

## **Bibliosan-BMJ: pooling resources in the creation of a new platform between library and training centre**

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### **Introduction**

Bibliosan ([www.bibliosan.it](http://www.bibliosan.it)) was set up in 2003 as a Health Ministry-funded project. It has since been developed into an ongoing service, also funded by the Ministry of Health.

Bibliosan makes important resources (online journals, bibliographic and bibliometric databases, online bibliographic management) available to clinicians and researchers (and all other health workers) at Italy's 48 Scientific Institutes for Research, Hospitalization and Healthcare (IRCCS), 10 national health authority and research organizations for animal health and food safety (IZS), National Institute of Health (ISS), National Institute for Insurance against Accidents at Work (INAIL), National Agency for Regional Health Services (AGENAS); to the Italian Medicines Agency (AIFA) and also to the libraries of these institutes, and thus the librarians who are their Bibliosan representatives.

### **Objectives**

An essential aspect in this setting is the partnership established with scientific publishers, which is related not only to the negotiation of economic aspects but also to the choice and evolution of contents.

Hence an integrated collaboration has arisen between libraries belonging to Bibliosan, the scientific publishing industry, and training and information technology departments: a synergy that has resulted in a pilot project based on the philosophy of Continuing Medical Education (CME) within the E-learning environment.

The aim of this project is to maintain, develop and increase healthcare professionals' knowledge, skills and performances, on the basis of the concept of compulsoriness of CME for healthcare professionals.

A total of 5000 training credits for healthcare operators (the equivalent of 1000 courses, each worth 5 credits) are made available by the BMJ (British Medical Journal) group. Institutes will benefit from a number of courses calculated on the basis of their Full-Time Equivalent (FTE).

## Methods

This project started in October 2015 and will end in June 2016.

The unusual aspect is that the supporting educational material has been prepared, published and dispensed by the BMJ (British Medical Journal) group through a dedicated website platform, Ebookecm Cloud, designed by SO.GE.S. SAS (<https://bibliosan.ebookecm.it> – figure 1). Through this platform, the BMJ group offers a catalog of titles that is currently limited, both numerically and in terms of the topics covered, but is in the process of being expanded (figure 2).

### *Ebookecm Cloud Platform*

The objectives of the Bibliosan - BMJ - Ebookecm Cloud Project are to improve documental services, facilitate access to CME and training for in-house personnel, and help companies and organizations save money. Through the Ebook Cloud platform, companies and organization networks can autonomously manage their employees' distance self-learning based on CME-accredited original BMJ editorial products. Ebookecm Cloud fulfills the requirements set by regional, national and international rules on CME. Through this platform, Bibliosan can manage, in an autonomous way, a library of BMJ editorial products with original contents, accredited by regional, national and international of CME and make them available for the in-house personnel. The editorial products are, to all intents and purposes, CME events, delivered in the distance self-learning mode. The entire process, from the distribution of texts to the monitoring of attendance, and from the test and quality assessment questionnaire compilation to CME certificate issue, is managed by the Ebookecm Cloud website platform. The platform is accessible via Internet, through a normal browser; it permits end users to access the system using access credentials, to select from the library the CME-accredited BMJ editorial products with original contents that they would like to follow as form of CME, to download the texts in PDF or ebook format (ePub or mobi, when available) and use them, in an autonomous way, to fill out the multiple choice test, according to CME rules, to fill out the quality assessment questionnaire – once the test has been passed –, to assess the course, according to the CME rules, and to receive the certificate of attendance and the CME credits in PDF format. The platform allows all the Bibliosan network training managers to: manage the library of accredited BMJ editorial products with original contents, to monitor in real time credits acquired, the registrations at events and attendance of self-learning courses, providing reports and detailed stats both individual and for each course and edition, to download the Excel tables of attendee data for each event, for CME accounting purposes, to read users' comments and evaluations, to make variations and periodically improve the courses, and to support tutoring activities for distance self-learning courses, according to the modalities provided for by the criteria for the assignment of credits to CME activities.

## Results

This platform allows: 1) access to a presentation of the courses (figure 3); 2) downloading of articles, book chapters, etc.; 3) monitoring of courses both by participants and by administrators, according to their different access levels; 4) completion of assessment questionnaires; 5) preparation and downloading of certifications of CME credits acquired.

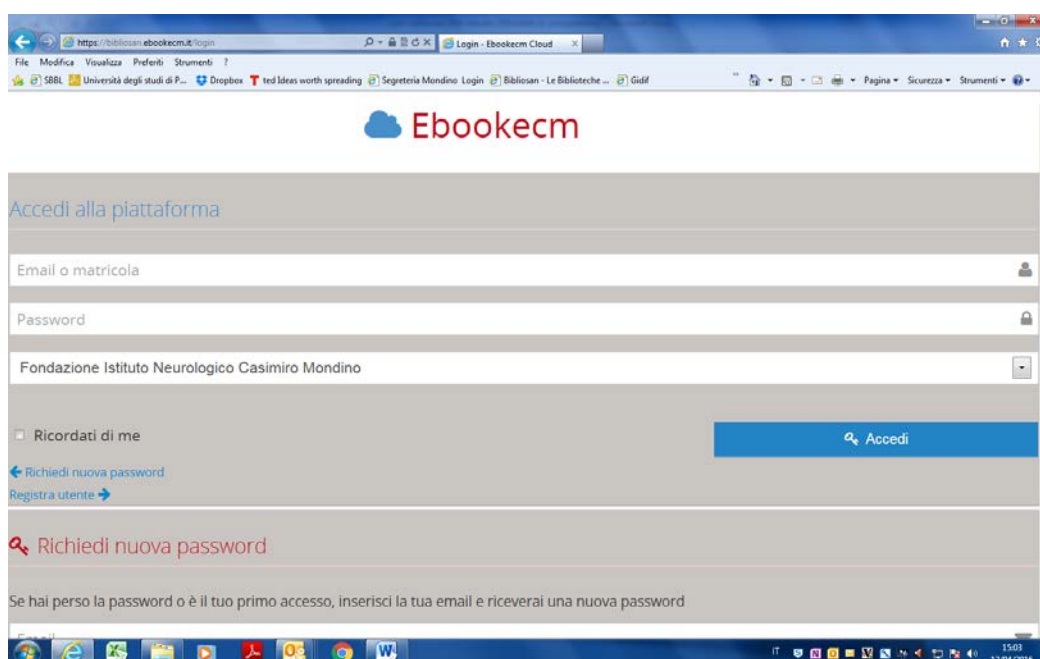
## Discussion and Conclusions

The value of the proposed model is twofold, relating to the content and the technological aspects. This prototype could also be reformulated using material from other certified scientific sources, allowing learners to be certain that they are being offered quality educational material; material that could, in any case, be used for ongoing training activities and that, once optimized, might serve for the recognition of CME credits.

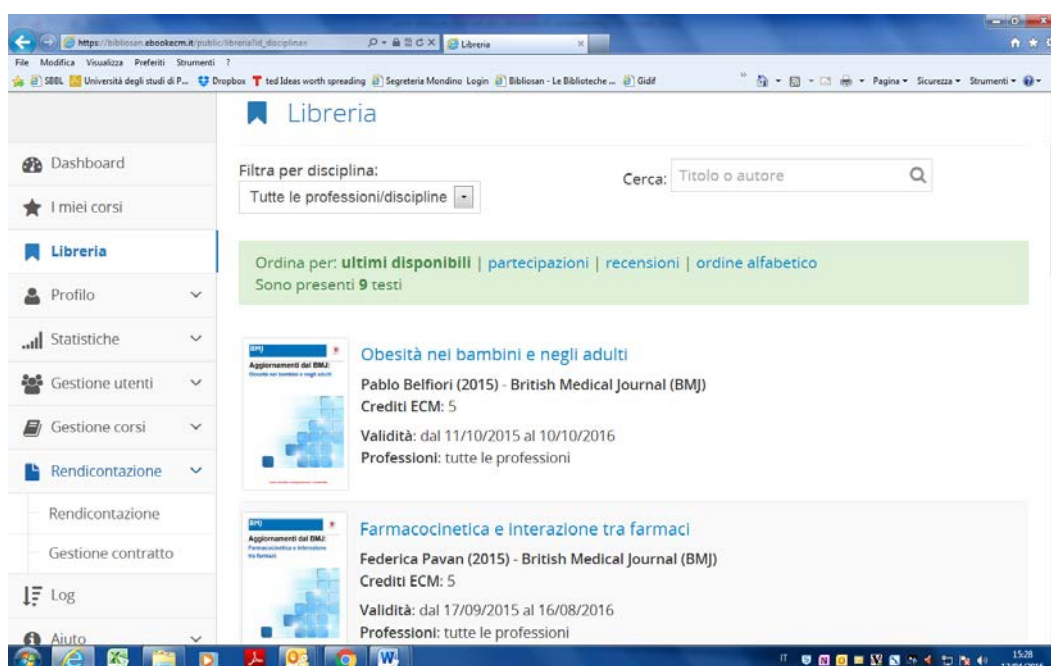
**Key words:** cloud computing, e-learning, evidence-based medicine, health care provider, publication, research personnel

## Figures

1.



2.



3.

The screenshot displays a web browser window with the address bar showing the URL: <https://bibliosian.ebokecm.it/public/libreria/462/farmacocinetica-e-interazione-tra-farmaci.html>. The page title is "Ebokecm Cloud - Fondazione Istituto Neurologico Casimiro Mondino". The main content area features a course titled "Farmacocinetica e interazione tra farmaci" with a BMJ logo. The course details include: Credits: 5; Validity: dal 17/09/2015 al 16/08/2016; Autore/I: Federica Pavan; Provider ECM: SP srl (provider Agenas n.4146); Obiettivo formativo: Applicazione nella pratica quotidiana dei principi e delle procedure dell'evidence based practice (ebm - ebn - ebp); Professioni: tutte le professioni; Allegati; Ore di studio: 5. The abstract discusses the basic concepts of pharmacokinetics and drug-drug interactions (DDI). The index lists: ABSTRACT ITALIANO; BMJ OPEN: DRUG-DISEASE AND DRUG-DRUG INTERACTIONS: SYSTEMATIC EXAMINATION OF RECOMMENDATIONS IN 12 UK NATIONAL CLINICAL GUIDELINES - BMJ LEARNING: INTERAZIONI FARMACOLOGICHE, INTERAZIONI FARMACOCINETICHE; BIBLIOGRAFIA E REFERENZE. A notification box on the right states: "Questo corso non è accreditato per la tua professione/disciplina". The browser's taskbar at the bottom shows the date and time as 12:58 on 13/04/2016.