Teaching Evidence-Based Practice Pre-Course Survey

14-15 TEBP

Survey results

Started: 07 November 2014

Ended: 10 November 2014

Reply rate: 64% (23 / 36)
### Teaching Evidence-Based Practice Pre-Course Survey

1. **Name:**
   - Lisa Insole
   - Nick Myles
   - SHIREESH BHALERAO
   - Majid Artus
   - Ola Bratt
   - Paul Jennings
   - Zilvinas Dambrauskas
   - Chris Hay
   - Amena Munshi
   - Elizabeth Anderson
   - Ruta Nadisauskiene
   - Edmund Jack
   - Gene Stevenson
   - Alison Bethel
   - Sam Densem
   - Nik Bobrovitz
   - Richard Draper
   - Paulien Wiersma
   - Leone Snowden
   - Hanneke Rijkels-Otters
   - Haris Achilleos
   - Bianca Kramer

   Number of answers: 22

2. **The best study design to assess whether smokers, compared to non-smokers, have a higher incidence of lung cancer is:**

   - A randomised controlled trial: 0 % (0)
   - A case-controlled study: 17 % (4)
   - A cohort study: 83 % (19)
   - None of the above: 0 % (0)

   Number of answers: 23
   Weighted mean: 2.83

3. **3. How confident are you in your ability to search PubMed for relevant articles on a clinical/research question?**

   - 1 - Not confident: 0 % (0)
   - 2: 13 % (3)
   - 3: 26 % (6)
   - 4: 43 % (10)
   - 5 - Very confident (could teach others): 17 % (4)

   Number of answers: 23
   Weighted mean: 3.65

4. **4. The best study design to assess whether a treatment is effective or not is:**

   - A cohort study: 0 % (0)
   - A randomised controlled trial: 87 % (20)
   - A case-controlled study: 0 % (0)
   - A systematic review: 13 % (3)
   - None of the above: 0 % (0)

   Number of answers: 23
   Weighted mean: 2.26

5. **5. How confident are you in your ability to critically appraise a randomised controlled trial?**

   - 1 - Not confident: 13 % (3)
   - 2: 13 % (3)
   - 3: 26 % (6)
   - 4: 35 % (8)
   - 5 - Very confident (could teach others): 13 % (3)

   Number of answers: 23
   Weighted mean: 3.22
6. How confident are you in your ability to interpret a forest plot from a systematic review?

<table>
<thead>
<tr>
<th>Confidence Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Not confident</td>
<td>9 % (2)</td>
</tr>
<tr>
<td>2</td>
<td>13 % (3)</td>
</tr>
<tr>
<td>3</td>
<td>17 % (4)</td>
</tr>
<tr>
<td>4</td>
<td>39 % (9)</td>
</tr>
<tr>
<td>5 - Very confident (could teach others)</td>
<td>22 % (5)</td>
</tr>
</tbody>
</table>

Number of answers: 23
Weighted mean: 3.52

7. How confident are you in your ability to interpret the results from a diagnostic study?

<table>
<thead>
<tr>
<th>Confidence Level</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1 - Not confident</td>
<td>17 % (4)</td>
</tr>
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<td>2</td>
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</tr>
<tr>
<td>3</td>
<td>35 % (8)</td>
</tr>
<tr>
<td>4</td>
<td>13 % (3)</td>
</tr>
<tr>
<td>5 - Very confident (could teach others)</td>
<td>9 % (2)</td>
</tr>
</tbody>
</table>

Number of answers: 23
Weighted mean: 2.7

8. Case-controlled studies include cohorts that are matched on outcome.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>52 % (12)</td>
</tr>
<tr>
<td>False</td>
<td>48 % (11)</td>
</tr>
</tbody>
</table>

Number of answers: 23
Weighted mean: 1.48

9. The result from a positive (abnormal) test result that tells you the probability of having the disease being tested for is the:

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative predictive value</td>
<td>0 % (0)</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>4 % (1)</td>
</tr>
<tr>
<td>Likelihood ratio</td>
<td>17 % (4)</td>
</tr>
<tr>
<td>Positive predictive value</td>
<td>74 % (17)</td>
</tr>
<tr>
<td>None of the above</td>
<td>4 % (1)</td>
</tr>
</tbody>
</table>

Number of answers: 23
Weighted mean: 3.78

10. The equation to calculate the number needed to treat is 1-ARR

<table>
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<tbody>
<tr>
<td>True</td>
<td>26 % (6)</td>
</tr>
<tr>
<td>False</td>
<td>74 % (17)</td>
</tr>
</tbody>
</table>

Number of answers: 23
Weighted mean: 1.74

11. Randomisation and allocation

<table>
<thead>
<tr>
<th>Confidence Level</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1 - Not happy</td>
<td>13 % (3)</td>
</tr>
<tr>
<td>2</td>
<td>13 % (3)</td>
</tr>
<tr>
<td>3</td>
<td>35 % (8)</td>
</tr>
<tr>
<td>4</td>
<td>26 % (6)</td>
</tr>
<tr>
<td>5 - Very happy</td>
<td>13 % (3)</td>
</tr>
</tbody>
</table>

Number of answers: 23
Weighted mean: 3.13

12. Heterogeneity in systematic reviews

<table>
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<tr>
<td>4</td>
<td>17 % (4)</td>
</tr>
<tr>
<td>5 - Very happy</td>
<td>9 % (2)</td>
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</tbody>
</table>

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Weighted mean: 2.83

13. Diagnostic likelihood ratios

<table>
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</tr>
<tr>
<td>4</td>
<td>9 % (2)</td>
</tr>
<tr>
<td>5 - Very happy</td>
<td>9 % (2)</td>
</tr>
</tbody>
</table>

Number of answers: 23
Weighted mean: 2.17
14. Confounding in observational studies

| 1 - Not happy | 13% (3) |
| 2 | 35% (8) |
| 3 | 22% (5) |
| 4 | 22% (5) |
| 5 - Very happy | 9% (2) |

Number of answers: 23
Weighted mean: 2.78

15. Principles of evidence based medicine

| 1 - Not happy | 9% (2) |
| 2 | 13% (3) |
| 3 | 35% (8) |
| 4 | 30% (7) |
| 5 - Very happy | 13% (3) |

Number of answers: 23
Weighted mean: 3.26

16. List three objectives that you hope for from the course:

- I hope to learn to be a more effective teacher-in terms of structuring sessions. I would like to observe examples of good teaching.
- I hope to understand statistics better than I do now and learn how to present material in a way that trainees will understand it.
- I want to find evidence that EBP is superior to non-EBP or mixed pattern practice.
- I want to learn more about how to better understand and teach: hazard ratio in cohort studies, ROC curves, survival analysis, and effect size as a measure of treatment effectiveness.
- Learning the skills to find evidence within time restraint.
- Gaining confidence that the identified evidence IS the best available evidence.
- Learning the best ways to apply 'evidence' to individual patients.
- I'm the course director for a 30 ECTS course on medical research methodology for Ph.D. students and another short course for SpRs on basics in medical research. The 3 hour EBM sessions (not held by myself) needs to be improved. Inspiration is sought to improve this session.
- I'm also the course director for the urology course for medical students and would like to confer some EBM principles during the 2 weeks that the students are "under my care". Time for additional teaching is scarce, but hopefully your EBM course will give me some ideas.
- I'm the chairman of the Swedish national prostate cancer guidelines group and want the guidelines to be based on EBM. A general improvement in my EBM skills is sought, especially on performing and interpreting systematic reviews.
- Innovative ways of teaching EBM
- Improve understanding of diagnostic studies and related statistical tests
- Consolidate knowledge relating to observational study methods
- How clinical guidelines are developed?
- How clinical guidelines are implemented/adapted in the clinical practice?
- Better understanding of statistics frequently used in the evidence based medicine.
- Better understanding of critical appraisal and paper screening
- Improved understanding of medical statistics
- Increased familiarity with search strategies
- Master the Basic concept of EBM
- Become confident in using its terminology
- Be able to teach them to other
- To feel more confident about study designs and have some understanding of statistics.
- To feel more confident about critical analysis/literature evaluation
- To determine appropriate studies for specific clinical questions.
- To gain theoretical skill how to teach EBM
- To gain practical skills of appraisal systematic reviews
2. To gain practical skills of appraisal RCT and other design of studies
   • 1. Consolidate my understanding of basic EBP
   2. Develop techniques to use whilst teaching in the future. I'm specifically looking to develop imaginative engaging ways to engage diverse groups from undergraduates to busy clinicians.

3. To feel confident to work through examples of the stats used in papers in real time with a group
   • Workshop skills

   Teaching Critical Appraisal
   How teach an audience with diverse background in EBHC
   • understand more about evidence based medicine
   some good techniques to help me train others
   help me fir the little bits I know into the bigger picture
   • 1. Educated about evidence based teaching methods.

2. Further opportunity to learn and practice knowledge and skills of EBP
   3. To practice teaching some skills of EBP
      • 1. To learn effective methods to teach the calculations and interpretations for measures of effect, including how to convert relative measures of effect to absolute measures of effect.
   2. To learn effective methods to teach the principles of EBM.
   3. To relearn the methods needed to interpret and critically appraise a diagnostic study.
      • Improve broad knowledge of EHBC
      Improve knowledge of teaching resources for EHBC
      Develop ways of applying the above to role as GP Trainer
      • study design in relation to types of questions (e.g. diagnostic/etiologic/etc.)

   statistical topics
evaluation of systematic reviews
   • To better understand statistical measures

   To improve critical appraisal skills (particularly in relation to therapy)
   To have a wider knowledge of pre-appraised information sources
   • 1. to enhance my own knowledge of EBM and teaching skills
   2. how to teach in such a way that GPs understand and see the relevance of continuous education by using the Pico and 4 steps in their clinical practice so that patients benefit from ongoing EBM

3. How do you change the opinion of EBM being boring and costing a lot a time to being fun and can be done efficiently?
   So how can I introduce the fun factor to EBM?
   4. How to deal with levels of knowledge in a group. I want all students to learn, moderate and excellent students.
   5. could you explain funnel plots and eggers test please?

   thanks!
   • 1. Learn to give feedback on critical appraisal in a way that is not perceived as judgemental or mean (i.e. during Journal Club meetings)