MODULE 6
USING LITERATURE TO INFORM MY PRACTICE
11 January 2021

PRELIMINARY PROGRAMME
QUICK FACTS

WHEN: 11 JANUARY 2021
WHERE: IRCAD
Hôpitaux Universitaires
1, place de l’Hôpital
67091 Strasbourg, France
www.ircad.fr
+ 33 (0)3 88 11 90 00

MAXIMUM ATTENDEES: 50 delegates
REGISTRATION FEE:
EUROSPINE Member: €200
Non-member: €300

CME CREDITS:
Application to EACCME pending

LANGUAGE: English
DRESS: Casual

CME CREDITS:
Accreditation by EACCME® (European Accreditation Council for Continuing Medical Education) pending

LANGUAGE: English
DRESS: Casual

IMPORTANT NOTE:
Attendance at every session is mandatory.
This will be a paperless course and not printed programme will be provided.
A wireless Internet device (mobile phone/ipad/computer) is mandatory to access on-line resources during the course and for completing the course evaluation. Please bring one with you.
The course evaluation is mandatory to obtain the CME certificate.

TARGET AUDIENCE

- Healthcare professionals in Europe in order of availability and access: primary care physicians and surgeons involved in spine care, physiotherapist, chiropractors, osteopaths, occupational therapists, clinical psycholoigists, nursing practitioners, naprapath and others who are graduated as clinicians from a recognized institution (i.e. professional school or university).
- At least two years of clinical experience is recommended but all new graduates are encouraged to register.

AIMS OF THE MODULE
This course will provide participants with the necessary skills to critically appraise the quality of the spine literature. Specifically, the course will introduce basic study designs and discuss the main threats to the validity of clinical studies.
Learning methods include didactic lectures and workshops. Recently published papers will be used in the workshops. The topics covered in the course include: the importance of research to inform practice, randomized clinical trials and cohort studies.

Participants will learn to use a critical appraisal tool to assess the quality of randomized control trials and cohort/prognostic studies.

**LEARNING OUTCOMES**

This module aims to enable learners to:

**General outcomes and objectives**
- Evaluate the quality of randomized clinical trials (RCTs);
- Evaluate the quality of cohort/prognostic studies;
- Understand the place of critical appraisal in a clinical practice that includes published evidence and patients’ perspectives;
- Judge whether to change their practice based on new evidence.

**Outcomes and objectives for session 1: Introduction to critical appraisal**
- Understand the place of critical appraisal in clinical practice that includes published evidence and patients’ perspectives;
- Identify the research question and study objective in a published article;
- Understand the notions of statistical significance and clinical importance of study results;
- Judge when to change their practice based on new evidence.

**Outcomes and objectives for session 2: The architecture of RCTs: What clinicians need to know to determine the quality of a RCT**
- Understand the basic design of a RCT;
- Understand key issues to address when critically appraising a randomized controlled trial: selection issues, randomization, measurement of key outcomes, comparability of groups, data analysis.

**Outcomes and objectives for session 3: The architecture of cohort/prognostic studies: What clinicians need to know to determine the quality of a cohort/prognostic study**
- Understand the basic structure of cohort/prognostic studies;
- Understand the role of data registry in the conduct of cohort/prognostic studies;
- Understand key issues to address when critically appraising a cohort/prognostic study: selection of participants, measurement of exposures and outcomes, control for confounders and interpretation of results.

**Outcomes and objectives for Workshop 1: Critical appraisal of a RCT**
- Critically appraise a published randomized controlled trial using a standardized critical appraisal tool and identify the main threats to its validity;
- Discuss the validity of a published randomized clinical trial;
- Discuss the relevance of results of a published randomized clinical trial.
Outcomes and objectives for Workshop 2: Critical appraisal of a cohort/prognostic study

- Critically appraise a published cohort/prognostic study using a standardized critical appraisal tool and identify the main threats to its validity;
- Discuss the validity of a published cohort/prognostic study;
- Discuss the relevance of results of a cohort/prognostic study to clinical practice.

INSTRUCTIONAL METHODS

The following instructional methods will be employed in the teaching of this module:

- Pre-learning activities: Preparatory readings;
- Classroom teaching: Interactive lectures that extend from theory to case-studies;
- Workshops: Facilitated group discussions and practical workshops.

All instructional methods should require active participation, consistent with the range of motivations for pursuing the EDISC programme. There should also be a strong emphasis on self-directed learning and pre-reading.

FACE-TO-FACE LEARNING SESSIONS

- **Introduction to critical appraisal: evidence-base spinal care and critical appraisal**
  - Lecture: This session will introduce learners to the importance of critically reading the clinical literature and introduce the basic principles necessary to evaluate the quality of RCTs and clinical practice guidelines.
  - Activity: Workshop 1: presenting a clinical case and polling participants with their treatment recommendation

- **Critical appraisal: principles and available tools**
  - Lecture: This session will introduce learners to the principles of critical appraisal and tools that can be used.
  - Activity: Workshop 2: Appraising the pertinence of abstracts

- **Critical appraisal of randomised clinical trials (1): Study question, population and randomisation**

- **Critical appraisal of randomised clinical trials (2): Study conduct and analysis**
  - Lecture: The session will provide basic knowledge of the methodological design of RCTs
  - Activity: In small groups, learners will work together to evaluate a RCT using the CASP Randomized Controlled Trail Checklist. The instructors will serve as methodological experts to guide the small group interactions. The critical appraisal session will be followed by a consensus discussion that will involve all learners.
    - Workshop 3: Critical appraisal of parts of a randomised controlled trial (article 1, related to case)
    - Workshop 4: Critical appraisal of parts of a randomised controlled trial (article 1, related to case)
• Critical appraisal of cohort and prognostic studies (1): Study question, population and randomisation

• Critical appraisal of cohort and prognostic studies (2): Study conduct and analysis
  o Lectures: The session will provide basic knowledge of the methodological design of a cohort/prognostic study.
  o Activity: In small groups, learners will work together to evaluate a cohort/prognostic study using the SIGN tool. The instructors will serve as methodological experts to guide the small group interactions. The critical appraisal session will be followed by a consensus discussion that will involve all learners.
    ▪ Workshop 5: Critical appraisal of parts of a cohort study (article 2, related to case)
    ▪ Workshop 6: Critical appraisal of parts of a cohort study (article 2, related to case)

• Applicability of study results to initial case
  o Activity: Workshop 7: polling of students, and feedback

ASSESSMENT

1. Critical appraisal of randomized controlled trials
   Participants shall critically appraise a Randomised Controlled Trial using the CASP Checklist with 11 questions. The 11 questions are designed to help you think about three broad issues:
   A. Are the results of the study valid?
   B. What are the results?
   C. Will the results help locally?
   A number of italicised prompts are given after each question to remind you why the question is important. Record your reasons for your answers in the spaces provided.

2. Critical appraisal of a cohort study
   Participants are expected to critically appraise a cohort study using the CEBM critical appraisal form. For each question, participants are to answer "yes", "no" or "unclear" and justify the answer in the comment section. Following the critical appraisal of the paper, participants are expected to make an informed decision about the usability of the study findings to their clinical practice.
COURSE EVALUATION BY THE PARTICIPANTS

In line with EACCME’s requirements for accredited activities, participants will be requested to complete a mandatory course evaluation at the end of the module in the form of a short online survey. Responding to the survey is a condition in order for participants to obtain their CME certificates.

LIST OF RESOURCES

Pre-course reading:

OTHER RESOURCES:
### COURSE CHAIRMAN

<table>
<thead>
<tr>
<th>Name</th>
<th>Position, Location</th>
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<tbody>
<tr>
<td>RACHID SALMI</td>
<td>EPIDEMIOLOGIST, BORDEAUX, FRANCE</td>
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### FACULTY

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>PIERRE CÔTÉ</td>
<td>EPIDEMIOLOGIST, OSHAWA, CANADA</td>
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<tr>
<td>EVERARD MUNTING</td>
<td>SPINE SURGEON, OTTIGNES, BELGIUM</td>
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<tr>
<td>MARGARETA NORDIN</td>
<td>PHYSIOTHERAPIST, ROMORANTIN, FRANCE</td>
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<tr>
<td>EVA SKILLGATE</td>
<td>NAPRAPATH, STOCKHOLM, SWEDEN</td>
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<tr>
<td>08:30 - 09:00</td>
<td>Participants’ check-in and welcome</td>
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<tr>
<td><strong>SESSION 1: COURSE INTRODUCTION</strong></td>
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<tr>
<td>09:00 - 09:15</td>
<td>Welcome and introduction</td>
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<tr>
<td>09:15 - 09:35</td>
<td>Introduction to critical appraisal: evidence-based spinal care and critical appraisal</td>
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<tr>
<td>09:35 - 09:55</td>
<td>Workshop 1: presenting a clinical case and polling participants with their treatment recommendation</td>
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<td>9:55-10:30</td>
<td>Critical appraisal: principles and available tools</td>
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<td>10:45 - 11:05</td>
<td>Workshop 2: Appraising the pertinence of abstracts</td>
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<td><strong>SESSION 2: RANDOMIZED CONTROL TRIALS</strong></td>
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<td>11:05-11:25</td>
<td>Critical appraisal of randomised clinical trials (1): Study question, population and randomisation</td>
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<td>11:25-11:55</td>
<td>Workshop 3: Critical appraisal of parts of a randomised controlled trial (article 1, related to case)</td>
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<td>11:55-12:30</td>
<td>Critical appraisal of randomised clinical trials (2): Study conduct and analysis</td>
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<td><strong>Lunch 60 min</strong></td>
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<td>13:30 - 14:10</td>
<td>Workshop 4: Critical appraisal of parts of a randomised controlled trial (article 1, related to case)</td>
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<td><strong>SESSION 3: COHORT AND PROGNOSTIC STUDIES</strong></td>
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<td>14:10 - 14:30</td>
<td>Critical appraisal of cohort and prognostic studies (1): Study question, population and randomisation</td>
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<td>14:30 - 15:00</td>
<td>Workshop 5: Critical appraisal of parts of a cohort study (article 2, related to case)</td>
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<td>15:00 - 15:30</td>
<td>Critical appraisal of cohort and prognostic studies (2): Study conduct and analysis</td>
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<td><strong>Coffee Break 15 min</strong></td>
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<td>15:45-16:30</td>
<td>Workshop 6: Critical appraisal of parts of a cohort study (article 2, related to case)</td>
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<td><strong>SESSION 4: CONCLUSION</strong></td>
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<td>16:30-17:00</td>
<td>Workshop 7: applicability of study results to initial case, polling of students, and feedback</td>
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<td>17:00-17:15</td>
<td>Course evaluation (Mandatory for all participants)</td>
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<td>17:15-17:30</td>
<td>Closing remarks</td>
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<td>17:30</td>
<td>END OF MODULE</td>
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CONTACTS
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Chairman, Education Committee of EUROSPINE