Addressing the evidence gap: new techniques to solve an old problem

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Evidence-Based Veterinary Medicine (EBVM) is held to be the gold standard approach to cases for veterinary clinicians; reducing the use of habit, anecdote and theoretical reasoning by basing clinical decisions on the best available empirical evidence. The veterinary profession has, quite rightly, been moving towards using a more evidence-based approach to clinical practice in recent years. The fundamentals of EBVM are now taught throughout the curricula of UK veterinary schools, postgraduate certificates focus on the tenets of EBVM, the EBVM Learning website is used worldwide to teach the stages of EBVM and RCVS Knowledge have launched a journal (Veterinary Evidence) whose remit is to publish evidence to aid clinical decision making.

However, the reality for many vets in practice is that there is still a dearth of good-quality evidence available upon which to base even the simplest of day-to-day clinical decisions. There are many reasons for this lack of evidence, not least the lack of funding available to conduct high quality, randomised controlled trials addressing some of the common questions faced in practice.

Opinion consensus is thought to be the least robust form of evidence (Table 1), but, depending on how the expert opinions are elicited, these can have as much weight as evidence from other study types, and may sometimes provide better evidence than case reports or case series. While systematic reviews, meta-analyses and randomised controlled trials are regarded as the most robust evidence forms to answer clinical questions in most instances, there is a distinct lack of these ‘higher’ forms of evidence in many areas of veterinary medicine. As such, there is a need for the profession to be more creative in its approach to evaluating the evidence base.

**What you need to know**

- There is currently little evidence available on optimising preventative healthcare consultations in small animal practice.
- New recommendations for preventative healthcare consultations have been developed in collaboration with veterinary surgeons and pet owners, using the Delphi technique.
- A total of 18 recommendations were made, with 13 of these reaching consensus of more than 80 per cent.
- These recommendations are wide-ranging and will provide a solid basis for developing practice-specific preventative healthcare consultations.

In the absence of evidence, veterinary surgeons often have to rely on their own clinical judgement, along with anecdotal evidence and the perceived norms among the profession. This is certainly true when it comes to preventive healthcare consultations (PHCs) in small animal practice.
As highlighted in a study by Belshaw and colleagues, summarised on p 348 of this issue of Vet Record, the evidence base for optimising PHCs is limited. Since these PHCs make up a large proportion of the work that small animal veterinary surgeons do, research of this nature is long overdue. Finding ways to optimise the ‘simple booster vaccination’ to be a useful exercise in communication and health planning will benefit both the animals in our care and the profession as a whole.

The study by Belshaw and colleagues is one of many to come out of the University of Nottingham’s Centre for Evidence-Based Veterinary Medicine aimed at improving the evidence base for clinicians, and is one of a series focusing on PHCs. It uses a method for providing an evidence base that is used relatively commonly in human healthcare but is still quite new to the world of veterinary medicine – the Delphi technique.

The Delphi technique is a way of using expert opinion to develop recommendations for a topic where there is currently little evidence. It was developed in the 1950s as a means of predicting the impact of technology on warfare and has since been taken up by a number of disciplines. There are a few previous examples of the technique being used in veterinary science: developing recommendations for the treatment of uterine prolapse, in veterinary education and for recognising pain in cats. This latest study was designed to try to inform some of the most common and straightforward consultation decisions made by small animal veterinarians.

While the Delphi technique still relies on ‘expert’ opinion, it does at least canvas opinion from multiple sources in a tried and tested way. Laudably, following in the footsteps of the work of Greenhalgh and colleagues in human medicine, Belshaw and colleagues decided to include the opinion of clients alongside those of vets. This move towards a partnership approach to the ‘expert’ is encouraging. There is much research to show that paternalistic knowledge transfer can be ineffective, and including the opinion of the client, who is indeed the expert in what it is they expect from a PHC, is a step in the right direction.

The recommendations set out in the study include needing a minimum of 15 minutes for a PHC to encouraging owners to ask questions, agreeing how costs will be communicated and conducting a full clinical examination. These recommendations are yet to be tested in the field, and it will be interesting to see what the uptake and impact may be. The authors stress that the recommendations do not all need to be implemented together, but rather provide a list from which clinicians can use their clinical judgement to discern which may provide the best service and care for clients and their animals.

These guidelines, developed in partnership with clients, provide a much-needed source of evidence for small animal practitioners and have the potential to really impact the quality of care we can offer in the consulting room. In the absence of higher forms of evidence, these new techniques can help us solve old problems.

References


Table 1: Level of evidence table, adapted from the Oxford Centre for Evidence-Based Medicine’s levels of evidence

<table>
<thead>
<tr>
<th>Level of evidence</th>
<th>Treatment</th>
<th>Prognosis</th>
<th>Risk</th>
<th>Diagnosis</th>
<th>Prevalence</th>
<th>Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (most robust)</td>
<td>Systematic review and meta-analysis</td>
<td>Systematic review and meta-analysis</td>
<td>Systematic review and meta-analysis</td>
<td>Systematic review and meta-analysis</td>
<td>Systematic review and meta-analysis</td>
<td></td>
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<tr>
<td>2</td>
<td>Randomised controlled trial</td>
<td>Cohort study</td>
<td>Cohort study</td>
<td>Diagnostic test evaluation study</td>
<td>Cross-sectional study</td>
<td>Cohort study</td>
</tr>
<tr>
<td>3</td>
<td>Cohort study</td>
<td>–</td>
<td>Case-control study</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>4</td>
<td>Case report or case study</td>
<td>Case report or case study</td>
<td>Case report or case study</td>
<td>Case report or case study</td>
<td>Case report or case study</td>
<td>Case report or case study</td>
</tr>
<tr>
<td>5 (least robust)</td>
<td>Opinion consensus</td>
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