% of respondents fell into the high and 28% into the low category. Significant variation in sickness absence emerged between the two groups in respect of certain diseases—pulmonary tuberculosis, acute infectious diseases, severe respiratory illness, and acute tonsillitis. So the long-established link between contagious diseases and poor housing was shown once again.

Comment

For nineteenth-century pioneers of public health, such as Sir John Simon, it was axiomatic that the amelioration of poor living conditions required strong government. In the Soviet Union, as hardly needs saying, the State has an absolute monopoly of power and does not have to seek adjustments with powerful private groupings that may obstruct governmental proposals. Nevertheless, institutional vested interests exist there and operate against the good of the general public. A case in point is the military establishment which, together with the political leadership, ensures that a very substantial proportion (estimated at 12-14%) of Soviet national wealth is devoted to the armed Forces and related areas. Whether the proportion is considered to be far in excess of reasonable requirements for defence may be subject to disagreement. But it seems difficult to deny that a lower level of military spending in the USSR would make possible a higher standard of living for the average industrial worker.

Reference

- 1 Antropova VG, Melnikova ZM. Vliyaniye nekotorykh sotsialno-bitovikh faktorov na zabolvaemost rabochikh. *Zdravookhraneniye Rossiskoi Federatsii* 1981;2:21-3.

Is vitamin B₆ useful in treating postnatal depression, premenstrual tension, or other depressions?

The normal daily requirement of pyridoxine (vitamin B₆) is 1-2 mg but this is increased several fold in women taking high-dose oestrogen oral contraceptives. It has thus been suspected as a cause of depression in women taking the pill, but no clear link has been established. There is no convincing evidence that vitamin B₆ has any place in treating premenstrual tension or depression from any cause. When there is a clinical suspicion of pyridoxine deficiency a therapeutic trial of 50 mg of pyridoxine hydrochloride might be justified but without clear symptomatic response should not be continued beyond one month.

Anonymous. Depression and oral contraceptives: the role of pyridoxine. *Drug Ther Bull* 1978;16:86-7.

Over several years a woman has had vague ill health associated with frequent loose offensive motions. By trial and error she has found that wheat flour appears to be the precipitant. Elimination diet has largely removed the signs and symptoms. Now, however, on exposure to wheat

flour, be it accidentally or by social necessity, some two or so hours later she has a migrainous headache followed by a tightness in her throat and chest and later explosive, offensive watery bowel movements. What prophylaxis and treatment are advised?

She might have adult coeliac disease and unless she is on a strict gluten-free diet will probably have an abnormal jejunal mucosa. She should be referred to a physician for peroral jejunal biopsy and for tests of malabsorption and malnutrition. The other, more likely, possibility is of allergy to a component of flour, which is manifesting itself by disordered motor activity in both the intestines and the cranial arteries.^{1 2} Allergy to wheat is the commonest food allergy in migraine,³ and migraine is quite often accompanied by diarrhoea. The only completely reliable prophylaxis and treatment for food allergy is total avoidance of the offending food. In this the help of a trained dietitian is desirable. But first it would be worth while to prove a specific wheat allergy by skin prick tests or blind challenge tests, or both.

¹ Anonymous. Food allergy and intolerance. *Lancet* 1980;ii:1344-5.

² Monro J, Brostoff J, Carini C, Zilkha K. Food allergy in migraine. Study of dietary exclusion and RAST. *Lancet* 1980;ii:1-4.

³ Grant ECG. Food allergies and migraine. *Lancet* 1979;i:966-9.