

APPLYING EVIDENCE BASED MEDICINE IN LABORATORY MEDICINE: A PILOT STUDY

Nuria Giménez^{1,2,3}, Daniel Morell-García^{1,4}, Juan Antonio Allué^{1,5}, María Dolores Albadalejo^{1,6}, Miguel Angel Castaño^{1,7}, Xavier Filella^{1,8}, Angels Ruiz^{1,9}, María Santamaría^{1,10} María José Torrejón^{1,11}

¹c-EBLM of SEQC-ML ²c-EBLM of IFCC ³Research Unit, Hospital Universitario MútuaTerrassa, Barcelona ⁴Son Espases University Hospital, Palma de Mallorca ⁵Synlab, Sevilla ⁶Hospital General Universitario Santa Lucía, Cartagena ⁷Hospital Clínico Universitario Juan Ramón Jiménez, Huelva ⁸CDB, Hospital Clínic, IDIBAPS, Barcelona ⁹Fundació Hospital de l'Esperit Sant, Santa Coloma de Gramanet ¹⁰Hospital Universitario Miguel Servet, Zaragoza ¹¹Hospital Clínico San Carlos, Madrid

BACKGROUND

Evidence-Based Laboratory medicine (EBLM) is the application of clinical laboratory medicine relying on the best scientific evidence available at time in order to make right decisions.

AIM

This pilot study was undertaken as a first step to know needs and how are applying laboratory medicine professionals EBLM in their professional practice.

METHODS

A self-completed questionnaire was designed by the Evidence-Based Laboratory Medicine Committee of the Spanish Society of Clinical Chemistry and Laboratory Medicine(SEQC-ML). The questionnaire consisted of five sections (sociodemographic data, opinion about EBLM, personal experience, workplace conditions, and suggestions) and 50 variables.

The variables were scored on a scale of 1 to 10.

The survey was administered by email in December 2018.

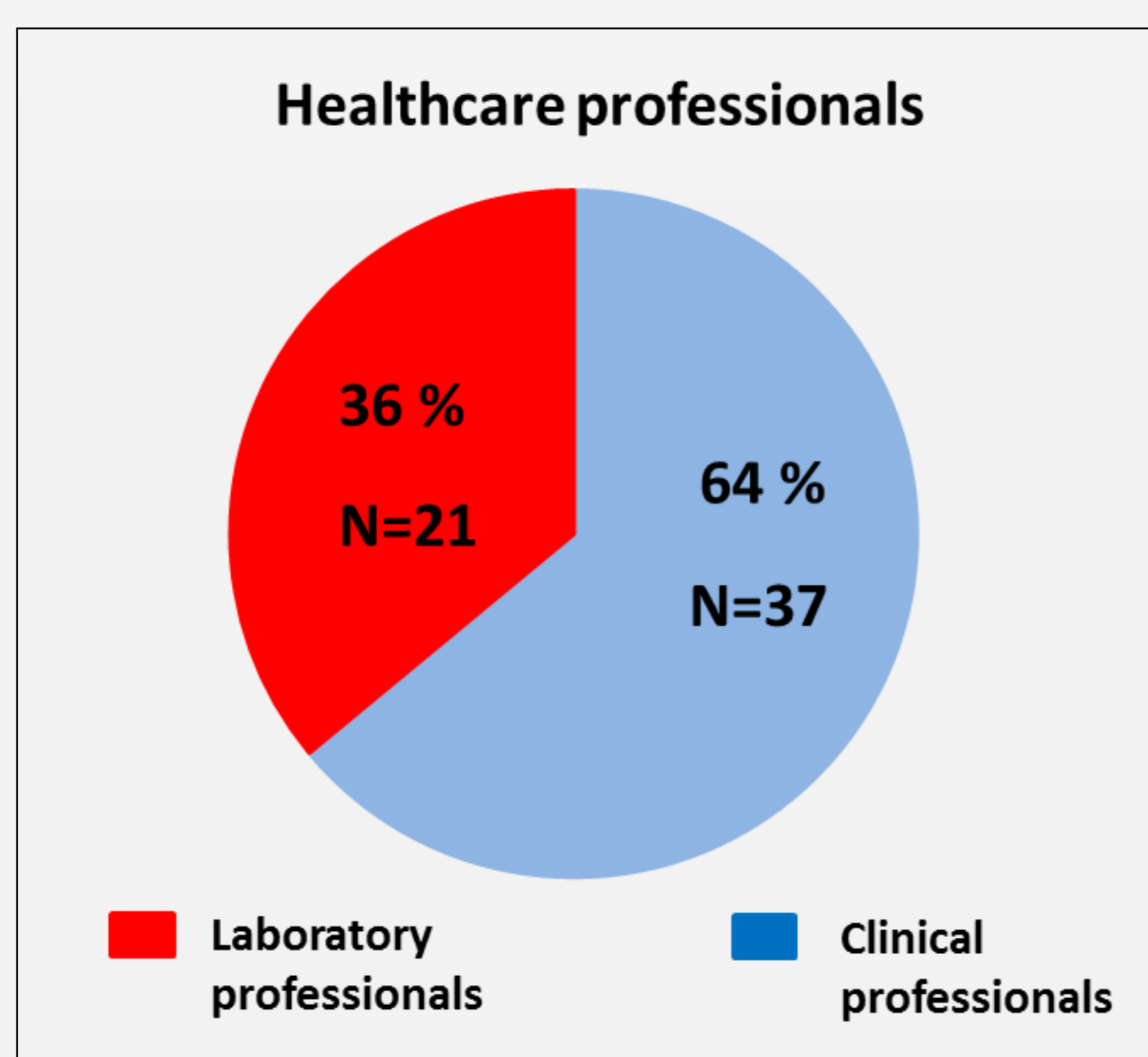
The data analysis was done using IBM SPSS.

The present study was done in accordance with the Ethics Research Committee.

RESULTS

58 healthcare professionals participated (Figure 1). 60% were female (n=34). The mean age was 41 years and mean professional experience was 16 years. The perception about EBLM importance are detailed in Figure 2, the main information resources in Figure 3 and the daily professional practice in Figure 4. 98% considered that their daily professional practice would improve if they had time to update their EBLM knowledge.45% had participated in elaborating assistance protocols (n=26) and 35% in guidelines (n=20).50% did not know on which the reference values of their laboratory were based (n=29).86% considered that the inadequacy of the EBLM processes entails an additional cost of healthcare (n=50).91% considered that the EBLM updating of laboratory professionals should be mandatory (n=53).

Figure 1. Pilot study. Participation (n=58).



RESULTS

Figure 2. Evolution of the EBLM importance.

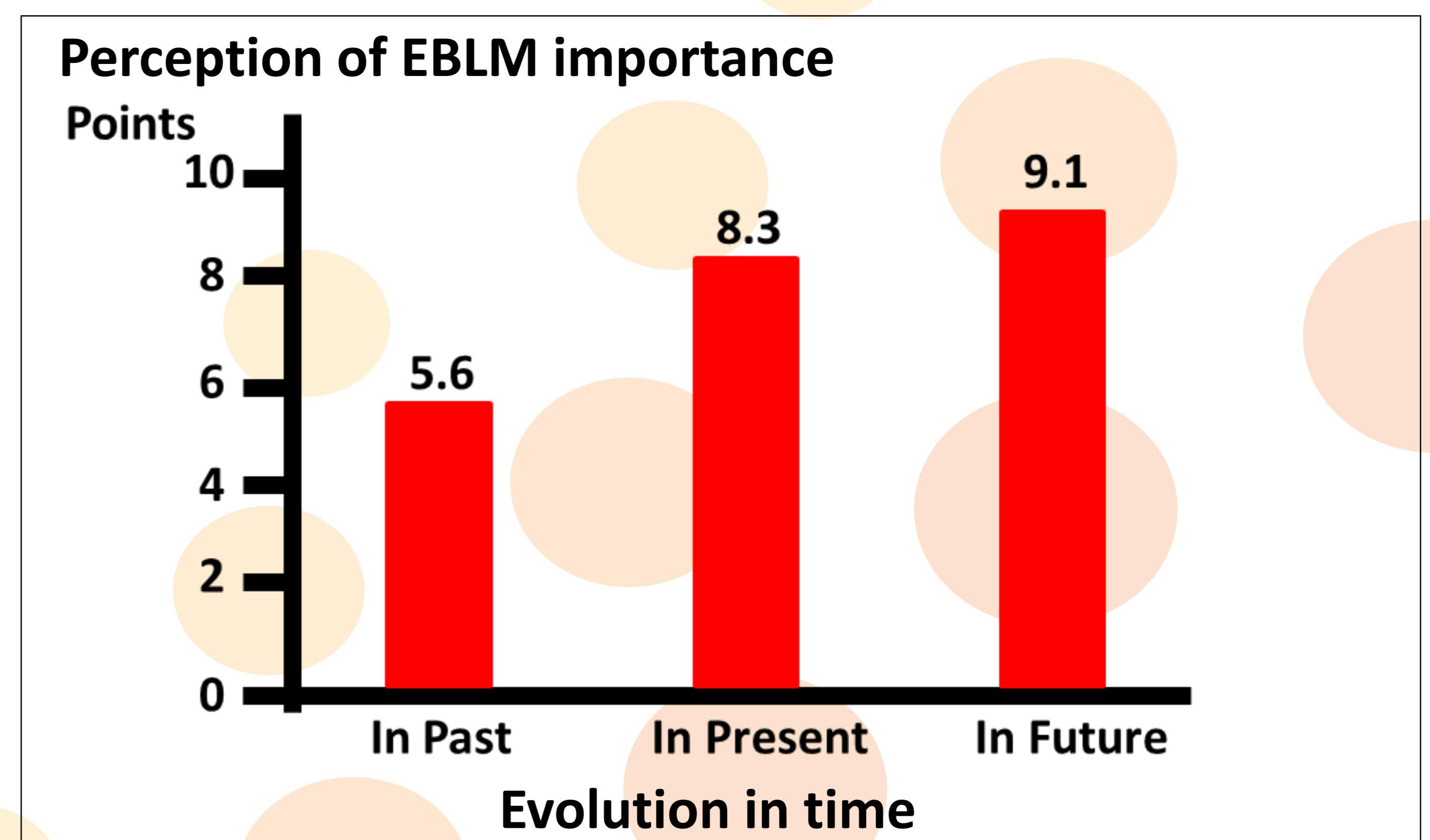


Figure 3. Information resources.

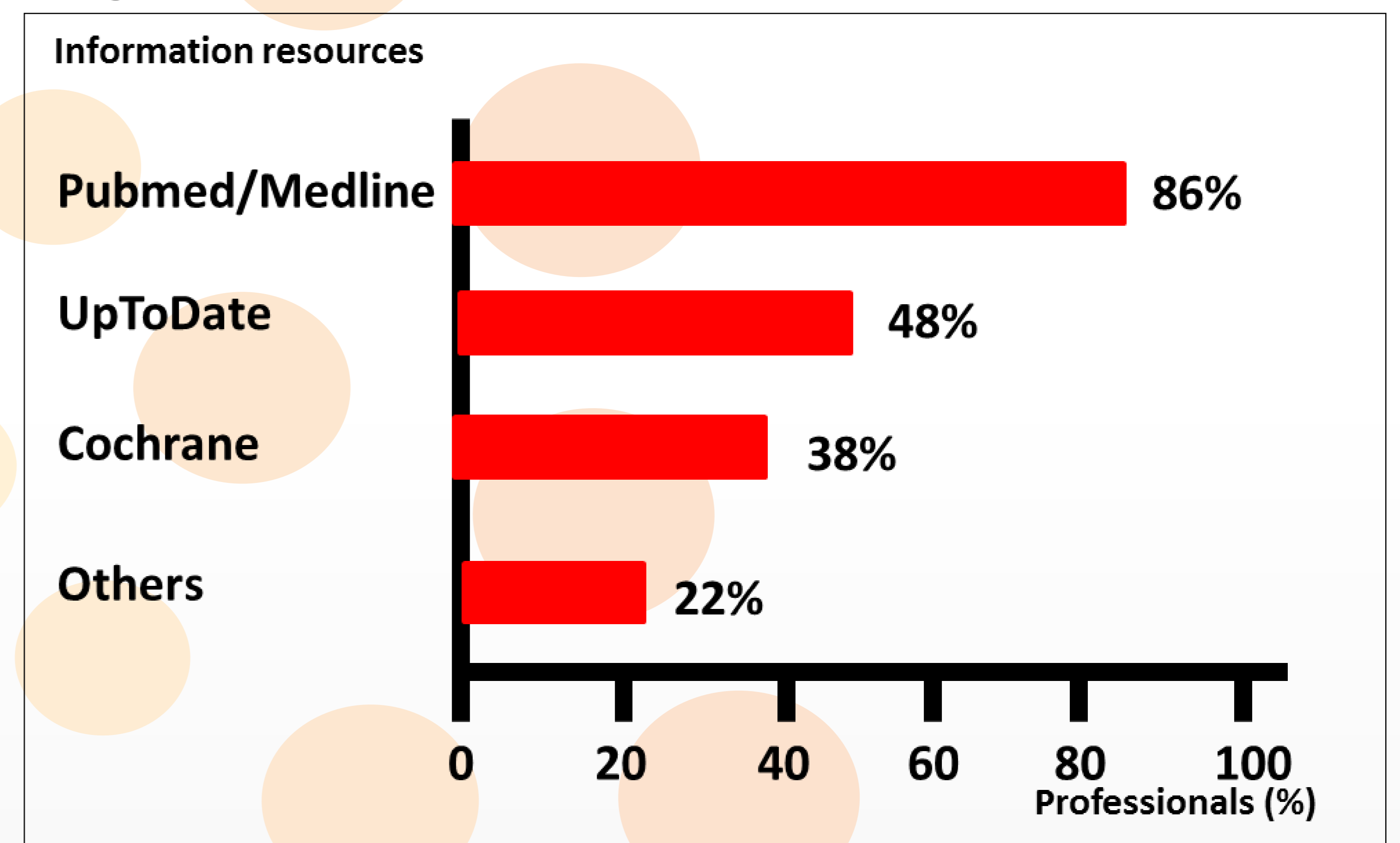
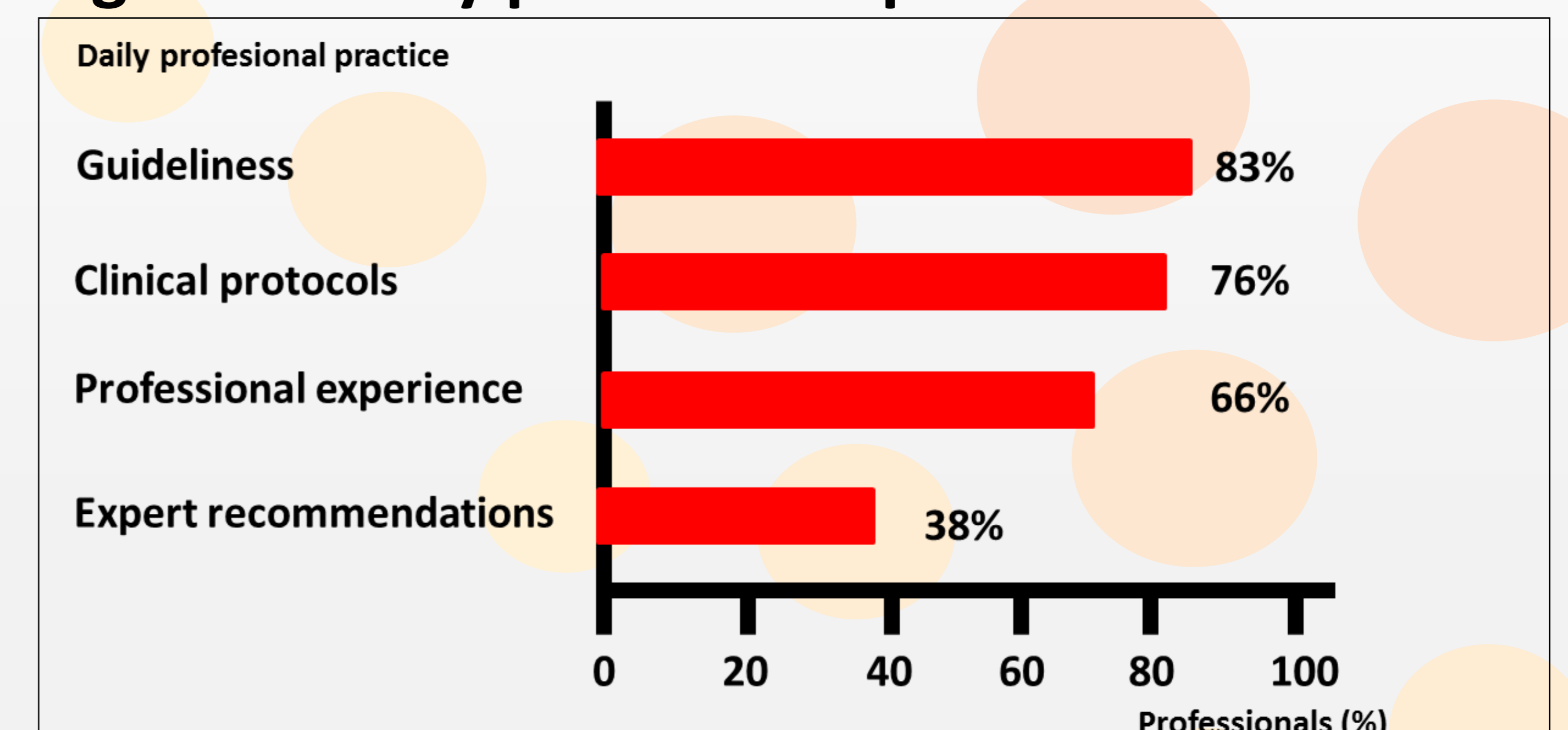


Figure 4. Daily professional practice based on:



CONCLUSIONS

Laboratory and clinical professionals considered EBLM as necessary in their daily practice, even with the multiple difficulties implicated while applying it.