

ESSENTIAL DRUGS AND THEIR ROLE IN THE HOSPITAL DRUG CONSUMPTION IN THE UNITED REGIONAL CLINICAL HOSPITAL-VARNA IN 1997

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The consumption of the drugs included in the Model List of Essential Drugs (ED) of WHO was studied in the United Regional Clinical Hospital of Varna for the first time. The purpose of the study was to estimate the consumption of these drugs in the hospital as a whole as well as in every hospital division. The monthly variations of the consumption were analyzed according to the specific activity of these divisions. The mean ED consumption by the patients in all the divisions was calculated. Those of them with the highest frequency of ED usage recommended in the Model List were presented. Certain conclusions about the benefit of the introduction of this Model List of ED and its importance for some hospital pharmaco-economic factors were drawn.

Key words: Essential drugs, drug consumption, monthly drug variation, town of Varna

New developments in social life and related changes in the business environment lead to restructuring the drug market and rationalizing the roles of companies and consumers. These changes put new requirements to the governmental hospitals' behaviour. The elaboration of a drug policy taking into account the specificity of each hospital becomes a major priority. A substantial element of the hospital drug policy is the elaboration and approval of a list of used drugs. It is based on international and local standards exist-

ing in this field and on the particular needs of every clinic or hospital. Regardless of the limitation of physicians' access to drugs and the resulting decreased freedom in their clinical practice it is extremely important to the rationalization of the drug consumption.

Since 1977, the World Health Organization (WHO) regularly assesses the consumption of drugs and recommends to medical community these of them that, because of their effectiveness, safety, incontestable therapeutic qualities and good pharmacoeconomical profile, have become a reliable treatment standard. They are included in the Model List of WHO and are known as Essential Drugs (ED). They meet the needs of the majority of the

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population and are available at every moment and level in the health care system. The Bulgarian Model List for hospital drug use is based on them, too. A widely known weakness of the hospitals in Bulgaria is the use of too many drugs per patient (polypragmasia) which can be classified as irrational and "infatuation in fashion". At the same time, WHO has long ago proved that the necessary hospital medications are between 100 and 200, depending on the place of the hospital in the national health care system. That is why the hospital lists can become a major and rational regulator of the drug therapy, particularly until the approval of criteria of Good Clinical Practice (GCP).

The aim of this study is to assess the extent to which the use of drugs in the United Regional Clinical Hospital of Varna (URCH-Varna) conforms to the Model List of ED of WHO, Revision of December, 1995 (3), and whether the prescription of the ED has a priority over that of the others.

MATERIAL AND METHODS

The subject of this trial is the drug use of all medications prescribed in the URCH-Varna during the period from January 1, 1997 till December 31, 1997 with exception of those either used for less than 9 months, or provided as humanitarian aid. A total of 510 drugs from all pharmacological groups according to the Hospital drug list are included. The medications are divided into three groups taking into account their conformity to the Model List

of ED of WHO.

Statistical methods (variation analysis, Student's *t*-criterion) are used to compare the groups (2).

RESULTS AND DISCUSSION

The monthly consumption of 510 medications in URCH-Varna in 1997 was established and compared to the Model List of ED of WHO. A total of 265 medications of 172 drug substances were ED, which represented only 52 % of the cases. The variation in the monthly consumption of the drugs in the three studied groups was statistically insignificant. The ratio between the variation in the monthly consumption of drugs and the average one could serve as a criterion for the assessment of the stability of prescribers' preference to a particular medication (or medications).

This statement was based on the argument that the more frequent and regular the preference of a large group of prescribers to a given drug, the less the variation in the monthly consumption (Table 1).

The established average variation in the monthly drug consumption in URCH-Varna during 1997 was of 78,96 % 34,36 and indicated the absence of stable preferences to particular drugs. The value for 1995 was of 72,78 34,37. Consequently, there were no quantitative changes in the pathology that could seriously influence on the regularity in the use of the drugs, respectively on its average variation. The established value of monthly variation could hardly be considered as

Table 1
Consumption of drugs in URCH-Varna in 1997

Drugs used in URCH	Group one Prescribed drugs (total)	Group two ED	Group three Non-ED
n	510	265	245
Mean variation	78,96 %	79,78 %	78,08 %
Standard deviation	34,36 %	37,97 %	30,03 %
Statistical significance		p > 0,10	p > 0,10

significant because the role of financial and commercial factors could not be ignored. The variation in the consumption of non-essential drugs was less than that of ED and that of all the drugs, regardless the fact that their number is less. The difference was statistically insignificant.

The study could not establish any substantial difference in the preferences of the physicians to ED or non-ED. This is a disappointing statement as it stresses the disparity in the criteria of drug quality and effectiveness between Bulgarian medical community and the WHO experts. Since its creation twenty years ago, the Model List of WHO has been modified six times. The total number of the active substances included has, however, never exceeded 220.

The Bulgarian specialists still can not make their choice of really useful and relatively safe medications among the large number of drugs available on the market. This explains the polypragmasia and irrational drug use in URCH-Varna already detected in our previous studies (1).

CONCLUSIONS

1. The drug use in URCH-Varna proves to be irrational, not only from the quantitative but also from the qualitative point of view, because only about 50 % of the drugs are essential.

2. The established disparities are most probably due to the lack of adequate appraisal of the long-term effectiveness, safety and reliable therapeutic qualities of drugs on the part of the physicians.

3. The absence of nationally accepted criteria for GCP imposes the application of the Bulgarian Model list of the hospital drug use as a harder, including administrative, criterion for rational therapeutic policy.

4. The limitation of the drugs available in the hospital pharmacy remains the most important means for overcoming the irrationality in the choice of drug therapy and, as the world experience indicates, represents a totally pertinent and legally approved component of the hospital management.

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Роля на основните лекарствени средства (“Essential drugs”) в болничното лекарствено потребление на ОРКБ-Варна през 1997 г.

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Резюме: За пръв път в ОРКБ-Варна бе проучена консумацията на лекарствените средства, включени в моделната листа на СЗО за “Essential drugs” (ED). Целта на проучването бе да се определи консумацията на тези лекарствени средства в болницата като цяло и за всяко болнично отделение. Анализирани бяха месечните вариации в потреблението в зависимост от специфичната дейност на тези отделения. Изчислена бе средната консумация на ED от пациентите във всички отделения. Представени бяха отделенията с най-висока честота на използване на препоръчаните в ED-листата медикаменти. Направени бяха някои изводи за полезността от въвеждането на моделната листа за “Essential drugs” и значението ѝ за някои фармако-икономически фактори на болницата.