

# ITALIAN BIOMEDICAL SCIENTIFIC WEB SITE QUALITY EVALUATION

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#### **BACKGROUND**

Due to the uncontrolled spread of new biomedical web sites, it becomes essential for the scientific community to make possible the evaluation of the quality and reliance of the online information repository content. The Internet, so far, undoubtedly represents a democratic and free information system, it gives the same importance to everyone who has something to communicate, share or "just sell", without any distinction between scientifically sound resources and the others. Often computer graphics and free access are guaranteed but not the information content: texts are not certified and no references are furnished. In most of the cases it is impossible to know the authors, the issues, the bibliographical references, and the updating frequence as well. This also happens even in Web Sites usually read by doctors, researchers (or even patients) that need to know how to approach to serious topics, such as diseases, new therapies or pharmacological treatments. At the moment, just a few examples of organizations devoted to the Web site certification are avaliable. One of them is the HON Foundation (http://www.hon.ch/) which, after evaluation of some basic characteristics of Web sites, gives "quality label" stating if it can be considered as an affordable information source.

# AIMS

From this standpoint the poster had the aim to discuss a methodology in order to evaluate the Italian Web sites scientific quality in biomedical area (human and animal health). This methodology was setted up through a qualitative analysis of web sites of representative Italian Scientific Societies and Associations.

#### **METHODS**

The selection of the web resources was carried out through a research on the most important available net spiders (Google, Altavista, Scirus).

Thank to this research we evidenced some websites that grouped all together scientific medical societies and the veterinarian ones.

Checking the list we choose to focus our attention on:

- "Federazione Italiana delle Società Medico Scientifiche"

- information in the website of Cagliari University

For veterinary sciences we used the Fatro® directory, the IZS list of Internet address in health and biomedical area, the veterinarian board and organization.

Each site was analyzed through an "Evaluation Questionnaire" based on the criteria previously adopted by scientific organizations such as HON, DISCERN, AMA and IZS UM.

# RESULTS

288 societies have been selected: 199 in biomedical area and 29 in veterinary field. For 21 societies has not been possible to carry out any evaluation, either because the website does not exist (18) or is presently "in progress" (3)

Therefore, the survey has been based on 207 scientific and medical websites.

On the right we present the questionnaire (Q) .used for the research and the resume (RE) of the evaluation carried out by a panel of examiners.

From the questionnaire, interesting data were obtained. We worked out the dataset according to the following parameters in order to evaluate website quality:

- discernible presence of information about the owner of the website
- high spreading and promotion of the initiative
- if website is frequently adjourned and it has a good quality of contents
- easy interaction with the user (easy to browse and to use)
- noticeable target of the webpage
- presence / absence of sponsors and promotional material.

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### **CONCLUSIONS**

This work has provided a new picture of the "Health Web", showing that scientific societies web sites have the main purpose to inform their associates. There is a massive presence of information useful to reach the society, but while 75% of the sites include the mail and e-mail addresses, in about 10% of them, this information is totally missing. The large space devoted to information on congresses, updating material, continuing education in medical science programs, confirms that these web sites deal mainly with the subscribers.

Low attention is devoted to the international certification of quality (e.g. Codex Hon), in fact, only 2.4% of the sites report this information, while 2.4% declare to follow other kind of standards.

Few attention is paid for the international visibility of the sites, testified by the low percentage of pages translated in english (15.9%), or using the "meta data" (20.8%). In 40.5% of the cases the site texts are not signed, in 35.7% the sources of information are not declared, while 21.7% of them do not report the updating date. For what concerns the site users, only in 40 cases (19.3%) a specific area dedicated to the Consumers exist. These observations confirm the professional role of these sites (50% of website has a reserved area for associates). A low presence of commercials and sponsors is advised. The friendly graphics and a direct and intuitive URL, in most of the cases, allow the websites of these societies to be easily reached and browsed.