THE HEALTH LIBRARIANS' MULTI-SKILLS APPROACH IN "*SITE TRAINIG AND EDUCATION':* THE EXPERIMENTAL SUPPORT ACTIVITY CARRIED OUT IN A TRAINING COURSE TARGETED TO THE ADVANCEMENT OF DIAGNOSIS AND RESEARCH ACTIVITIES IN ANIMAL HEALTH BY A PANEL OF EXPERTS

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INTRODUCTION

This work aims at explaining the new multi-skill approach a librarian is challenged to apply in user education activities for the health personnel knowledge management and empowerment in the field of diagnostics within the Istituti Zooprofilattici in Italy.
In Italy there are ten Institutes which have been established and directed by notable veterinary scientists and veterinarians. At present, they represent our most important scientific institutions (apart from schools), where our main experimental and diagnostic activity is carried out, most of all in the immunological field
The research activity carried out by the Istituti Zooprofilattici Sperimentali has always been aiming at tangible results to be applied in the laboratories, i.e. "in site".**(1)**
Evidence-based Medicine (EBM) is a scientific and systematic approach to the practice of medicine, which integrates the best research evidence with clinical expertise. There is an increasing body of opinion that EBVM (*evidence based veterinary medicine*) is important for the development of the veterinary profession, to improve the quality of decisions and to provide informed choices to practitioners. Evidence-based public health (EBPH) employs scientific knowledge concerning effective preventive measures to decision-making in public health and health promotion policy. Public health veterinary medicine through evidence-based method can improve the veterinary contribute in public health decision-making and preventive medicine programs.
Modern IT offer the researchers the best evidence on line bibliographic data banks by resorting to specific evidence-based search engines
Evidence- based medicine is a hot topic whereas in veterinary medicine the approach to this cultural attitude is relatively recent.
The first reference to EBVM is published in 1998 in *Veterinary Record,* where, in the section letters, the importance of this method is emphasized as well as the lack of any bibliographic references about its use in veterinary medicine.

In Italy, in 2000, in "Praxis Veterinaria", a new section is introduced "*Evidence based veterinary medicine*", which selects and publishes the most notable bibliographic works about a given subject, as a sort of secondary publication, which is the a mark of a new cultural approach in the bibliographic selections.
In 2004, the *College of Veterinary Medicine* of the *Mississipi State University* organizes its first symposium about EBVM.
In 2006, in Perugia, the 2nd Workshop of Applied Veterinary Epidemiology takes place and, the first session concerned EBVM and focused on the research of objective evidence to detect effective intervention, surveillance and information technology systems, medicine and veterinary medicien integration in the Italian Public Health. **(2)**
Anyway, at present, most researchers in the health sector are not familiar with the accredited data banks, both for the information proliferation which hinders a direct access, and because the number of the acredited sources is skyrocketing and, usually they differ in the vaious hosts used by the publishers.
The intermediation of an expert who knows accredited sources is vital: the information specialist supports the practioners in identifying the rigth information and facilitates them in the decision-making process.
The analysis of a domestic customer satisfaction survey, carried out by a team work in BIBLIOSAN, in 2008, by means of a questionnaire filled by health library users/researches, shows a new role for librarians as a new source of advice of information for health library users and/or researches/practitioners. **(3)**

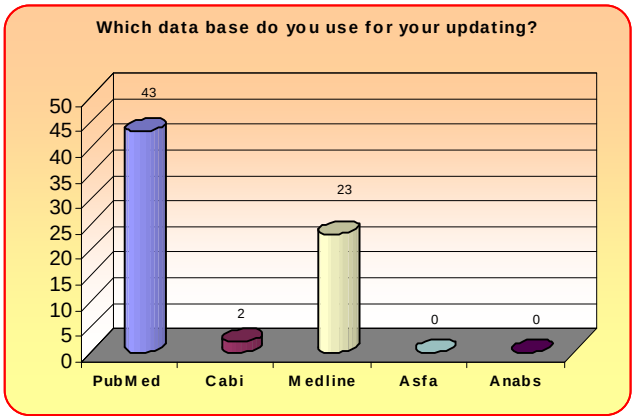
OBJECTIVES

Training and Education event

In 2008, the virtual library of the II.ZZ.SS. library network organizes a course, with ECM: **"**L'USO DELLE FONTI BIOMEDICHE PER LA RICERCA SCIENTIFICA". (The use of health electronic resources for scientific research).
This course, targeted to the health personnel of 10 Italian Istituti Zooprofilattici, aimed at user empowerment as well as an effective information retrieval in using the research tools available on line and through the BIBLIOSAN portal. All the partecipants (veterinarians, biologists, chemists, pharmacists) were asked t fill a questionnaire, during the course, wich was framed to detect the level of knowledge and use of the health electronic resources.
The analysis of the data collected show that the level of knowledge ad use is not standardized and almost fragmented. The trainingand and education Department together with the Documentation Department in the Istituto Zooprofilattico in Sassari have experimented a new type of user education approach to support the users to convert the theorical acquired knowledge into operative skills concerning information retrieval activities on the specific data banks at disposal. This facilitation route started in 2009, involved 45 researcher and will kepp on in 2010.
The librarian expertise has turned out to be precious for the practitioners, intrigued by the the EBVM approach. This information need has emerged for a questionnaire filled by the Institute's researcher and screening the specific skills required to access the EBVM informative tools

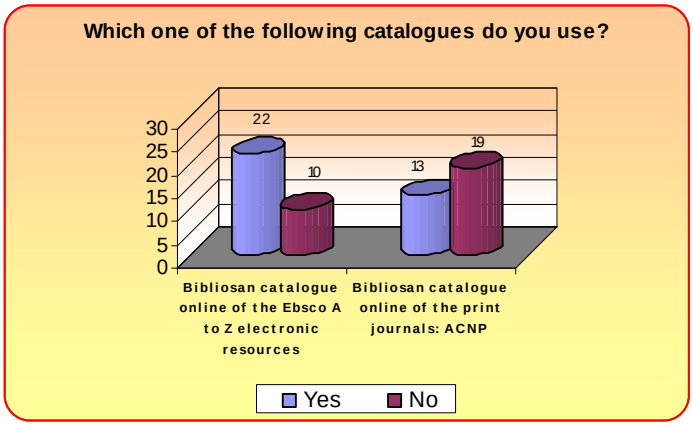
The results of the questionnaire

The questionnaire is framed into three sections containing a set of questions: scientific information, scientific production, clinic diagnostics. It was delivered to the partecipants to the project.



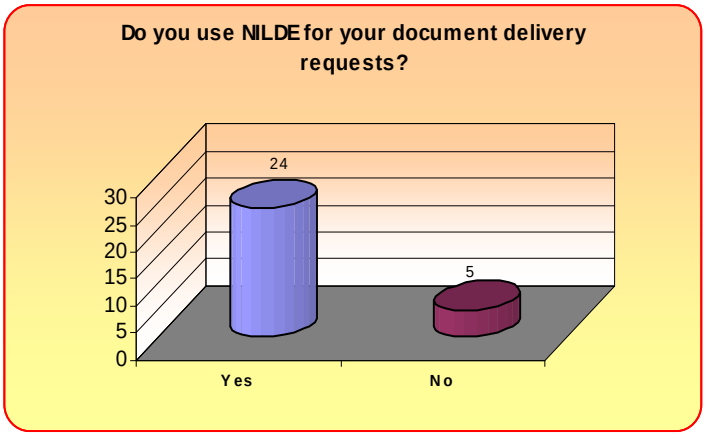
Which database do you use for your updating?

Picture n. 2 question 1
"scientific information"



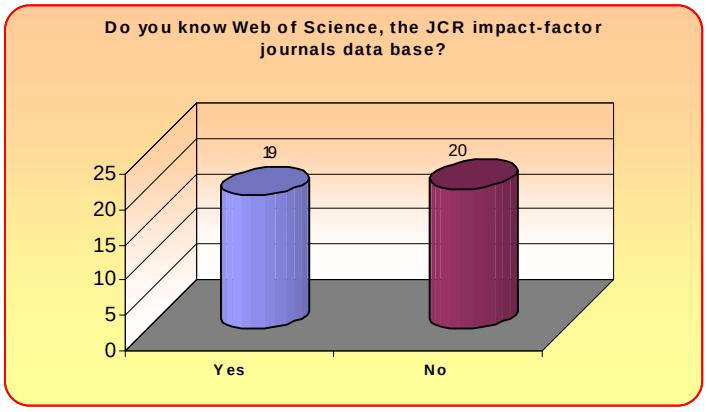
Which one of the following catalogues do you use?

Picture n. 3 question 2
"scientific information"



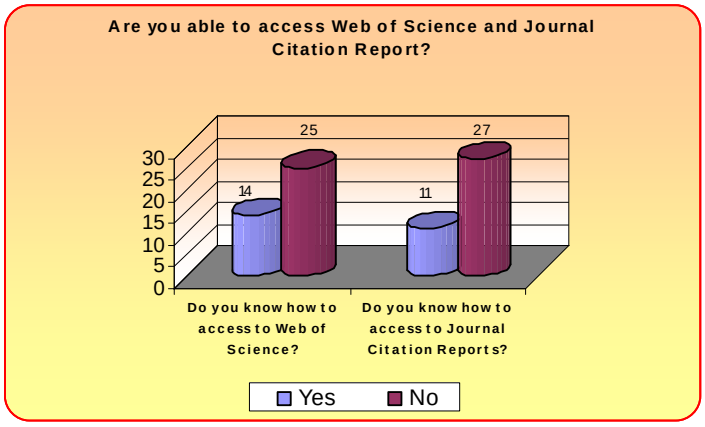
Do you use NILDE for your document delivery requests?

Picture n. 4 question 3
"scientific information"



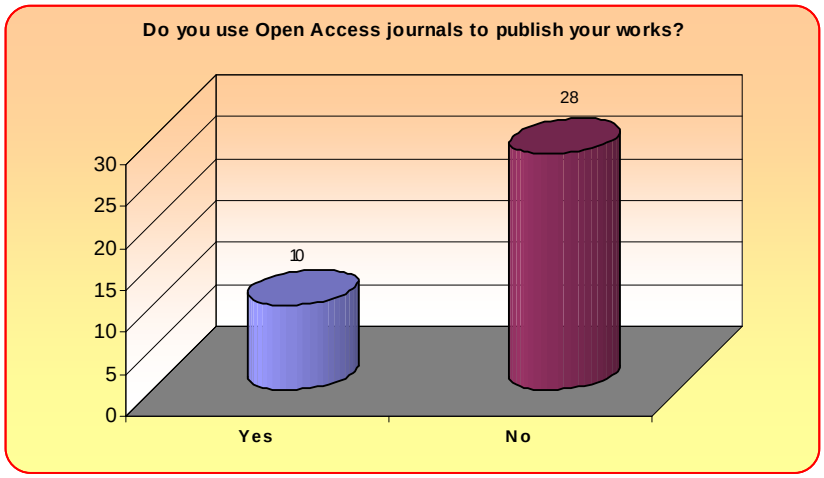
Do you know *Web of Science*, the JCR impact-factor journals data base?

Picture n. 5. question 4
"scientific production"



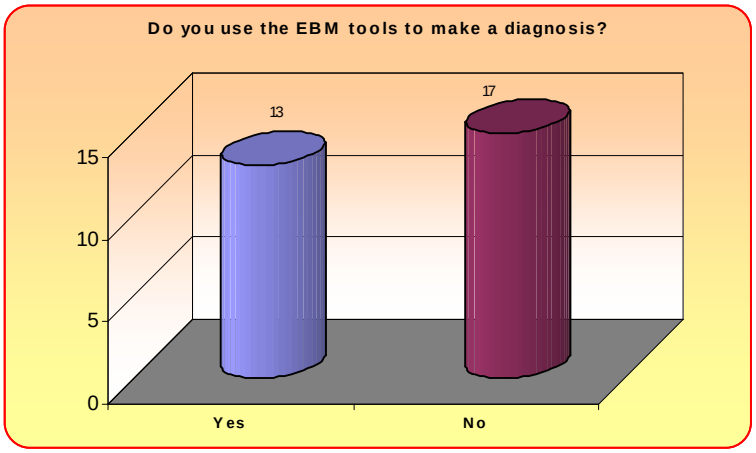
Are you able to access *Web of Science* and *Journal Citation Report*?

Picture n. 6. question 5
"scientific production"



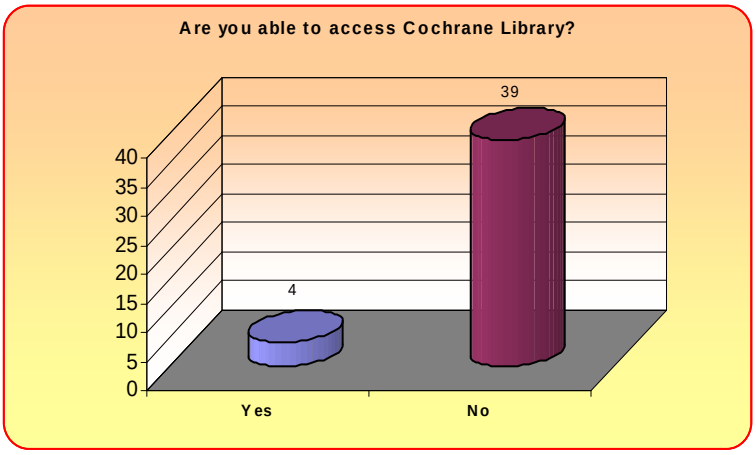
Do you use *Open Access* journals to publish your works?

Picture n. 7. question 6



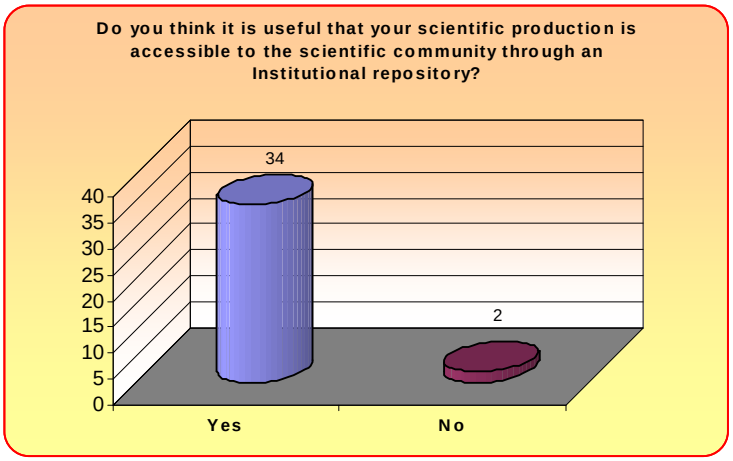
Do you use the EBM tools to make a diagnosis?

Picture n. 8.question 1
"Clinic Diagnosis"



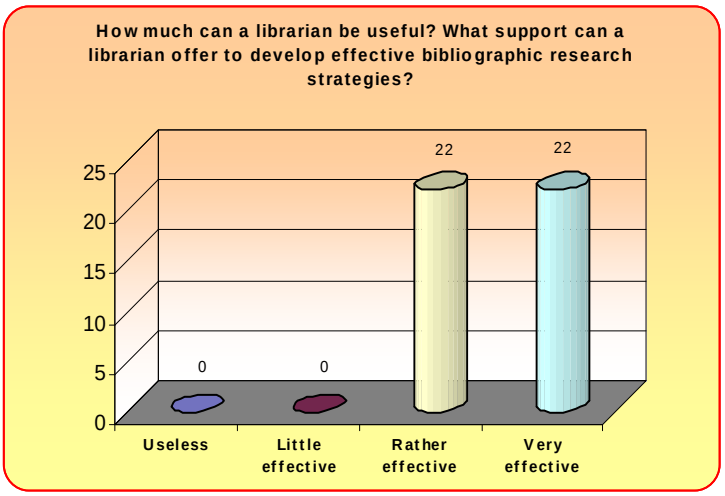
Are you able to access Cochrane Library ?

Picture n. 9.question 2
"Clinic Diagnosis"



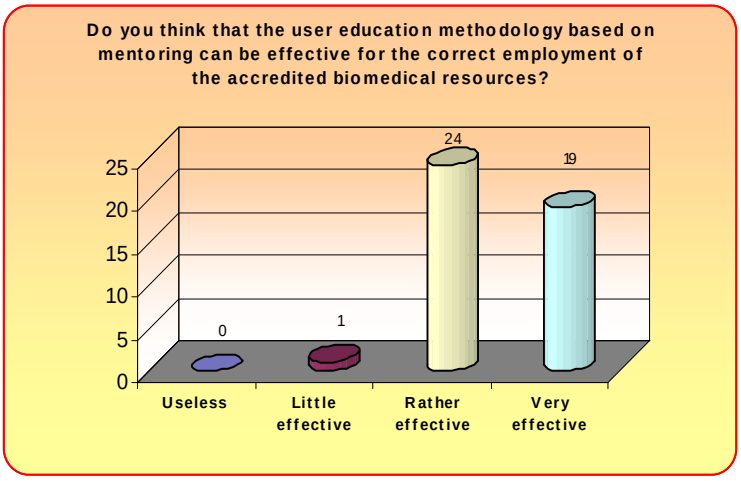
Do you think it is useful that your scientific production is accessible to the scientific community through an Institutional repository?

Picture n. 10. question 3
"Clinic Diagnosis"



How much can a librarian be useful? What support can a librarian offer to develop effective bibliographic research strategies?

Picture n. 11. question 4
"Clinic Diagnosis"



Do you think that the user education methodology based on mentoring can be effective for the correct employment of the accredited biomedical resources?

Picture n. 12. question 5
"Clinic Diagnosis"

This type of user education approach, developed together with the researchers, coud be defined as "in site training, advancement activity" . the librarian leaves the library premises and accesses the departments.

Methods

The user education route developed was entitled:
("*Presentation and discussions of cases, reports, research projects and new diagnostic methodologies for the improvement of diagnostic and research activities in the sector of animal public health*".)

This work shows which skills a librarian is asked in the peculiar training and education activities described to meet the information needs and the performances of the personnel operating in the field of diagnostics and research within the II.ZZ.SS (Istituti Zooprofilattici Sperimentali). This is known as *in site training and education.* It occurs in a setting where the interaction within a peer group is envisaged, aiming at the advancement of a process, a situation or a procedure. Indeed, the goal of this project was to create such a climate that learning could be fostered by the interaction between a group of peers who met each other to improve and standardize the clinic diagnostics of some basic pathologies for veterinary public health.The case described concerns the laboratory Directors in the Health Sector of the Institute, the researchers dealing with diagnostics and the librarian who supports their education process.
A multi-skill approach has been asked to the librarian

- Advanced IT knowledge and expertise;
- Attitude to reference activities;
- Basic knowledge of the scientific sector concerning the advancement group;
- Social intelligence, ability to understand a special technical jargon, empathy, ability to set up relationships.

This is a one-year education project, subdivided into 6 sessions, occurring one every 2 months; during each session, the speakers, who are experts in the various pathologies, show a clinical case and are supported by the librarian with regards to the information retrieval of the most significant websites relating to the subject.
The program of each session is scheduled as follows:

- Presentation of the topic: the speaker describes the specific case from anamnesis to diagnosis. The presentation is supported by photos, pictures, videos and any information deemed necessary to the evidence. The training goal is accomplished by sharing study and research experiences and operative demos.
- Reading of the most relevant scientific papers to support the diagnostic process;
- Bibliographic research into the most authoritative electronic resources, mentored by the information specialist (or the librarian in charge of the Library);
- Access to evidence-based documentation, browsing into the most acknowledged websites;
- Presentation of research project proposals;
- Discussion.

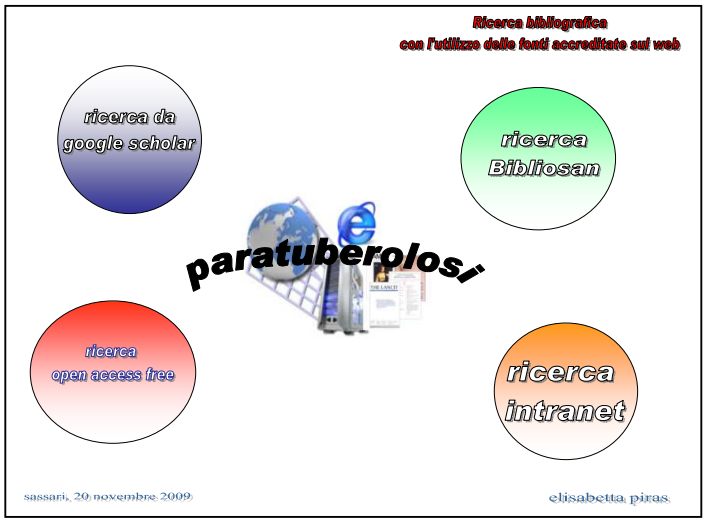
The Librarian acts as a sort of tutor/mentor who interacts with the peers by stimulating the accreditated health literature retrieval on the subject under study. Especially, as an information specialist, the librarian follows a process to retrieve and localize: original articles, bibliographic reviews of impact factor journals and open access journals, BMJ clinical evidence on the specific topic focused.
The librarian is asked to place his expertise and his skills at the researchers'disposal, in order to meet the specific information needs. The multi-skill approach accomplished by the librarian ranges from IT skills, basic technical knowledge in the subject under study in the advanced group, relationship abilities as far as listening and as the technical jargon is concerned.

RESULTS

At the end of this education project, the advanced group will carry out a dossier containing the guide lines to study and make a diagnosis as well as the diagnostic protocols of the pathologies under study. This work will show the results collected, the critical aspects and the excellence items of the project as well as the contribution of the librarian to the development of the process and the facilitation to the participants' learning process.

At present, two meetings, scheduled within this project, have taken place, the first on Paratuberculosis and the second, on parassitoses.

During these two days, the experts involved have focused on these specific topics and emphasized what is new at national and international level. The bibliographic research activities have been mentored by the librarian, using, first, Google Scholar, and then the portal BIBLIOSAN, as you can see in fig. n.1. The research about paratuberculosis has also included open access journals and the databases which are available on line but exclusively at the II.ZZ.SS. through our intranet.



Picture n. 1 search strategy

During the second day, the librarian has proposed a search strategy to underline the importance of the employment of such tools as JCR, the Cochrane Library, the institutional repositories and the open access journals.

CONCLUSIONS

During th research activity and at the moment of diagnosis**:** the main didactic goal of the librarian is the application of an effective search strategy which takes into consideration the integration of the various resources at disposal. This experience consolidates the librarian role within the Research Public Boards, not simply in terms of authoritativeness or status, but in terms of service, thus emphasizing his/her support to the experts in an effective and efficient way.

REFERENCES

(1) http://www.salute.gov.it/alimenti/attivita
(2) Nonis S., Valsecchi M. EBVM : A Change for veterinary public health. http://aivi.it/atti2007/120.doc -
(3) www.bibliosan.it.