



4° Congresso Nazionale

Le prove di efficacia: il patto terapeutico
tra Osteopata e Paziente



Managing and using "scientific" literature in clinical practice

Steven Vogel

Email: s.vogel@uco.ac.uk

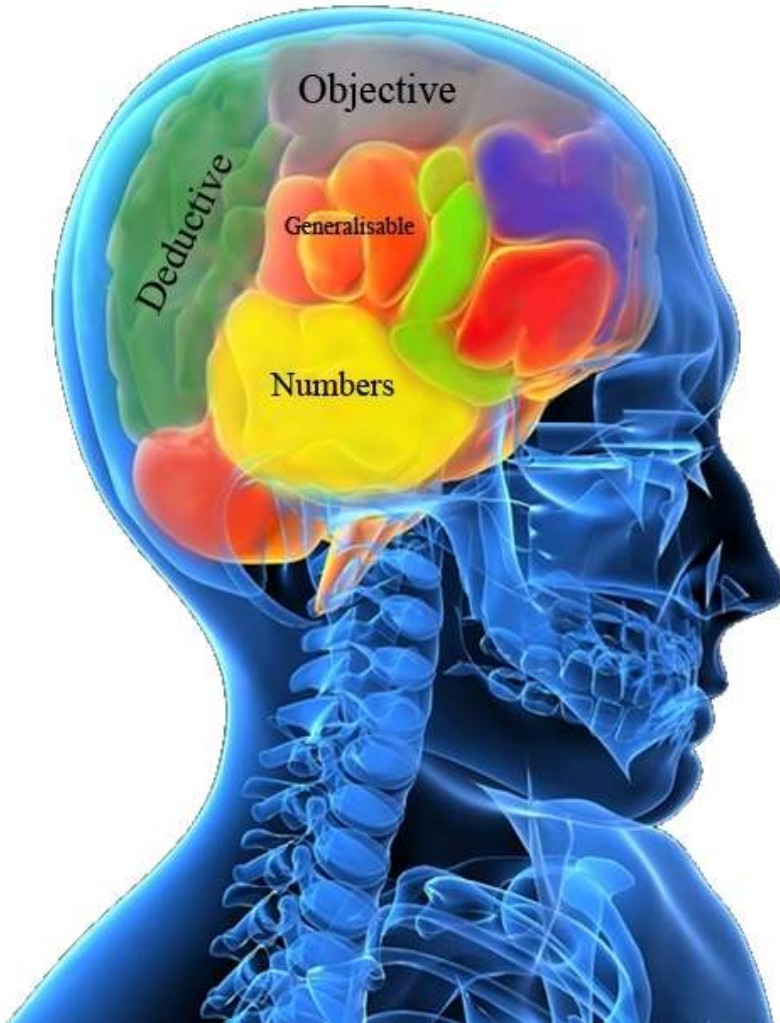


Declarations:

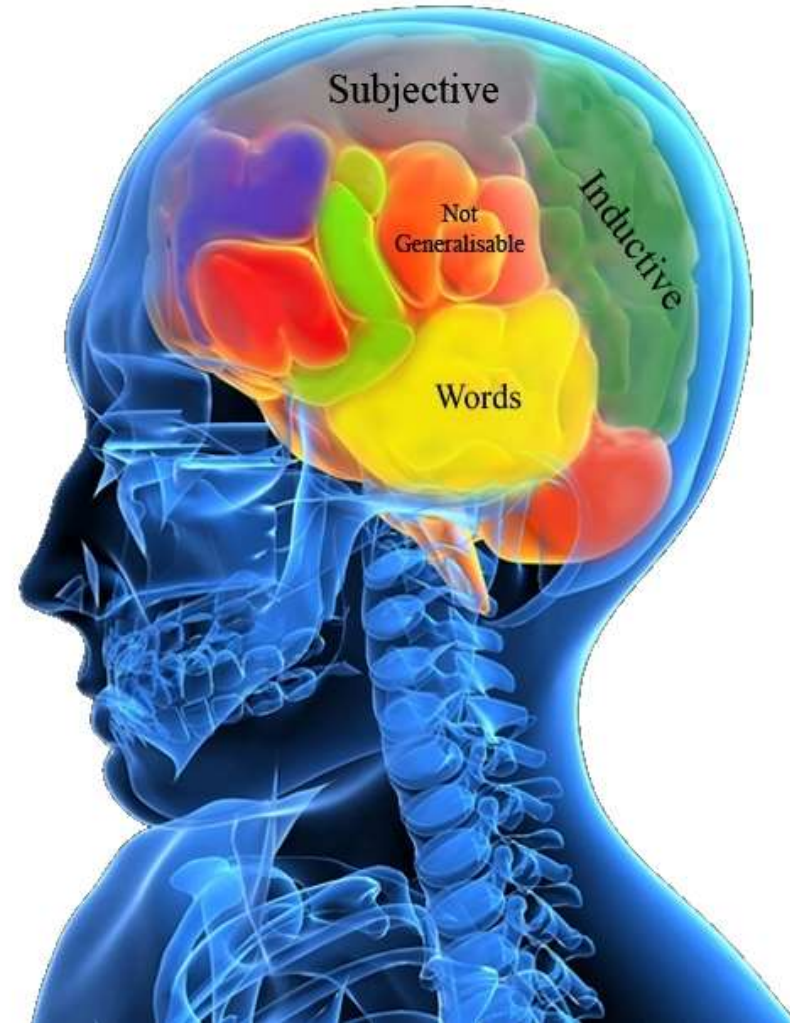
- Practising osteopath
- UCO (Formerly the British School of Osteopathy)
:manage research and clinical education/services
- Editor for Elsevier Osteopathic Journal
- Trustee for NCOR, Society for Back Pain Research
- United Kingdom Spine Societies Board
- Two NICE national back pain clinical guidelines
- Published and received funding for research



Quantitative



Qualitative



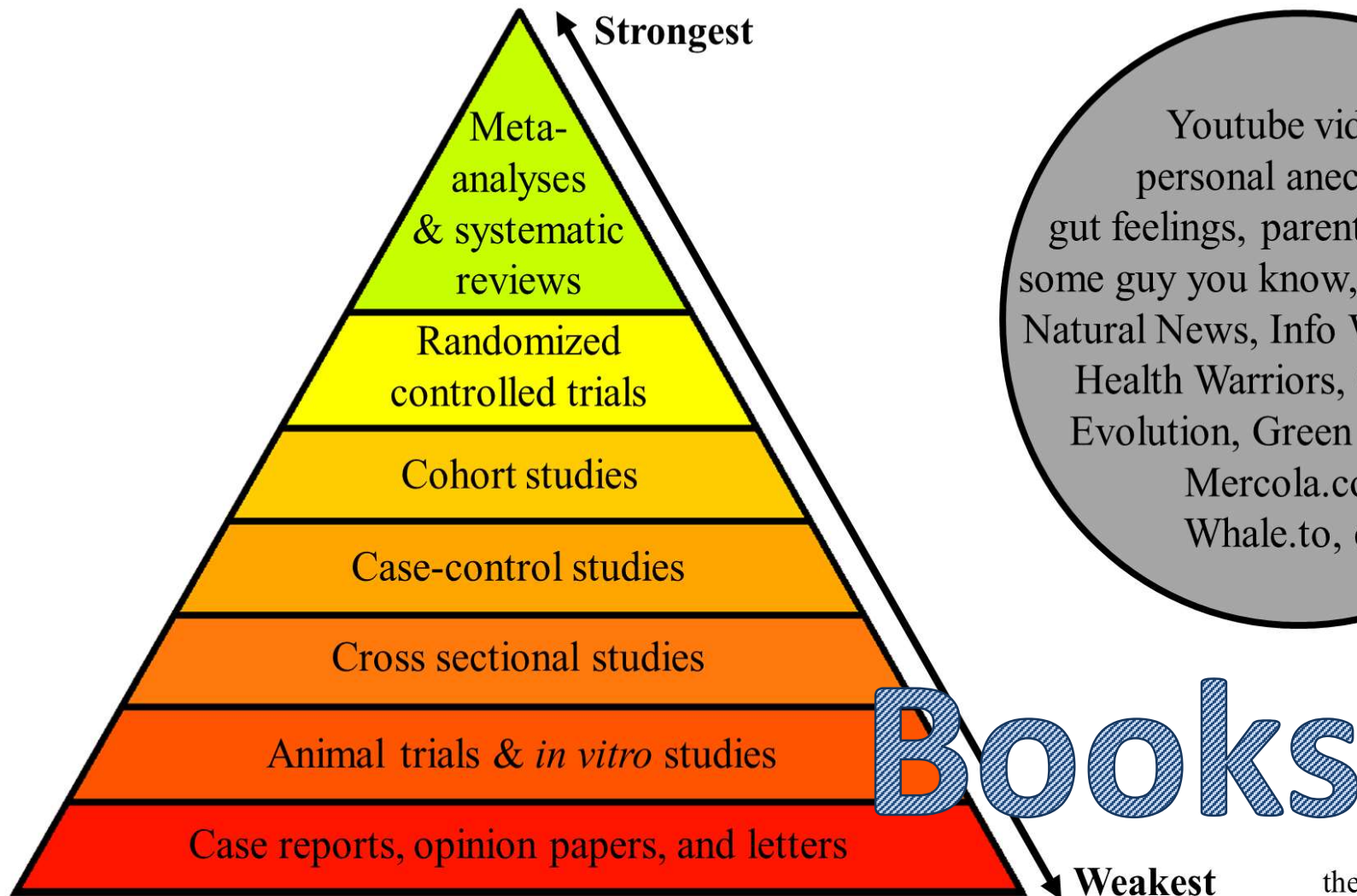
4° Congresso Nazionale



Effectiveness and Efficacy

Hierarchy of Scientific Evidence

Not Scientific Evidence



Youtube videos, personal anecdotes, gut feelings, parental instincts, some guy you know, websites like Natural News, Info Wars, Natural Health Warriors, Collective Evolution, Green Med Info, Mercola.com, Whale.to, etc.

Whole range of scientific literature

- Diagnostic studies
- Prognostic studies
- Theoretical reviews, narrative reviews, systematic reviews, meta synthesis etc
- Basic science

Peer review varies in quality

Particularly, if at all, with books



4° Congresso Nazionale



When and with whom do we use the Scientific literature?

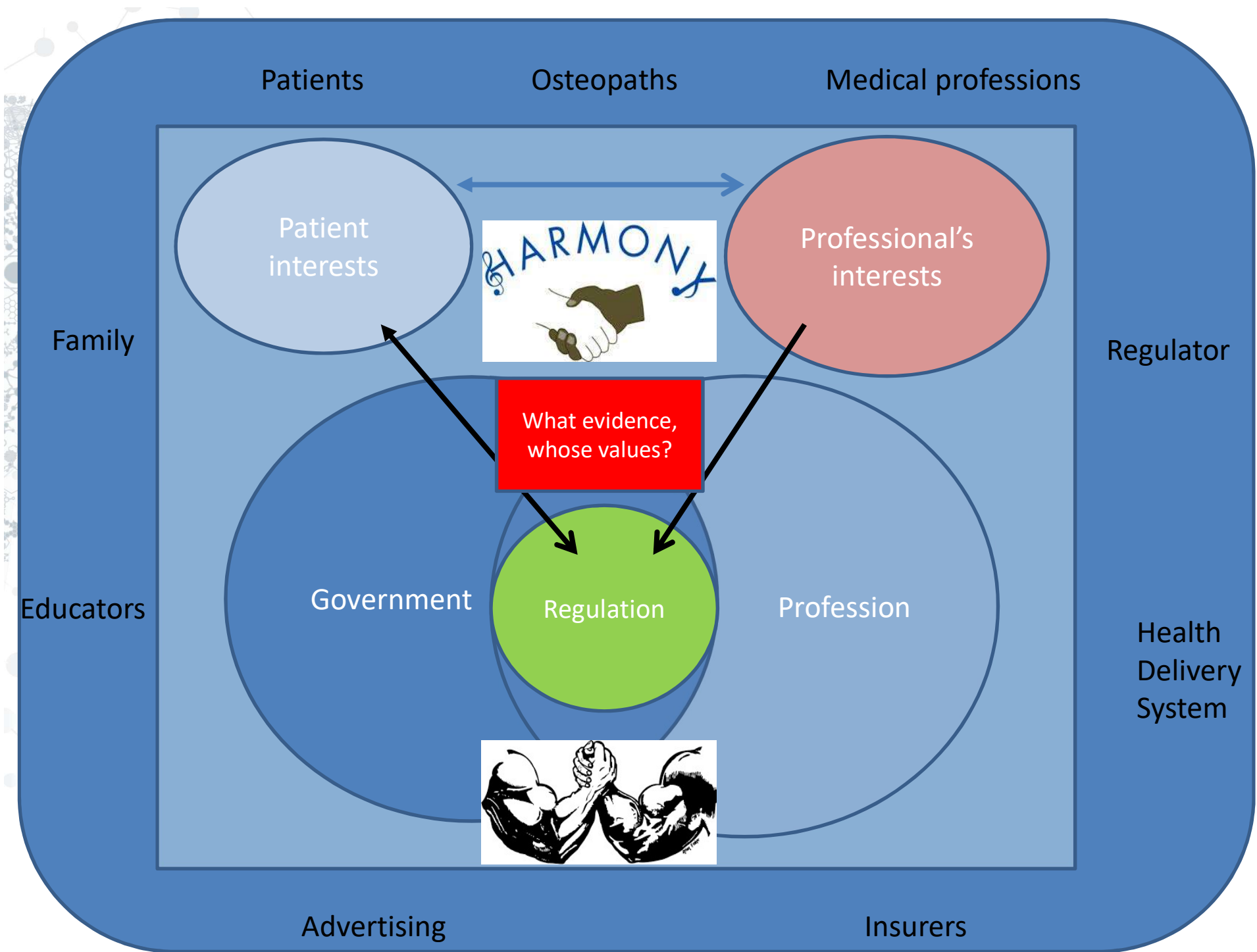


Copyright Jan Chlebik



4° Congresso Nazionale





Patients

Osteopaths

Medical professions

Patient interests

Professional's interests



What evidence, whose values?

Regulation

Government

Profession



Family

Regulator

Educators

Health Delivery System

Advertising

Insurers



MODEL KATIE MAY'S DEATH



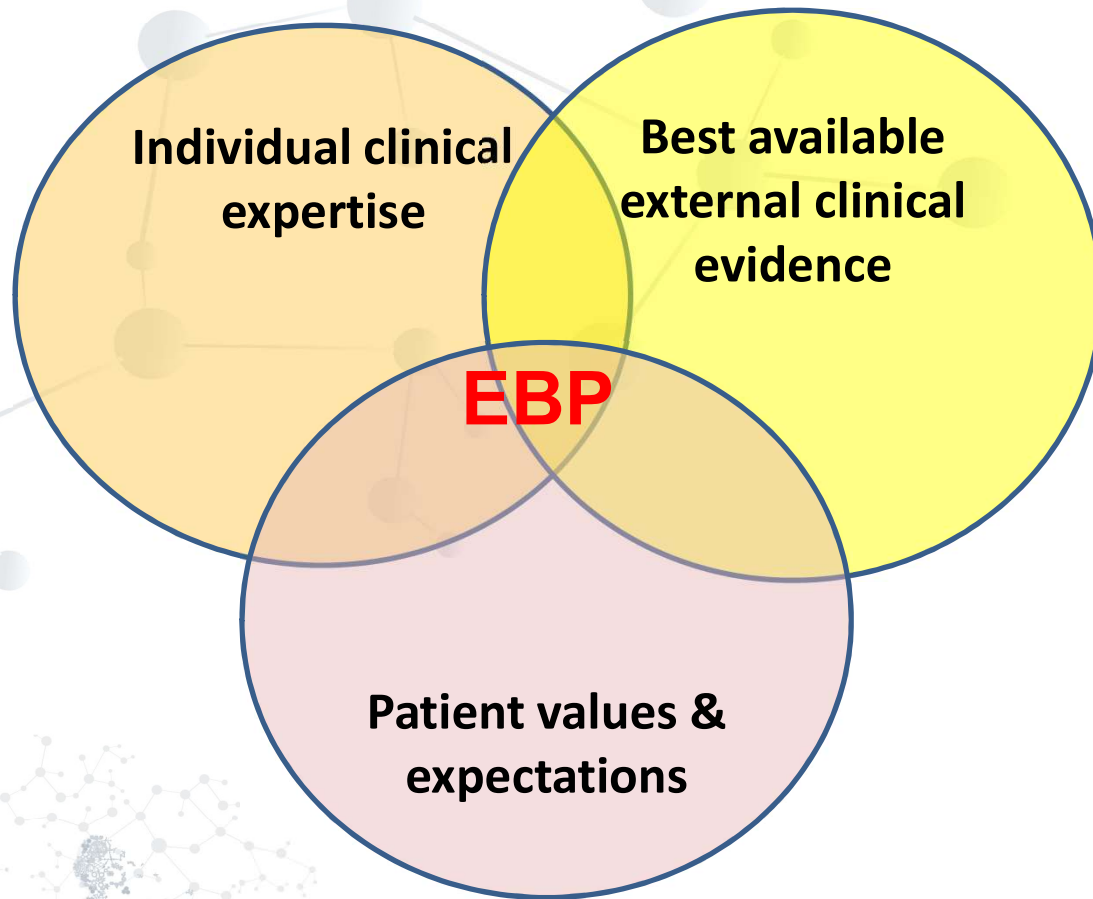
- How do we decide on the profession's position, scope, core beliefs – what we are about?
- How do we figure out what we need to do and when we need to change what we do?
- How can we work in our patient's best interests – assuming that working in our patient's best interests is a core value?



Cervical spine manipulation (a high velocity, low amplitude, end range thrust manoeuvre) is a common treatment option for

the increased risk after chiropractic treatment may be an artefact of patients seeking care for neck pain resulting from existing

Evidence-Based practice (EBP)



Using best evidence

- Question
- Search
- Appraise
 - Like my patient
 - Effect worth having
 - Quality
- Individualise
- Apply in partnership with patient
- Reflect

“Evidence-based medicine is the integration of *best research evidence* with *clinical expertise* and *patient values*” (Sackett 1996)



4° Congresso Nazionale



'Real' evidence-based practice

- Recently, researchers from across healthcare have called for a re-assertion of the original values and purpose of EBP.
- Re-positioning the *patient* at the *centre* of EBP.
- The EBP 'renaissance'

BMJ 2014;348:g3725 doi: 10.1136/bmj.g3725 (Published 13 June 2014) Page 1 of 7

ANALYSIS

ESSAY

Evidence based medicine: a movement in crisis?

OPEN ACCESS

Trisha Greenhalgh and colleagues argue that, although evidence based medicine has had many benefits, it has also had some negative unintended consequences. They offer a preliminary agenda for the movement's renaissance, refocusing on providing useable evidence that can be combined with context and professional expertise so that individual patients get optimal treatment

Trisha Greenhalgh *dean for research impact*¹, Jeremy Howick *senior research fellow*², Neal Maskrey *professor of evidence informed decision making*³, for the Evidence Based Medicine Renaissance Group

¹Barts and the London School of Medicine and Dentistry, London E1 2AB, UK; ²Centre for Evidence-Based Medicine, University of Oxford, Oxford OX2 6NW, UK; ³Yeele University, Staffs ST15 5BG, UK

Roger Kerry

HOME ABOUT

EVIDENCE

NOVEMBER 2, 2015 - 6:05 PM

Follow me on Twitter

Tweets

Alan J Taylor @TaylorAlanJ
#FOMPT people... THIS

“This house believes that in the absence of research evidence an intervention should not be used”

EDITORIAL INTRODUCTION AND COMMENTARY

Evidence-based healthcare, clinical knowledge and the rise of personalised medicine

Andrew Miles MSc MPHil PhD,¹ Michael Loughlin PhD² and Andreas Polychronis MB PhD MRCP³

¹Professor of Public Health Education & Policy, Editor-in-Chief, *Journal of Evaluation in Clinical Practice* & National Director, UK Key Advances in Clinical Practice Series, Faculty of Medicine, Medical School, University of Buckingham, London Campus, UK
²Reader in Applied Philosophy, Manchester Metropolitan University, Cheshire, UK
³Consultant Medical Oncologist, Mount Vernon Hospital, Middlesex, UK

Keywords: authoritarianism, clinical practice guidelines, Cochrane Collaboration, complexity, epistemology, ethics, evidence, evidence-based medicine, expertise, experts, hierarchy of evidence, implementation, information, knowledge, literature searching, meta-analysis, modernism, postmodernism, philosophy, systems, systems uncertainty

Correspondence: Professor Andrew Miles, Professional Unit for Public Health Education & Policy, Guy F. O. Box LB48, Mount Pleasant Mail Centre, Farnington Road, London EC1A 1LB, UK. Email: andrew.miles@evidencebased.org.uk

Accepted for publication: 24 September 2015
doi:10.1111/j.1365-2753.2015.01946.x

Introduction

In the 10th Thematic Edition within Volume 13 of the *Journal of Evaluation in Clinical Practice* published in August 2007 [1-6], we

riters', such that assertions that 'evidence in Medicine today who does not believe it is in the wrong business', remain what they originally were – expressions of bold rhetoric and intellectually heinous hyperbole [1-6].

Received: 25 February 2018 | Accepted: 9 March 2018
DOI: 10.1111/jep.12925

ORIGINAL ARTICLE

WILEY *Journal of Evaluation in Clinical Practice*
International Journal of Public Health Policy and Health Services Research

Of lamp posts, keys, and fabled drunkards: A perspectival tale of 4 guidelines

Trisha Greenhalgh F. Med. Sci, Professor

THE CONVERSATION Sign in

Get our newsletter

Why evidence-based healthcare has lost its way

October 31, 2017 3:41pm GMT

Roger Kerry

everyone...on average, liensaphoty/Shutterstock



'Real' evidence-based practice

- Real EBP asks, “what is the best course of action for this patient, in these circumstances, at this point in their illness or condition?” (Greenhalgh et al 2014)
- “Which evidence is most likely going to inform the multitude of decisions within this therapeutic interaction?” (Kerry 2015).
- Is reflexive, active and patient-centred
- Involves a range of clinical questions/problems in the context of an individual person and their practitioner
- **Therefore, involves the construction, application and integration of different sources of knowledge/evidence with expertise and patient’s preferences in the context of an individual encounter with a person.**

Example from the 2009 NICE clinical guideline

Question: What is the effectiveness of manual therapies compared with usual care on functional disability, pain, or distress?

Population	Adults presenting with non specific back pain > than 6 weeks duration and < one year
Intervention	Manual therapies
Comparison	Usual care
Outcome	Disability scores Pain scores Psychological distress

Databases

PubMed – www.pubmed.gov

Cochrane library for quality controlled systematic reviews and RCTs

www.nelh.nhs.uk/cochrane

AMED – Allied & Complementary Medicine

CINAHL – Cumulative Index to Nursing & Allied Health Literature

Google Scholar – <http://scholar.google.co.uk/>

Psychinfo
International psychological index

OSTMED

PEDro (Physiotherapy Evidence Database)

ScienceDirect



4° Congresso Nazionale



Developing a search strategy

1. Identify the relevant concepts
2. Identify search terms
 - a. Identify text word terms (ordinary English)
 - b. Identify subject heading terms (MeSH)
3. Combine search terms
4. Combine search sets
5. Iterative process (i.e. do it all over again)



4° Congresso Nazionale



Combining search terms

- To search effectively and efficiently database searching involves combining our search terms into search strings using “Boolean Operators”

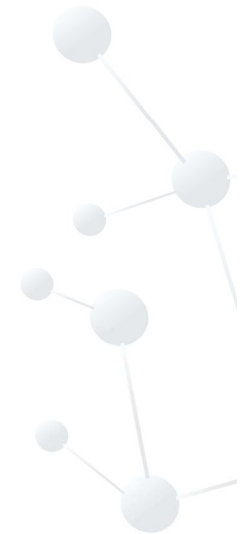
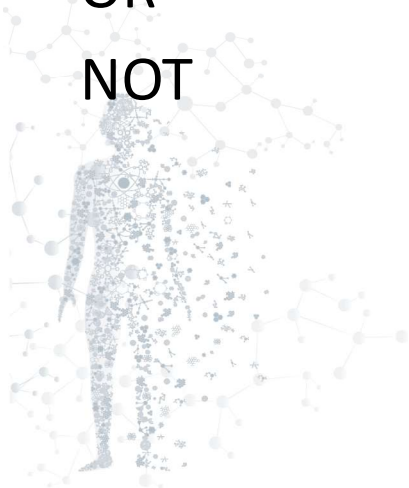
- Pain relief AND drug therapy.

- Most commonly:

AND

OR

NOT



4° Congresso Nazionale



Easy access papers

- Publishers website
- PubMed 'free full text'
- Contact authors
- Google scholar "pdf"
- Set up a deal like GOsC
 - All members access to range of journals

FREE full text article
in PubMed Central



this
article is
FREE

 **Full text**
blackwell-synergy.com



4° Congresso Nazionale



Empowering researchers

Create a free account

Reference management

Read, organize and cite all of your research from one library.

Research network

Connect and collaborate with millions of researchers worldwide.

Datasets

Store, share and cite your datasets with one secure online repository.

Careers

Search for science and technology jobs in institutions worldwide.

Tools for every stage of your career



4° Congresso Nazionale



Mendeley – free to download and use

Cite and write in word

The screenshot displays the Mendeley Desktop application interface. The main window shows a list of research papers under the heading "Physical activity and low back pain". The list includes columns for Authors, Title, Year, Published In, and Added. A tooltip for "The Cochrane Collaboration's tool for assessing risk of bias in randomised trials" is visible over one of the entries.

Authors	Title	Year	Published In	Added
Lamb, S.E.; Sheehan, B.; Atherton, N.; Nichols, V.; Collins, H.; Mistry, D.; Dossanjh, S.; Slowther, A.M.; Kh...	Dementia And Physical Activity (DAPA) trial of moderate to high intensity exercise training for people with dementia: Randomised controlled trial	2018	BMJ (Online)	10:11pm
Lee, H; Mancell, G; McAuley, J H; Kamper, S J	Best Practice & Research Clinical Rheumatology Causal mechanisms in the clinical course and treatment of back pain	2017	Best Practice & Research Clinical Rheumatology	03/08/17
Zadro, J.R.; Shirley, D.; Pinheiro, M.B.; Bauman, A.; Duncan, G.E.; Ferreira, P.H.	Neighborhood walkability moderates the association between low back pain and physical activity: A co-twin control study	2017	Preventive Medicine	17/05/17
Zadro, JR; Shirley, D; Amorim, A; Pérez-Riquelme, F; Ordoñana, JR; Ferreira, PH	Are people with chronic low back pain meeting the physical activity guidelines? a co-twin control study	2017	The Spine Journal	17/05/17
Hendrick, Paul; Milosavljevic, S.; Hale, L.; Hurley, D. A.; McDonough, S.; Ryan, B.; Baxter, G. D.	The relationship between physical activity and low back pain outcomes: A systematic review of observational studies	2011	European Spine Journal	12/05/17
Moore, Graham F; Audrey, Suzanne; Barker, Mary; Bond, Lyndal; Bonell, Chris; Hardeman, Wendy; Moore, Laure...	Process evaluation of complex interventions: Medical Research Council guidance	2015	British Medical Journal	18/04/17
Grant, Aileen; Treweek, Shaun; Dreischulte, Tobias; Foy, Robbie; Guthrie, Bruce	Process evaluations for cluster-randomised trials of complex interventions: a proposed framework for design and reporting.	2013	Trials	18/04/17
Shepperd, Sasha; Lewin, Simon; Straus, Sharon; Clarke, Mike; Eccles, Martin P.; Fitzpatrick, Ray; Wong, Geoff; ...	Can we systematically review studies that evaluate complex interventions?	2009	PLoS Medicine	18/04/17
Michie, Susan; Fixsen, Dean; Grimshaw, Jeremy M; Eccles, Martin P	Specifying and reporting complex behaviour change interventions: the need for a scientific method.	2009	Implementation science : IS	18/04/17
Koes, BW; van Tulder, M; Lin, CC; Macedo, LG; McAuley, J; Maher, C	An updated overview of clinical guidelines for the management of non-specific low back pain in primary care.	2010	European spine journal : official publication of the European Spin...	13/03/17
Higgins JPT; Altman DG; Gøtzsche PC; Juni P; Moher D; Oxman AD; Savovic J; Schulz KF; Weeks L; VAC, Sterne	The Cochrane Collaboration's tool for assessing risk of bias in randomised trials.	2011	British Medical Journal	17/01/17
Heweweel, Hans; Staes, Filip; Aufdenkampe, Geert; Van Rijn, Machiel; Vanhees, Luc	Physical activity and low back pain: A systematic review of recent literature	2011	European Spine Journal	17/01/17
Hartling, L; Ospina, M; Liang, Y; Dryden, D; Hooton, N; Krebs Seida, J; Klassen, T	Risk of bias versus quality assessment of randomised controlled trials: cross	2009	BMJ (Clinical research ed.)	17/01/17
Hurwitz, Eric L.; Morgenstern, Hal; Chiao, Chi	Effects of recreational physical activity and back exercises on low back pain and psychological distress: Findings from the UCLA low back pain study	2005	American Journal of Public Health	17/01/17
Olivo, S. A.; Macedo, L. G.; Gadotti, I. C.; Fuentes, J.; Stanton, T.; Magee, D. J	Scales to Assess the Quality of Randomized Controlled Trials: A Systematic Review	2008	Physical Therapy	17/01/17
French, Simon D; Green, Sally E; O'Connor, Denise A; McKenzie, Joanne E; Francis, Jill J; Michie, Susan; Buch...	Developing theory-informed behaviour change interventions to implement evidence into practice: a systematic approach using the Theoretical Domains Framework	2012	Implementation Science	29/11/16
Jelley, Sue; Lake, Alison	060_Physical activity : brief advice for adults in primary care	2013	NICE Guidelines	29/11/16
Dunn, Kate M; Hestbaek, Lise; Cassidy, J David; Smuck, Matthew; Kao, Ming Chih J; Brar, Nikhraj; Martinez-Jih, ...	Low back pain research - Future directions	2013	Spine Journal	27/09/16
Taylor, a H; Cable, N T; Faulkner, G; Hillsdon, M; Nari, M; Van Der Dijk, a K	Physical activity and older adults: a review of health benefits and the effectiveness of interventions.	2004	Journal of sports sciences	13/09/16
Saxena, S; Van Ommeren, M; Tang, K C; Armstrong, T P; Saxena S; van Ommeren M; Tang K; Armstrong T	Mental health benefits of physical activity	2005	Journal of Mental Health	13/09/16
Blair, Steven N.; Morris, Jeremy N.	Healthy Hearts-and the Universal Benefits of Being Physically Active: Physical Activity and Health	2009	Annals of Epidemiology	13/09/16
Melzer, K; Kayser, B; Pichard, C	Physical activity: the health benefits outweigh the risks.	2004	Current opinion in clinical nutrition and metabolic care	25/08/16
Taylor, C B; Sallis, J F; Needle, R	The relation of physical activity and exercise to mental health	1985	Public Health Report	25/08/16
Teng, Gim Gee; Nair, Raj; Saag, Kenneth G	Pathophysiology , Clinical Presentation and Treatment of Gout This material is the copyright of the original publisher . Unauthorised copying and distribution is prohibited . This material is original publisher .	2006		25/08/16
No, Issn	Commerce CHEMISTRY health benefits of physical exercise DR SANJAY ABSTRACT	2015		25/08/16
Haskell, William L.; Lee, I. Min; Pate, Russell R.; Powell, Kenneth E.; Blair, Steven N.; Franklin, Barry A.; Macer...	Physical activity and public health: Updated recommendation for adults from the American College of Sports Medicine and the American Heart Association	2007	Medicine and Science in Sports and Exercise	25/08/16
Troiano, RP; Berrigan, D; Dodd, KW; Masse, LC; Tilert, T; McDowell, M	Physical activity in the United States measured by accelerometer	2008	Med Sci Sports Exerc	25/08/16
Janssen, Ian; Leblanc, Allana	Systematic Review of the Health Benefits of Physical Activity and Fitness in School-Aged Children and Youth	2015	School Nutrition and Activity	25/08/16
Macer, Caroline A.; Hootman, Jennifer M.; Sniezek, Joseph E.	Major public health benefits of physical activity	2003	Arthritis & Rheumatism	25/08/16

The right-hand pane shows the details for the selected article: "Dementia And Physical Activity (DAPA) trial of moderate to high intensity exercise training for people with dementia: Randomised controlled trial". It includes the authors (S. Lamb, B. Sheehan, N. Atherton, et al.), journal information (BMJ (Online), 2018, Volume 361), and an abstract describing the trial's objectives and findings.

Critical appraisal



4° Congresso Nazionale



Quality Internal Validity

- Study limitations
(risk of bias quantitative,
trustworthiness qualitative)
- Inconsistency
- Imprecision

Consider randomisation method,
allocation concealment, blinding,
missing data, drop outs etc

Differences in effect size between
studies and explanations by subgroup
analysis

Results are consistent with more than
one conclusion, relative to the clinically
important effect



Technical skill, hard work

Adapted from Grade dimensions



4° Congresso Nazionale





Contents lists available at ScienceDirect

International Journal of Osteopathic Medicine

journal homepage: www.elsevier.com/locate/ijosm



Evidence, alternative facts and narrative: A personal reflection on person-centred care and the role of stories in healthcare

In 1846, Ignaz Semmelweis, a Hungarian physician working in the General Hospital in Vienna noted that in that year 451 women in the doctors' Maternity Ward Number 1 died of puerperal (childbirth) fever. This contrasted with the midwives' Ward Number 2 next door, in which only 90 women died. The assumed explanation, based on miasma theory, was that Ward Number 1 had bad air which Ward Number 2 did not. The fact was that the doctors' next morning room, which midwives

bad air (or not wearing a vest, being a bad person, obesity, spinal lesions, malalignment, or whatever), then no amount of 'evidence', will convince most people otherwise. New ideas must be "of their time" to be widely accepted, i.e., they must fit comfortably with what is known and the stories we tell ourselves about the world and how we experience it.

I also think that the story has relevance for better understanding

<https://www.sciencedirect.com/science/article/pii/S1746068918300555>

Experience and beliefs +- confirmation bias conquers all
Be reflective, critical and open to change!



4° Congresso Nazionale



Resources

Greenhalgh T. Of lamp posts, keys, and fabled drunkards: A perspectival tale of 4 guidelines. J Eval Clin Pract [Internet]. 2018;(February):1–7. Available from: <http://doi.wiley.com/10.1111/jep.12925>

Greenhalgh T, Howick J, Maskrey N. Evidence based medicine: a movement in crisis? Bmj [Internet]. 2014;348(jun13 4):g3725–g3725. Available from: <http://www.bmj.com/cgi/doi/10.1136/bmj.g3725>

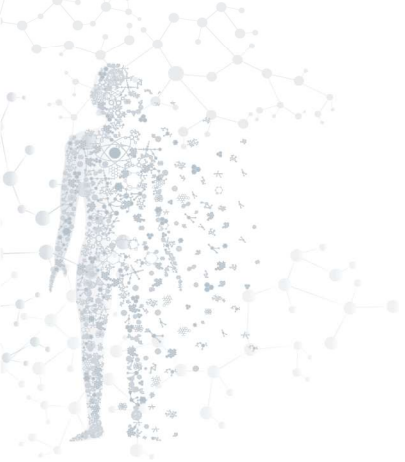
Tyreman S. Evidence , alternative facts and narrative : A personal reflection on person- centred care and the role of stories in healthcare. Int J Osteopath Med. 2018;
<https://www.sciencedirect.com/science/article/pii/S1746068918300555>

EBM podcasts videos

<https://podcasts.ox.ac.uk/real-versus-rubbish-ebm-do-you-know-difference>

<https://www.youtube.com/watch?v=qYvdhA697jl>

<https://podcasts.ox.ac.uk/critical-appraisal-and-ebm-real-world>



4° Congresso Nazionale



Online tutorials

- Nottingham University RLO: How to conduct a literature search.

<http://www.nottingham.ac.uk/nmp/sonet/rlos/studyskills/litsearch/>

- Nottingham University RLO: Advanced literature searching.

http://www.nottingham.ac.uk/nmp/sonet/rlos/studyskills/litsearch_advanced/index.html



4° Congresso Nazionale



PubMed tutorials

PubMed Online Training - Microsoft Internet Explorer provided by The British School of Osteopathy

http://www.nlm.nih.gov/bsd/disted/pubmed.html

File Edit View Favorites Tools Help

United States National Library of Medicine National Institutes of Health

Search NLM Web Site

Home > Training & Outreach > Distance Education Resources

PubMed® Online Training

PubMed Tutorial

The PubMed Tutorial is based on the NLM's one-day PubMed training course.

Go to:

- [Understanding the Vocabulary](#)
- [Building the Search](#)
- [Managing the Results](#)
- [Saving the Search](#)
- [Getting the Articles](#)

Quick Tours

The following are brief [animated tutorials](#) with audio for using PubMed. Running times are rounded to the nearest minute. Click on the link to launch the tour.

Searching PubMed

- [Search PubMed by Author](#) (2 min., June 2010)
- [Searching PubMed by Author and Subject](#) (1 min., September 2009)
- [PubMed Simple Subject Search](#) (1 min., January 2010)
- [Search for a Journal](#) (3 min., September 2009)
- [Retrieving Citations from a Journal Issue](#) (1 min., February 2010)

PubMed's MeSH Database

- [Searching with the MeSH Database](#) (3 min., October 2009)
- [Combining MeSH Terms Using the MeSH Database](#) (4 min., October 2009)
- [Applying Subheadings and Other Features of the MeSH Database](#) (5 min., October 2009)

Managing Results

- [Downloading Results for Use in Reference Management Software](#) (2 min., November 2009)
- [Changing Your Default Display Settings](#) (2 min., July 2010)

Links to Full Text (My NCBI)

Saving Searches (My NCBI)

- [Saving Searches](#) (4 min., revised October 2009)
- [Changing Saved Searches](#) (2 min., revised December 2009)
- [E-mail Alerts for Articles from Your Favorite Journals](#) (4 min., revised December 2009)

Collections and Bibliographies (My NCBI)

- [Collections](#) (3 min., revised October 2009)
- [Editing Collections](#) (3 min., revised December 2009)
- [Sharing Collections](#) (2 min., revised December 2009)
- [Creating Your Bibliography](#) (4 min., revised February 2010)

Preferences and Filters (My NCBI)

- [Retrieving Your My NCBI Username or Password](#) (2 min., August 2010)
- [Changing Your Default Display Settings](#) (2 min., July 2010)
- [Filters](#) (3 min., revised May 2010)
 - [Links to Full Text from Your Library \(Library LinkOut Filters\)](#) (3 min., revised December 2009)
 - [Custom Filters](#) (2 min., May 2010)

Hot Topics

- [Clinical Queries](#)
- [Selecting Your Outside Tool Preference](#)

Return to PubMed

Start HighWire - Mi... BSO Intranet ... PubMed Centr... BSO Intranet ... Cochrane Rev... Home - The C... PubMed Onli... Desktop : BSO Lexar (E:) Microsoft Pow... 17:40 Tuesday



4° Congresso Nazionale

ROI
REGISTRO DEGLI
OSTEOPATI D'ITALIA

MeSH Home - Microsoft Internet Explorer provided by The British School of Osteopathy

http://www.ncbi.nlm.nih.gov/mesh

File Edit View Favorites Tools Help

MeSH Home

NCBI MeSH A service of the National Library of Medicine and the National Institutes of Health

My NCBI [Sign In] [Register]

All Databases PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Books

Search MeSH for Go Clear

Limits Preview/Index History Clipboard Details

About Entrez
Text Version
Entrez PubMed
Overview
Help | FAQ
Tutorials
New/Noteworthy
E-Utilities
PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
Special Queries
LinkOut
My NCBI
Related Resources
Order Documents
NLM Mobile
NLM Catalog
NLM Gateway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

MeSH is the U.S. National Library of Medicine's controlled vocabulary used for indexing articles for MEDLINE/PubMed. MeSH terminology provides a consistent way to retrieve information that may use different terminology for the same concepts.

- Use the MeSH database to find Medical Subject Heading Terms and build a search strategy.

MeSH database tutorials:

- Searching with the MeSH Database
Quick Tour
- Combining MeSH Terms
Quick Tour
- Applying Subheadings and other features of the MeSH Database
Quick Tour

[Write to the Help Desk](#)
[NCBI](#) | [NLM](#) | [NIH](#)
Department of Health & Human Services
[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)

Done Internet 100%

Start 2 Window... BSO Intra... BSO Intra... BSO Intra... http://www... HighWire - ... HighWire - ... BSO Intra... MeSH Hom... Literature S... Searching fo... 16:40 Tuesday



4° Congresso Nazionale



Acknowledgements

- Dr Hilary Abbey
- Dr Oliver Thomson
- Mr James Barclay



**University College
of Osteopathy**



4° Congresso Nazionale





Grazie per l'attenzione!

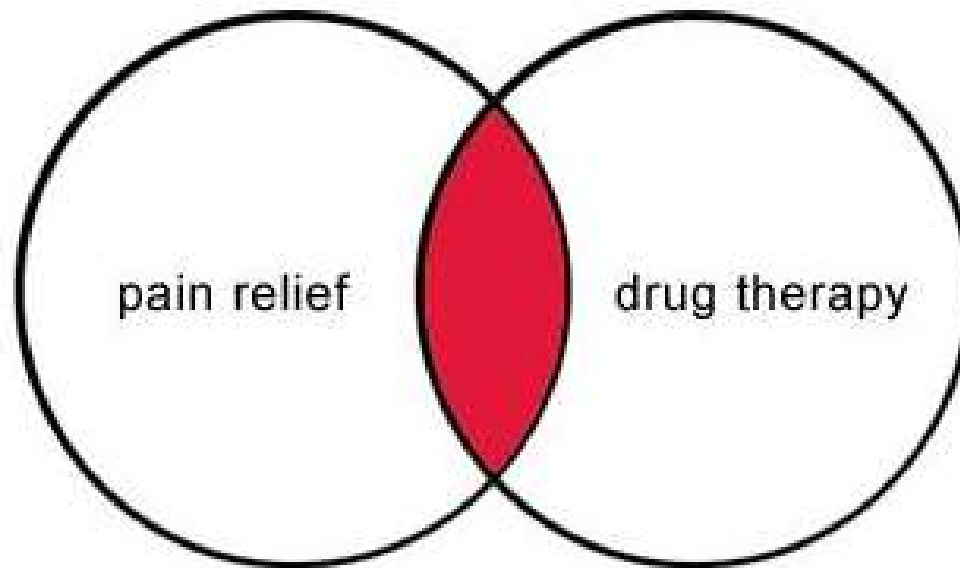


4° Congresso Nazionale



Boolean Operators: AND

Pain relief AND drug therapy

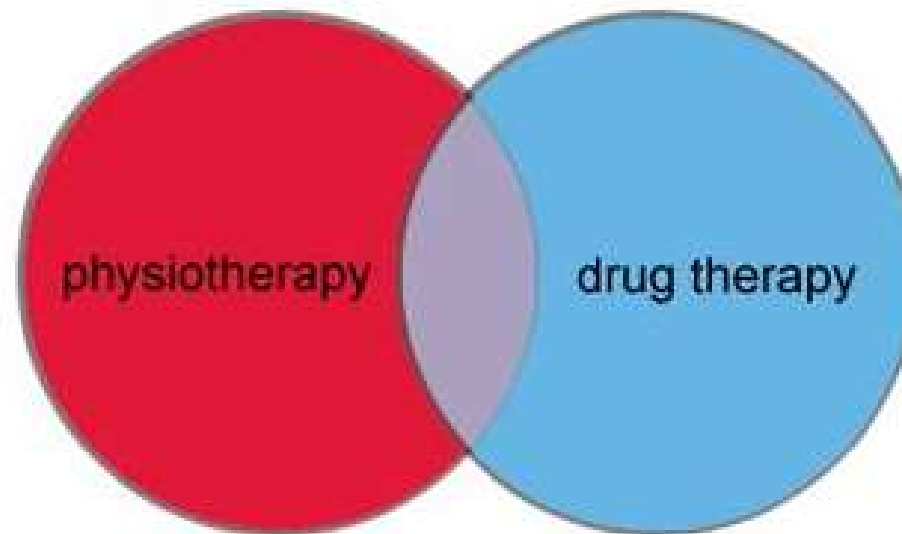


Pain relief AND drug therapy: finds articles relating to the use of drugs to relieve pain. Where these circles overlap is where the relevant articles will be found.

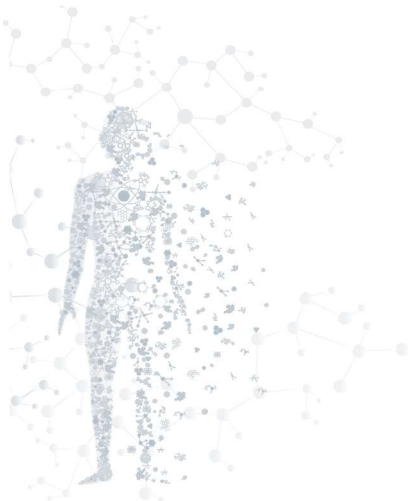


Boolean Operators: OR

- Physiotherapy OR drug therapy.



Physiotherapy OR drug therapy: finds articles relating to either physiotherapy or drug therapy. On this diagram, useful articles could be found in any of the coloured areas.



Boolean Operators: NOT

Pain relief NOT drug therapy



Pain relief NOT drug therapy: finds articles relating to methods of relieving pain without using drugs. On this diagram, useful articles will only be found in the section on the left.

