

## **E-PHARMACOLOGY, OR INTERNET AND DRUGS**

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The World Wide Web (WWW) represents the maximum expression of Information Technology Age, laying the foundations of a real transformation in the way scientific and biomedical information is spread.

Only in Italy, 8 to 9 millions of "Net-surfers" search the Web to enquire various topics, frequently regarding health and drug news. This field was really affected by the Internet revolution, and the binomial computer-Net is today a consolidated and reliable tool for professionals and for patients.

Internet satisfies the desire for knowledge of common people, and the well-informed patient will be the key-factor for the transformation of future health care management.

From several points of view, the Web may appear the perfect tool to vehicle information, but it is not yet optimally used, due to lack of organization, strategies, and quality assurance of the contents. This chaotic situation, caused by the exponential and sometimes wild growth of the Web, is particularly evident when health material and sites concerning the world of drugs are considered.

In Internet, Pharmacology is frequently a synonymous with drugstore, and the commercial purposes are always very strong and deep-rooted. The Net proved to be a very good place to sell and buy drugs without bureaucracy, shortening distribution times. More than 20000 medicines are easily available, needing only an easy mouse "click" and a credit card number, often by-passing any control by regulatory agencies, professional Orders or Institutions. In many Countries, there are few or no limits for the on-line sale of drugs.

In addition, information about health and medicines in most situations is misleading, inaccurate or simply not updated or badly expressed, with the risk to spread a real epidemic of misinformation.

As we can see, the impact of the Web in the pharmacological field results in positive and negative aspects, with only one certainty: we cannot stop or come back. Internet is now an essential aspect in Pharmacology-Pharmacy, as well as in biomedical or scientific contest; it plays an important role in student and professional training, patient management, and clinical practice.

In conclusion, future biomedical developments will be based on evolution of Internet technologies, and all people interested in the world of drugs need to stay up-to-date with emerging applications that are likely to impact their profession: telemedicine, teleconference, on-line publishing, e-learning, e-commerce and e-pharmacies are ready to become common and widespread services in about 5-10 years time.

This scenario, obviously, requires a timely and considerable improvement of the Net tools, both in quality and controls, developing criteria for evaluating health information and quality assurance, and also hardware-software systems to guarantee the safety and privacy of data.