VET 2204

Appraising and using evidence in practice
Aims and objectives

In this session we’ll be developing literature searching skills with the ultimate goal of undertaking a literature review.

During the session we will:

• Discuss the use of literature reviews in evidence based practice.

• Develop techniques for effective and thorough literature searching

• Explore some specialist sources for finding research articles
Literature Searching and Literature Reviews

[Comic]:
- Person thinks about searching.
- Person types in a search query and searches.
- The search returns zero results.
- Person expresses frustration about not even Google knows what they're talking about.
- Person concludes with, "I broke google!"

[Website]: www.phdcomics.com
What is literature?

• In an academic context, literature does not mean great works of fiction, but the information that has been written on a particular subject.

• Literature can be a book, a book chapter, a journal article, a conference paper, a newspaper, a government report, a webpage, a thesis...
What is a literature search?

• Before you can write your literature review, you need to find out what’s out there. To do this you need to do a literature search.

• A literature search is a systematic, comprehensive or thorough search of all types of literature in your topic.

• The information can be contained in books, journal articles, reports, case studies, policy documents, conference proceedings etc.

• A literature search will enable you to find out what has already been written in your subject area and enable you to identify the main trends.
What is a literature review?

• A literature review is a search and evaluation of the available literature in your given subject or chosen topic area. It documents the state of the art with respect to the subject or topic you are writing about.

• It surveys the literature in your chosen area of study.

• It is a critical account of what has been written within your chosen area of research

• It should highlight both widespread agreement, as well as debate and controversy in previous research

• The emphasis is interpretation of primary research articles.
A literature review has four main objectives

- It **surveys** the literature in your chosen area of study
- It **brings together** the information in that literature into a summary
- It **critically analyses** the information gathered by identifying gaps in current knowledge; by showing limitations of theories and points of view; and by formulating areas for further research and reviewing areas of controversy
- It **presents** the literature in an organised way
Why write a literature review?

• Because you have to!
• Allows you to show that you are building on a foundation of existing knowledge and ideas.
• Demonstrates the depth of your knowledge about your research.
• Identifies the important works in your area and shows that you’ve read them.
• Demonstrates your research skills.
• Identifies information and ideas that may be relevant to your project.
Stages of writing a literature review

• Define the topic area of investigation.
• Identify your keywords
• Locate the key literature – this is the literature search
• Assess the relevance of the literature search
• Access the most relevant material
• Critically analyse and evaluate the literature
• Structuring and writing the literature review
Key points to remember

• It is not a descriptive list.
• It is not a book by book and article by article summary.
• It is not a survey of every single thing that’s ever been written about your topic.
• It must be defined by an overall concept i.e. essay question, research project or objective.
• It must tell the reader what knowledge and ideas have been established and agreed in your area and outline their strengths and weaknesses.
How to do a literature search

• Define your terms
• Search creatively
• Identify relevant quality academic information sources
  • Journals
  • Books
  • Conference papers
  • Databases
• Use the library
• Keep a note of the sources you have used. You will need to reference them
Finding the evidence
What is evidence?

- **Evidence** is anything that you see, experience, read, or are told that causes you to believe that something is true or has really happened.
- You will need to provide evidence to support any arguments made in your assignments.
- The evidence is the information from your literature search and your references.
What is Evidence-Based Practice?

‘Evidence-based decisions combine clinical expertise, the most relevant and best available scientific evidence, patient circumstances and owners’ values. This is what we mean by Evidence-based Veterinary Medicine (EBVM).’

Key steps to make a clinical decision

1. Convert information needs into answerable questions
2. Track down the best evidence with which to answer them
3. Critically appraise the evidence for validity
4. Apply the results to clinical practice
5. Evaluate performance
Building a search
Search strategy

- Identify key concepts & terms
- Select relevant databases and resources
- Run searches in selected resources
- Combine search terms with Boolean operators
- Review and refine search results
Boolean Operators

• **AND** = Less: You are combining search terms **NARROWER**

• **OR** = MORE: You are asking for either of the search terms **WIDER**

• *** = Truncation** – You enter the beginning of a key word e.g. **Vet**\* will find all search terms beginning with these letters

• " " = Phrase searching – You want the words to be next to each other in your search e.g. “**animal behaviour**”
AND

Both terms

puppy
kitten

OR

Either term

puppy
kitten

NOT

Just one term

puppy
kitten
Searching with students!
Keyword creation

What is the role of the veterinary nurse in the prevention and management of canine obesity?

Imagine you have been asked to write an essay with this title
What are the keywords or concepts?
What alternative words can you use?
What related terms can you think of?
What is the role of the veterinary nurse in prevention and management of canine obesity?

- Dogs/Dog
- Canine
- Canids (Canis lupus familiaris)
- Ages?
- Breeds?

Obesity

- Obese
- Overweight
- Weight management
- Weight loss
- Fat
- Healthy weight / Unhealthy weight
- Related conditions, e.g. diabetes, osteoarthritis

Prevention / management

- Diet
- Nutrition
- Food / feeding
- Exercise
- Attitudes (owners, professionals)
- Education / advice
Venn Diagram:

- Prevention OR Management
- Obes* OR overweight
- Dogs OR Canines

Intersection: !
Advanced library search

Library Search

Search Profile: Search everything

- Any field contains dog or canine
- AND Any field contains obes* or overweight
- AND Any field contains prevention or management

Material Type
- All items

Language
- Any language

Start Date:
- Day
- Month
- Year

End Date:
- Day
- Month
- Year

SEARCH
### PICO Model for clinical questions

<table>
<thead>
<tr>
<th><strong>P</strong></th>
<th><strong>Patient, Population, or Problem</strong></th>
<th><strong>Hospital acquired infection</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I</strong></td>
<td><strong>Intervention, Prognostic Factor, or Exposure</strong></td>
<td><strong>handwashing</strong></td>
</tr>
<tr>
<td><strong>C</strong></td>
<td><strong>Comparison or Intervention (if appropriate)</strong></td>
<td><strong>No handwashing, other solutions, masks</strong></td>
</tr>
<tr>
<td><strong>O</strong></td>
<td><strong>Outcome you would like to measure or achieve</strong></td>
<td><strong>Reduced infection</strong></td>
</tr>
</tbody>
</table>

**What Type of question are you asking?**
- Diagnosis, Therapy, Prognosis, Prevention

**Type of Study you want to find**
- What would be the best study design/methodology?
Evaluating resources

• So you’ve found some information!!
• But is it any good......
Primary and Secondary research

• **Primary sources** - original research written up and published by the researchers in peer-reviewed journals
  • The title may mention the type of research e.g. ‘a qualitative study’, ‘a controlled trial’
  • Includes sections such as methods, results, discussion

• **Secondary sources** – work that summarises, critiques or reviews primary research
  • e.g. A literature review, a systematic review
Evaluating your sources

- **Currency**
- **Relevancy**
- **Authority and Accuracy**
- **Purpose**
Currency

• When was the information published or posted?
• Has the information been revised or updated?
• Are you using the most recent version or edition?
• Does your topic require current information, or will older sources work as well?
Accuracy/Authority

- Is the information supported by evidence (e.g. references, research data)?
- Has the information been reviewed or refereed?
- Can you verify any of the information in another source or from personal knowledge?
- Are there spelling, grammar or typographical errors?
- Who is the author/publisher/source/sponsor?
- What are the author's credentials or organisational affiliations?
- Is the author qualified to write on the topic?
- Is there contact information, such as a publisher or email address?
- Does the URL reveal anything about the author or source? examples: .com .edu .gov .org .net
Reliable Resources

With all the information out there what can you trust......
Sources for Searches
An epidemiological study of environmental factors associated with canine obesity

FA Courrier, RM Thomson, DJ Moller - Journal of Small Animal Practice, 2010 - Wiley Online Library

Objectives: To assess the relationships between socioeconomic and other environmental factors with canine obesity. Methods: This was a cross-sectional questionnaire study of dog owners attending five primary veterinary practices in the UK. Owners were asked about dog

Cited by 204 Related articles All 8 versions Import into ReF Works

Canine obesity: an overview

J. P. Gosselin, J. A. W. Nielsen - Journal of Veterinary Internal Medicine, 2007 - Wiley Online Library

Canine patients are generally regarded as being clinically obese when their body weight is at least 15% above ideal. The incidence of obesity in dogs is known to be in the range of 20–40% of the general population and, since obesity is known to predispose or exacerbate a ...

Cited by 92 Related articles All 5 versions Import into ReF Works

Canine obesity: is there a difference between veterinarian and owner perception?


Objectives: The overall aim of this study was to examine the nature of the relationship between dog ownership and canine obesity, explored in two cohorts of overweight/obese or non-obese dogs (n=125). This paper concentrates on the owners' perception of dog...

Cited by 81 Related articles All 5 versions Import into ReF Works

Relationship between analytic values and canine obesity


The objective of this study was to assess the relationship between canine body condition and metabolic parameters like serum lipids, blood glucose and alanine aminotransferase (ALT) concentrations. We selected 127 dogs (42 males and 85 females) that were taken to...

Cited by 38 Related articles All 6 versions Import into ReF Works

Related searches
canine obesity owner   analytic values canine obesity
canine obesity hydrotherapy   reduced serum levels canine obesity
canine obesity breed   weight loss protocol canine obesity
neutering canine obesity   veterinary practices canine obesity
Canine obesity: is there a difference between veterinarian and owner perception?


Available Online
Databases

• VetMed
• PubMed – Veterinary Science
• CABI
• Web of Science
• CINAHL
• Science Direct

• [http://libguides.mdx.ac.uk/vetnursing/journalsdatabases](http://libguides.mdx.ac.uk/vetnursing/journalsdatabases)
VetMed
Neutering increases the risk of obesity in male dogs but not in bitches - a cross-sectional study of dog- and owner-related risk factors for obesity in Danish companion dogs.

Knowledge of risk factors for canine obesity is an important prerequisite of effective preventative strategies. This study aimed to investigate risk factors for canine obesity in adult companion dogs across Zealand, Denmark. Client-owned dogs (>2 years of age and without chronic illness) were...
Tips on literature database searching

• Keep records of the searches that you do
• Develop a consistent strategy for handling the results of your searches.
• Consider using bibliographic software like RefWorks to manage your references
• Use the export function provided by many databases to transfer records directly into your own reference library
• Copy and paste relevant records into a text document to retain search results
Remember to reference
Library Guide: http://libguides.mdx.ac.uk/vetnursing

Welcome!
Hi, and welcome to the Veterinary Nursing Subject guide. Here you will find all kinds of useful information to help you in your studies. If you can't find the answer to your question or you'd like to make an appointment to see me, please contact me using the details here.

Susannah Parry
Email Me

Gemma Wilkinson and Faith Dillon-Lee are the Academic Writing and Language Lecturers for the School of Health and Education.

Based in the Learning Enhancement Team (LET) in the Sheppard Library, they can help you excel in your academic communication, whether this is in written assignments or oral presentations, as well as using information effectively and ethically in your work. They also
Any questions?
The entire audience silently stares at you. Your lecture has either blown their minds or horrified them beyond words.