Evidence-based Librarianship (EBL): A Historical Perspective

Zuraidah Abd Manaf, PhD, Ida Nadia Mohamad Bahtiar,
Faculty of Information Management, UiTM Puncak Perdana, Shah Alam, MALAYSIA

Abstract
Evidence-based librarianship is an approach to information science that promotes the collection, interpretation and integration of valid, important and applicable user-reported, librarian-observed and research-derived evidence. This paper provides a historical perspective on evidence-based librarianship (EBL) practices in general. It highlights the history of evidence-based librarianship (EBL) practices and its value to librarianship environment. The paper reviews EBL literatures to trace the origin and evolution of the evidence-based practices concepts. From the literature it was found that evidence-based concepts change over time. Different area practice different evidence-based practice style based on the needs and to fit in the real situation. In librarianship setting, EBL would be another mechanism that will assist in problem solving and decision making process. This concept will definitely benefit library in many aspects and gives value to the library itself. EBL encourages librarian to use evidence in their practices and the usage is flexible and applicable in many areas of library management.

Keyword: Evidence-based Practices, Evidence-based Librarianship (EBL); Libraries, Library Management

Introduction
Evidence-based librarianship (EBL) gradually becomes a hot discussion in librarianship literature. It started in the medical and clinical field, and then the concept evolves and was widely practiced by another area of study. It had a long history before it was discussed in librarianship literature and later was adopted in libraries day-to-day practices.

There are many definitions of EBL in the literature, but in general the basic concept is to support library in real life situation with up-to-date practice, provide any best available practices, and offer reliable and trustworthy research evidence. The concept has existed long before it became a great model.

Definition
From the medical perspective, Gray (2001) had defined Evidence-based practice (EBP) as “an approach to decision making in which practitioner uses the best evidence available in consultation with a patient to decide upon the option which suits the patient best”. Meanwhile Brice and Hill (2004) believed the EBP is a “practice that should be based on up-to-date, valid and reliable research"
In library environment, the adoption of EBL was first delineated as “an approach to information science that promotes the collection, interpretation, and integration of valid, important and applicable user reported, librarian observed, and research derived evidence. The best available evidence moderated by user needs and preferences is applied to improve the quality of professional judgments” (Booth, 2002), while Eldredge (2002) stated that EBL “seeks to improve library practice by utilizing the best available evidence in conjunction with a pragmatic perspective developed from working experiences in librarianship, the best available evidence might be produced from either one, although EBL encourages using more rigorous forms over less rigorous forms of evidence when making decisions”.

However, Crumpley and Koufogiannakis (2002) think that both definitions are not practical in the real environment, therefore they described EBL as “to improve the profession of librarianship by asking questions as well as finding, critically appraising and incorporating research evidence from library science (and other disciplines) into daily practice. It also involves encouraging librarians to conduct high quality qualitative and quantitative research”. The variation in the definition shows a positive acceptance in library nature. It is a good sight that the EBL concept in librarianship is growing alongside its lively history.

**History on EBL**

In the context of nursing, EBP was advocated by Florence Nightingale dated back in the years of 1800’s. Her first publication on evidence-based research in nursing environment is in England in 1859 and in the following year it was published in America. At that moment, this concept is very alien to the professional in nursing setting. She believed that sanitation in nursing practices is vital and cannot be neglected. During those days evidence and scientific research to support her theory was very limited. However through her observation her theory on sanitation was true. She proved to the world that a nurse was able to analyze and decide what the best is for their patient based on ‘trial-and-error approach’. This is where the idea of EBP started but only in the 1960s there was interest in EBP which focused on practice-based research and to try developing nursing research design. The underlying concept of EBP epitomizes the combination work of police officer and lawyer, seeking and providing evidence of a suspect to prove guilty or innocence by the court of law.

In the intervening time in medical setting, medical professionals use experiment to conduct investigation and collect evidence. This method was also used to test the effectiveness of a
practice in order to solve a specific problem. Cochrane (1972) highlighted that in collecting clinical evidence, assessment on the effectiveness of health care policies and the application of ‘randomized controlled trial’ in clinical studies should be given a great attention. He found that decisions for patient’s medical treatment were usually not constructed from clinical evidence. He believed that medical professionals should employ clinical systematic reviews to implement the best practice for specific issues. There are huge differences between research-based theories with practice-research oriented whereby in this case the clinical practice is the real life situation. To him it is the best suited practice to be adapted and adopted. In respect for his involvement in EBP in health care, Brice and Hill (2004) appointed him as ‘Father of Evidence-Based Practice’.

The cost for health care facilities had risen up in-line with the growth and awareness of health care services in most countries including USA. In 1973, the USA government followed the Health Maintenance Organization (HMO) act. According to Reeds and Eisman (2006), the act helps the government to better control the budget for health care and made the health care services accessible. Public are given a chance to evaluate any ineffective health care system in term of services provider, cost effectiveness, and irrelevant procedures. This situation has led to the researcher to appraise their health care treatments.

Few decades later, after Archie Cochrane promotes evidence-based practice to clinical and medical professionals, the term Evidence-based medicine (EBM) was first introduced by Guyatt et al. They incorporated EBM concept into clinical services, promote clinical decision making and research based practices. However, the concept varied and argument on the concept invited hot debate in 1997 onwards, though, it took longer time for it to really fit into the medical environment.

In 1996, the concept of evidence-based clinical decision making is once again changing. Sackett et al strongly believed that the concept must be integrated with evidence in clinical practice and professional expert in clinical field. Then, patient preferences will take into consideration. This is the first time the EBM concept was agreed by many professional and was recognized widely in medical field especially in health care services. Evidence-based Health Care Teachers and Developers were first conducted in 2003 and the purpose of its existence is to promote the concept globally and invite scholars to contribute something in the field of EBM principally in health care.
In 1997, Jean Chrétien gave a speech at a Canadian National Health Forum, where he stated that “a key objective of the health sector should be to move rapidly toward the development of an evidence-based health system, of which decisions are made by health care providers, administrators, policy makers, patients and the public on the basis of appropriate, balanced and high quality evidence” (Melynk & Fineout-Overholt, 2011). After the event, the government deposited 25 million dollar fund to the Canadian Health Nurses Research Foundation. Afterwards, Alba DiCenso and Donna Ciliska launched the Canadian Centre for Evidence-Based Nursing (CCEBN) in 1998, followed by the publication of Evidence Based Nursing Journal and the establishment of Registered Nurses' Association of Ontario. These were the key persons who were involved in the creation of the Best Practice Guidelines using the evidence-based knowledge in 2004. Other than Canada, USA and also few other countries were very determined in educating nurses and health care service providers in support of the evidence-based practices in the sectors.

In 2000, a joint annual meeting was held in Vancouver between MLA (Medical Library Association) and Canadian Health Libraries Association (CHLA). The main discussion of the meeting is related to EBL. UK put an advance step by joining the Editorial board of the International Research Reviews and the Evidence-based Librarianship Implementation Committee (EBLIC) which was setup for the first time. The EBLIC welcomed the international partnership and their main objective was to develop EBL guideline that can be used worldwide (Bayley, 2001; Bayley, Wallace & Brice, 2002; Booth et al, 2001). The EBL implementation advances one step forward by organizing its first conference in the year 2001. It was launched in Sheffield and received a warm presence by representative from UK, Canada, USA, Sweden and Norway (Eldregde, 2001) and it was led by two presenters form UK Library The Information Research Group is an influential research community in UK, whereby it gathers all academic and public library professionals who have interest in library research and they have had a very strong awareness on practice-based research.

Some country had used the term Evidence-based information practice (EBIP) or Evidence-based libraries instead of EBL but EBL is more widely used in USA. In recent years the term EBLIP (Evidence-based library and information practice) had taken place. Within 15 years EBLIP has developed its own phenomena. Since it was first introduced at the international level, it has successfully built a strong community which comes from varies nation and background with the same interest.
Six official conferences have been made fruitfully for the past few years. For educational purpose, EBLIP is accessible via online and available in an open access as a peer review journal. As the time passes, the current feature of EBL is formed on the basis of the following process:

1. Formulation of appropriate EBL question, searching for evidence and evidence critical evaluation
2. Different question needs different answer with support of appropriate evidence
3. Hesitation on the evidence’s validity and reliability
4. International collaboration on enlightening appropriate research methodology, evidence search and cultivate best practice

**EBL model**

Despite the cross distribution of the EBP concept to other area of study, the fundamental concept is almost the same. The term EBP generally reflects on the process of evidence based activities. Dewes et al (2005) designed 5 steps to EBM model and later it was simplified into the 5A’s of EBL model by Hayward (2007). However, they realized that the model was not really applicable with the library working environment. Then, the model was improved and presented at the 5th International Evidence Based Library and Information Practice conference (EBLIP5) in 2009. According to Booth (2009) the original 5A’s of EBL model emphasizes the individual (librarian and information professionals) but in reality, the library working environment focused on various activities.

![Figure 1: The transformation of the EBL model](image)
**Domain of EBL**

In a conference held in Sheffield, UK in 2001, Crumpley and Koufogiannakis (2001; 2002) presented their idea of EBL domain which consisted of library core practices as shown in the figure below. It is originally and re-modeled after the EBM domain. The domain was tested a few times because of the rising issues in librarianship. Koufogiannakis, Slater and Crumley (2004) had removed marketing and promotion from the list due to lack of literature in the subject area that they focused on to study but still the determinant of marketing and promotion is essential in librarianship so they arranged it under the domain of management. In the intervening time when there was an arising issue regarding professionalism researcher agreed to put it as a subset to the domain of education. The main reason to the concept of EBL domain is to assist librarian and information professionals to access information based on category outlined in EBL domain. It helps them to narrow down the search key and direct them to specific topic that they are looking for.

The EBL domain is just a basic guide to library who plans to practice EBL, but the final practice is always based on the needs of the library or organizational nature of work.

![EBL domain](image)

**Value to profession**

In library environment, EBL constitutes an applied rather than theoretical science. It merges as scientific research with the pressing need to solve practical problems. It provides a framework for self-correction as new information becomes available that would suggests new directions or new methods. This value is the benefit that EBL practices bring to librarianship profession. It may add to tons of work but for the sake of sustaining the existence and dependability to the library the concept of EBL is the best choice to be adopted.
**Decision making**

Miller and Ireland (2005) had described strategic decision making as ‘holistic hunch’ and ‘automated expertise’. ‘Holistic hunch’ concerns a person’s knowledge and experience, a bunch of related or reliable information in hand and have a strong intuition on that matter. While ‘automated expertise’ comprises multiple specific experience based on cases, personal knowledge or information about something and usualness by virtue of being familiar with related to subject matter. Library needs to adopt both ‘holistic hunch’ and ‘automated expertise’ to achieve ideal decisions in sustaining its relevance in supporting educational and research determination of their institution.

With EBL as the intermediary method to achieve the goal, librarian will be guided to assess related information and evidence that later can be used to support their actions and decisions. It benefits library through:

- Improving the quality of decisions by providing sufficient information (Ganshorn, 2009)
- Offering positive impact after the action has taken place after the decision was made (Ganshorn, 2009)
- Making use of available literature or library resources for library own good (Baughman, 2008)
- Measuring Library services achievement by using EBL (Baughman, 2008)
- Aiding library policy through reviews and evidence report (Booth, 2009b)
- Applying research as day-to-day decision making in library (Sivak, 2007)

**Problem solving**

In delivering library services, librarian acts as problem solvers to their users. This is common in library environment but the application in their individual task is still undetermined. Getting evidence into practice may require resources and methods, and this is how the application of EBL in this situation will help librarian not only assist their users but also support their individual job when a problem occurs. At this point EBL will fortify individual confidence in solving a particular problem and support decision making activity at the end of the process. EBL approach allows data gathered at the early process where the problem will be clarify in-depth, information gathered, alternatives resolution listed and later it is translated into actions.

The benefits of using EBL in problem solving allow librarians the following opportunities:

- Improving critical thinking skills
- Creating individual creativity
- Being open and flexible in handling library issue
- Changing to an evidence-based person
- Improving search skills in specific subject especially
- Building new knowledge and experience
- Expanding research methodology skills

Career advancement
Koufogiannakis et al (2013) believed that EBL practice may help to improve professional practice. In this situation the librarians will benefit the most if they make use of EBL activity in all aspects of library practice. An evidence based person can work independently or in group because their focus is evidence and outcome of a research. This will reflect their values to the organization as EBL encourages self-development that brings positive improvement not only to themselves and the organization but also in whatever they do. In relation to career advancement, some organizations are very supportive. They use rewards such as promotions, salary increment, bonus, allowance and annual review performance (KPI) points as an encouragement to motivate employee practice EBL in daily routine. These rewards will inspire librarian to performed well and use EBL for their own good.

Challenges to EBL
Ever since the first implementation of evidence based practices in medical field, the challenges never stop. The number is rising but different field faced different obstacle based on their situation. In 2011, Booth had come out with the taxonomy of factors for EBL challenges which existed in LIS literature.

During that time only Booth and Brice (2007), Brice et al. (2005), Gavgani (2009), Genoni et al., (2004) and Pretty (2007) had solely focused their research on barrier and challenges towards EBL practices. After the introduction of taxonomy EBL factors to the library practitioners, more research on the barriers were carried out like Spring (2011a), Spring (2011b), Spring & Wilshaw (2013), Maden-Jenkins (2011), Wilson (2013), Kennedy & Brancolini (2012) and Nisha & Ali (2013). Most of the articles contain the researchers’ experiences facing EBL challenges. All researchers had shared the same goal which is to share their experience, knowledge and issues that they overcame with the hope to inspire current or future practitioners from other countries who plan to adopt EBL in their practices.
Conclusion
Since EBP was developed decades ago, its values and the conceptions have shaped EBL as it is now. The new movement of EBL internationally has added to the advancement of librarianship profession in today’s digital era. It makes library more manageable, systematic, and focus on the expansion of library activities and services. It benefits librarian in decision-making, problem solving, service improvement, advance skills and knowledge and professional values. Thus, EBL will not only help librarian to support research and evidence-based activities of their user, but also to cultivate their (librarian) own evidence-based practice culture.

References


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