

# The Awareness And Knowledge Of Evidence Based Medicine In The International Orthopedics Community: a questionnaire survey.

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## Background

Evidence Based Medicine (EBM) is a universal cultural movement that integrates three important aspects: current best evidence, clinical expertise and patient's values. EBM's influence and application is exponentially growing. How clinicians perceived and use EBM has been explored in studies across several countries encompassing many medical fields. However, no one has studied clinician's behavior under an international perspective. Indeed, whether the international orthopedic community endorse the EBM principles and apply them in their clinical practice is still largely unknown.



David L Sackett, BMJ 1996

## Aim

To investigate the awareness, knowledge and perception towards the helpfulness and usefulness of the evidence based literature in clinical practice among surgeons and health professionals, member of the European Society of Sports Traumatology, Knee Surgery and Arthroscopy (ESSKA Association), which is a professional society that represents Europe in the fields of degenerative joint disease and sports medicine.

## Methods

A questionnaire has been sent to orthopedic surgeons and health professionals who are members of the ESSKA Association during the year 2016 (January – December). Professionals contacts were collected from an electronic database settled in Luxembourg. We used the self-report questionnaire of Jette et al. (Jette et al. Physical Therapy, 2003), which was built to investigate the knowledge of the evidence based medicine among physical therapists, demonstrated to have an adequate test-retest reliability. The questionnaire has been adapted for being appropriately addressed to the orthopedic community. The modified questionnaire has been judged by an expert panel of four health professionals in order to validate the content for the orthopedic community. We explored: (i) respondents' attitudes and beliefs about evidence based medicine; (ii) interest in and motivation to transfer evidence based medicine to practice; (iii) educational background, knowledge and skills related to accessing and interpreting information; (iv) level of attention to and use of literature; (v) access to and availability of evidence; (vi) perceived barriers to using evidence in clinical practice. The following demographic and practice data have been collected: country, age, sex, educational background, attendance to EBM courses. The questionnaire has been generated using an online format (<https://da.surveymonkey.com/>) and send via e-mail to all the selected members of the ESSKA association. The survey has been launched on January 23, 2017 and lasted until March 30, 2017. Data were analyzed through descriptive statistics and we will further investigate age, educational background (i.e. PhD or only MD) and country as co-variables to response to items.

## Preliminary results

288 ESSKA members, 263 males and 25 females, answered to the questionnaire, corresponding to the 10% of the total member's number. The median age was comprised among 40 – 49 years. About the 2.5% of the responders works in two countries and the 1.7% even in a third. The majority of responders was a medical doctor (91%), and the minority (8%) was represented by other health professionals such as physical therapists, biomedical engineers and sport scientists. The 45.5% of our sample has a post-graduate degree and the 30% undertook a PhD. EBM cultural movement is known by the 97% of responders and more than 50% of them declared to have received EBM training during the academic preparation. However, almost the 50% declared to have not received a specific training to critically appraise the research literature. The 90% of the responders agreed that EBM improves the quality of patient care but the 25% declared that the EBM does not take into account patient preferences.

## Limits

We will investigate the non-response bias due to the size of the sample selected.

**Keywords** Evidence-Based Medicine, Evidence-Based Practice, Orthopedics, Musculoskeletal Diseases, Surveys and Questionnaires.

## Conclusion

How clinicians in orthopedics field implement the EBM movement in their practice is paramount to discover. Our preliminary results can lead to investigate educational lack and professional behavior in order to improve the quality of orthopedic practice. Further actions should be direct towards restraining divergent beliefs, promoting education and disseminate EBM strategies.