

AGENDA:

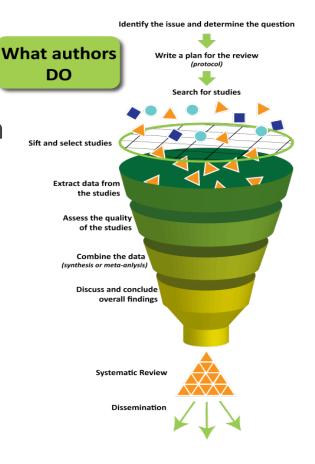
- What is a systematic review?
- Content
 - Reducing bias, Searching grey literature
- Features
 - Multi-file search aids scoping work
 - Unique features for comprehensive and/or precise searches
- Functionality
 - Efficient workflow features, accurate search documentation
- Conclusion:
 - Librarian roles for SR's! Is Ovid used for systematic reviews? Resources & Checklist



What is a Systematic Review?

The purpose of a systematic review is to sum up the best available research on a specific question. Authors synthesize the results of hundreds of studies:

- In an unbiased way
- Critically appraise the studies
- Present a balanced and impartial summary of the findings with due consideration of any flaws in the evidence.





High Quality Systematic Reviews:

Increasingly replace
traditional narrative reviews
and expert commentaries
as a way of summarizing
clinical evidence

Reduce
Eliminate Bias,
with Language,
Publications,
Geography etc.

Bring the same level of rigor to reviewing research evidence as should be used in producing that research evidence in the first place

Follow Standards such as PRISMA, Cochrane, JBI

Based on a peer-reviewed protocol so that they can be replicated if necessary

Are Comprehensive Identify all relevant published and unpublished evidence



Highlight of steps for systematic review searching
Decisions documented

Planning, reference interviews with team, identify resources to search

Peer Review, 'PRESS'

Scoping Searches

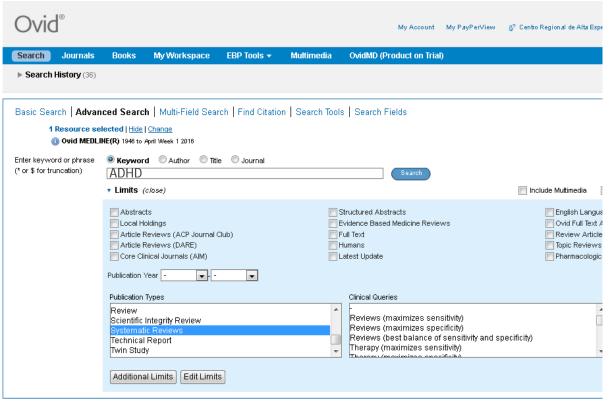
Syntax, test finalize

Terms identified in/out

Documentation PICO & beyond



Was a systematic review already done for this clinical question? Search Ovid.





Practitioner Review: Pathways to care for ADHD – a systematic review of barriers and facilitators

Nicola Wright, ¹ Maria Moldavsky, ² Justine Schneider, ³ Ipsita Chakrabarti, ³ Janine Coates, ³ David Daley, ⁵ Puja Kochhar, ³ Jon Milla, ⁸ Walld Sorour, ⁴ and Kapil Sayal ³ School of Health Sciences, University of Natingham, Nottingham, ⁵ Spotalist Services Directorate, Nottingham, Nottingham, ⁵ Helion of Sociology and Sociol Policy, University of Nottingham, Nottingham, ⁵ Division of Popularity, Nottingham, ⁵ Division of Popularity, Nottingham, ⁵ Division of Popularity, ⁵ Anderson in Popularity, ⁵ Anderson of Popularity,

Background: Attention-Deficit/Hyperactivity Disorder (ADHD) is a common neurodevelopmental disorder starting in childhood that may persist into adulthood. It can be managed through carefully monitored medication and nouphamacological interventions. Access to cam for children at risk of ADHD varies both within and between countries. A systematic literatum mylew was conducted to investigate the matarch evidence related to factors which influence children accessing services for ADHD. Method: Studies investigating access to care for children at risk of ADHD were identified through electronic searches of the international peer-reviewed and grey literatum. Databases were searched from inception till 30th April 2012. This identified 23,156 articles which were subjected to three levels of acmening (title, abstract and full text) by a minimum of two independent reviewers. Due to the heterogeneity in the study designs, a narrative approach was used to present the findings. Results: Twenty-seven papers met the inclusion criteric, these were grouped into four main themes, with some papers being included in more than one. These were wider determinants (10 papers); identification of need (9 papers); entry and continuity of care (13 papers) and interventions to improve access # papers). Barriers and facilitators to access were found to operate at the individual, organisational and societal level. Limited evidence of effective interventions to improve access was identified. Conclusion: This review explored the multilayered obstacles in the pathway to care for children at risk of ADHD and the lack of evidence-based interventions designed to address these issues, thereby indicating areas for service development and further evaluative research. Keywords: Attention-deficit disorder with hyperactivity, child, continuity of patient care, health service needs and demands, developmental disability.

Introduction

Attention-Deficit Hyperactivity Disorder (ADHD) is a common neurodevelopmental disorder beginning in childhood and often persisting into adulthood (American Psychiatric Association, 2013). The American Psychiatric Association in the Diagnostic and Statiatical Manual of Mental Disorders (DSM V) (2013) states that ADHD occurs in most cultures, affecting approximately 5% of children and 2.5% of adults. In the United Kingdom, within the school age population, there is an estimated overall prevalence rate of 3-9% (NICE, 2008), Childhood ADHD can be managed with carefully monitored medication and nonpharmacological interventions (Brown et al., 2005; Sonuga-Barke et al., 2013). However, there is evidence that many children with ADHD remain undiagnosed and do not access these interventions (Bussing, Zima, Perwien, Belin, & Widawski, 1998). Left unmanaged, ADHD can result in impairments in multiple domains, including academic performance

Conflict of internet statement: No conflicts declared.
Correction Note: This article was first published online on the
21st of February 2015, under a subscription publication
(inconc. The article has since been made Chim/Open, and
the copyright line and license statement was therefore updated

and parental productivity (e.g. being able to undertake paid employment; Doshi et al., 2012; Shaw et al., 2012; All conductives the risk of conduct and personality disorders, substance misuse and impaired social adjustment in adulthood (Binderman et al., 2006). Although the lifetime consequences and crasts of Although the lifetime consequences and crasts of Although the lifetime being limpactor of 2014; NICE, 2008; the reported impacts of 40 PtD on children's development, families and society present a strong impeins for only dientification, accreas to severies and evidence-based dientification, accreas to severies and evidence-based

The UK National Institute for Health and Case Excellence (DICE) and the American Academy of Politarics both advocate a comprehensive approach to treating ADHD, including multidisciplinary assessment, support for parents and medication for children in moderate or severe cases (American Academy of Pediatrics, 2011; National Institute for Health & Care Excellence, 2000s), in an ideal situation, every child who has ADHD would be identified and retirror to a specialist and be offered appropriant extra to a specialist and be offered appropriincluding behavioural interventions. In practice, including behavioural interventions, in practice, pedientiological studies show that ADHD is underdisgnosed, pathways through services are not clear and therefore access to care is not universal.

© 2015 The Authors, James of Child Psychology and Psychiatry published by John Wiley & Sone Ltd on behalf of Association for Child and Addressors Bestall Bendill.

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If a systematic review is needed, standards for SR's include "searching" e.g. PRISMA, Cochrane etc.

- **6.1.1.2** A search of MEDLINE alone is not considered adequate. A systematic review showed that only 30% 80% of all known published randomized trials were identifiable using MEDLINE (depending on the area or specific question) (Dickersin 1994).
- **6.2.4** The three bibliographic databases generally considered to be the most important sources to search for studies for inclusion in Cochrane reviews are CENTRAL, MEDLINE and EMBASE.
- 6.4.4 Searches for systematic reviews aim to be as extensive as possible in order to
 ensure that as many as possible of the necessary and relevant studies are included
 in the review.

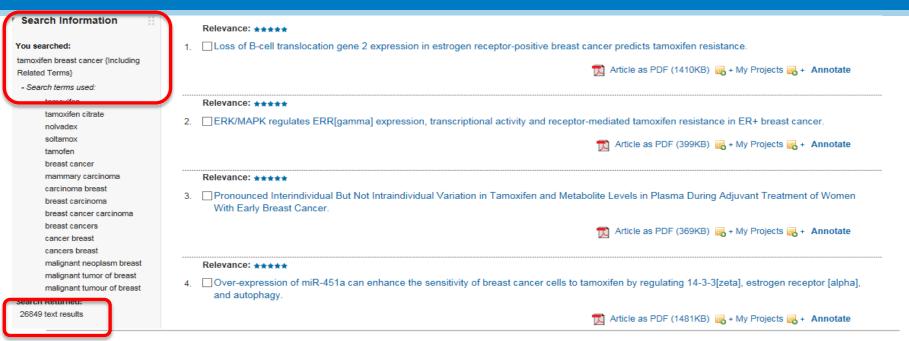






Journals@Ovid Full Text

Why? Keyword search of all journals here includes those not indexed by MEDLINE. Supports comprehensive searching. Reduces bias.





Ovid Open Access

Why? Reduces publication, language & geographic bias Comprehensive searching

Relevance: ****

Anastrozole versus tamoxifen for the prevention of locoregional and contralateral breast cancer in postmenopausal women with locally excised ductal carcinoma in situ (IBIS-II DCIS): a double-blind, randomised controlled trial.

Forbes JF; Sestak I; Howell A; Bonanni B; Bundred N; Levy C; von Minckwitz G; Eiermann W; Neven P; Stierer M; Holcombe C; Coleman RE; Jones L; Ellis I; Cuzick J; IBIS-II investigators.

Lancet. 387(10021):866-73, 2016 Feb 27,

[Comparative Study, Journal Article, Multicenter Study, Randomized Controlled Trial, Research Support, Non-U.S. Gov't]

UI: 26686313

Authors Full Name

Forbes, John F; Sestak, Ivana; Howell, Anthony; Bonanni, Bernardo; Bundred, Nigel; Levy, Christelle; von Minckwitz, Gunter; Eiermann, Wolfgang; Neven, Patrick; Stierer, Michael; Holcombe, Chris; Coleman, Robert E; Jones, Louise; Ellis, Ian; Cuzick, Jack; IBIS-II investigators.

▶Abstract



Abstract Reference Complete Reference

Find Similar
Find Citing Articles



Endometrial evaluation by ultrasonography, hysteroscopy and histopathology in cases of breast carcinoma on Tamoxifen therapy

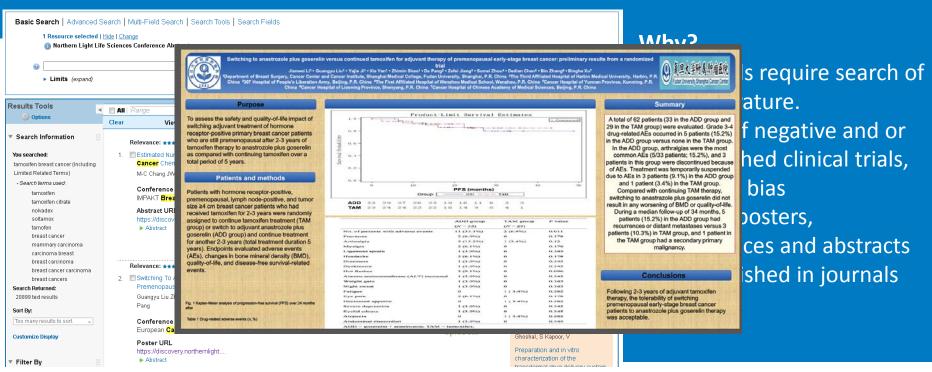
Jindal, Alka Mohi, Manjit K. Kaur, Manjeet Kaur, Balwinder Singla, Risham Singh, Shaunik

Tamoxifen use and gallstone formation in postmenopausal breast cancer patients in south Indian population

Mohamed, APA Kadambari, D Bhuvaneswari, V



Grey Literature Content: Northern Light Life Sciences Conference Abstracts and PsycEXTRA













Multi-file search Why? Scoping

Rasic Search | Advanced Search | Multi-Field Search | Find Citation | Search Tools | Search Fields

Search Information

You searched:

tamoxifen breast cancer (Incluyendo términos relacionados)

- Search terms used:
 - tamoxifen

tamoxifen citrate

nolvadex

soltamox

tamofen

breast cancer

mammary carcinoma

carcinoma breast

breast carcinoma

breast cancer carcinoma

breast cancers

cancer breast

cancers breast

malignant neoplasm breast

malignant tumor of breast

malignant tumour of breast

Search Returned:

10375 text results



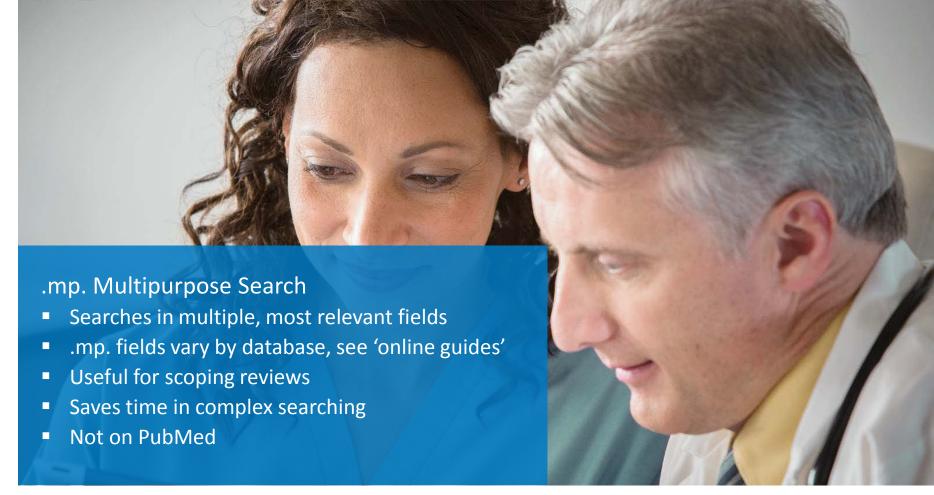
3, 📵 AMED (Allied and Complementary Medicine) 1985 to May 2016, 📵 Books@Ovid, 📵 Full O RIALII, 📵 The Joanna Briggs Institute EBP Database, 📵 EBM Reviews - Cochrane Database gister of Controlled Trials April 2016, 📵 EBM Reviews - Cochrane Methodology Register 3rd 😡 nalytical Abstracts 1980 to 2016 May Week 5, 📵 Drug Information Full Text May 2016, 📵 Embase 19 , 📵 Ovid MEDLINE(R) Epub Ahead of Print May Week 4 2016, 📵 Ovid MEDLINE(R) In-Process 8 PSycBOOKS 1806 to May 2016, (1) PSycCRITIQUES 1956 to May 2016 Week 4, (1) PSyCEXTRA 1908 to 500 Per Page Go View: Title Citation Abstract e: ***** f B-cell translocation gene 2 expression in estrogen receptor-positive breast cancer predicts shi, Maiko 1; Hayashida, Tetsu 1; Okazaki, Hiroshi 1; Miyao, Kazuhiro 1; Jinno, Hiromitsu 1; Kitagawa, d Journals Database (Abstract + TOC + Journals subscribed) Science. (Original Articles: PDF OnM) 48331-900000000-99823 3-cell translocation gene 2 (BTG2), a gene suppressed in a subset of aggressive breast can pression of HER ligands and promotes AKT activation, which plays an essential role in the ta R)-positive breast cancer. To determine if BTG2 expression modifies tamoxifen efficacy, a moxifen monotherapy was analyzed. We found that increased BTG2 expression showed bet dependent prognostic factor for disease-free survival (hazard ratio, 0.691; 95% confidence in ippressed the human epidermal growth factor receptor 2 (HER2)-Akt signaling in BTG2 expre prelated increase in sensitivity, whereas BTG2 knockdown abrogated this sensitivity. Consist

ippressed the growth ratio, tumor weight and Ki-67 expression in BTG2 expressing breast ca emonstrate that BTG2 is a significant factor in tamoxifen response, acting through modification

▼ Search History (1)

# 🛦	Searches	Results

···	Searches	Results	
1	▼ tamoxifen breast cancer {Including Limited Related Terms}	13799	
	Ovid MEDLINE(R) <1946 to May Week 4 2016>	716	
	AMED (Allied and Complementary Medicine) <1985 to May 2016>	607)
	Books@Ovid	355	
	Full Ovid Journals Database (Abstract + TOC + Journals subscribed)	430	
	LWW Total Access Collection	418	
	PscyARTICLES Full Text	271	
	Transplant Library <product on="" trial!!=""></product>	1	
	The Joanna Briggs Institute EBP Database	211	
	EBM Reviews - Cochrane Database of Systematic Reviews <2005 t	120	١.
	EBM Reviews - ACP Journal Club <1991 to May 2016>	139	
	EBM Reviews - Database of Abstracts of Reviews of Effects <1st Q	653	
	EBM Reviews - Cochrane Central Register of Controlled Trials <april< td=""><td>649</td><td></td></april<>	649	
	EBM Reviews - Cochrane Methodology Register <3rd Quarter 2012>	425	
	EBM Reviews - Health Technology Assessment <2nd Quarter 2016>	403	
	EBM Reviews - NHS Economic Evaluation Database <1st Quarter 2	368	
	Analytical Abstracts <1980 to 2016 May Week 5>	356	
	Drug Information Full Text <may 2016=""></may>	155	
	Embase <1974 to 2016 Week 22>	2755	
	HMIC Health Management Information Consortium <1979 to March	1278	
	International Pharmaceutical Abstracts <1970 to June 2016>	435	
	Ovid MEDLINE(R) Epub Ahead of Print <may 2016="" 4="" week=""></may>	351	
	Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations <june< td=""><td>471</td><td></td></june<>	471	
	Maternity & Infant Care Database (MIDIRS) <1971 to April 2016>	452	
	Ovid Nursing Database <1946 to May Week 4 2016>	895	
	PsycBOOKS <1806 to May 2016>	67	
	PsycCRITIQUES <1956 to May 2016 Week 4>	23	
	PsycEXTRA <1908 to May 30, 2016>	475	
	PsycINFO <1806 to May Week 4 2016>	229	
	PsycTESTS <1910 to May 2016>	91	

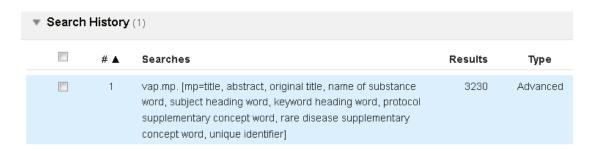




.MP. Multi-purpose field – Unique to Ovid, Broadens sensitivity

MEDLINE

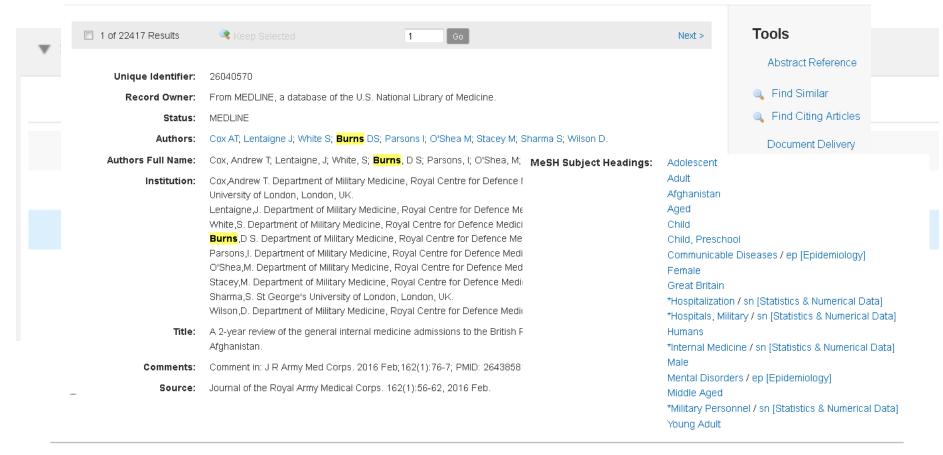
- Abstract (AB) Original Title (OT)
- Subject Heading Word (HW)
- Keyword Heading Word (KF)
- Protocol Supplementary Concept (PS)
- Title (TI)
- Name of Substance Word (NM)
- Rare Disease Supplementary Concept (RS)
- Unique Identifier (UI)



- Finds single words in phrase-indexed fields like PS, RS.
- Uses Name of Substance (NM) index that contains single words from the <u>CAS Registry/EC Number/Name</u> (RN) field.
- Searches portions of chemical names. This field displays as part of the <u>CAS Registry/EC Number/Name</u> (RN) field.
- Single words from the Subject Heading SH (phrase indexed field) e.g. Subject Heading World (HW) field.



.MP. Multi-purpose field – Unique to Ovid , Broadens sensitivity





.MP. Multi-purpose field – Unique to Ovid , Broadens sensitivity

EXAMPLE: ventilator associated pneumonia, VAP is acronym

SEARCH: vap.mp.

- A single word in Protocol Supplementary Concept (PS)
- A single word "VAP" in the in Keyword Heading Word (KF).

Finds:

- Keyword Heading Word (KF): "VAP prevention bundle cardiac surgery" or "VAP, ventilator-associated pneumonia" or "VAP"
- Protocol Supplementary Concept (PS): "VAP protocol" or "VAP combination" or "vap-cyclo protocol"
- Zero results for vap.ps. in the Protocol Supplementary Concept (PS) field, but with the .mp. search, you do find all the VAP related protocols.
- Just a few for vap.kw. in the keyword field, where VAP is a single keyword, missing VAP in phrases in the keyword field. But with .mp. you find it in the phrases too.

VALUE in Systematic Reviews .mp.

- Saves time, eliminates guesswork and missed words
- Broadens search, more sensitive
- Finds phrases conceptually related in uncontrolled vocabulary
- When there are many possible phrases to consider it finds all of them for further evaluation like in the PS field

Another Example: complex substance:

- phosphatidylinositol-4,5-bisphosphate 3-kinase
- Acronyms: Pi3K, PI 3-kinases, PI(3)Ks, PI-3Ks
- Search: pi3k.mp.



Search Trick to Remove Animal Studies

MEDLINE on Ovid:

- NOT (animals/ not humans.sh.)
- NOT (Animals/ NOT (Animals/ AND Humans/))

Embase on Ovid:

NOT ((exp animal/ or nonhuman/) NOT exp human/)

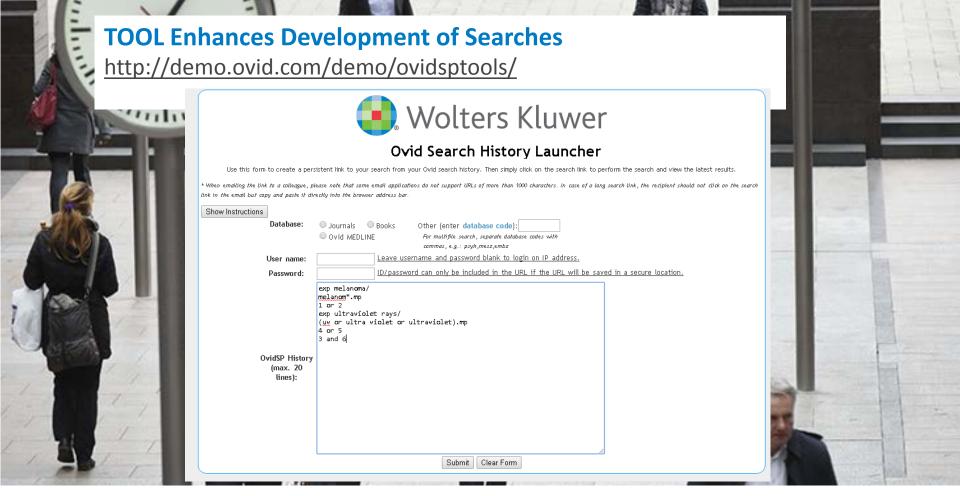
TIP! Subheadings also limit by human or animal:

- disease/"side effect" AND
- drug/"adverse drug reaction" = HUMAN
- drug/"drug toxicity" = ANIMAL

Sources: The Cochrane Handbook 6.36 Canadian HIWIKI recommends, see also: McGill University "Searching for Studies"

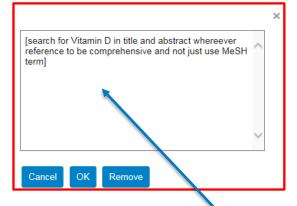








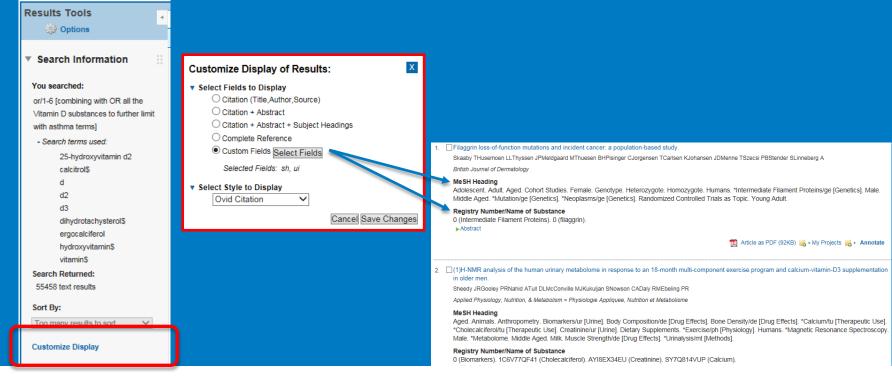
TOOL 'Annotation' document your search decisions within your workflow, adds efficiency, accuracy. Two options:



# 🛦	Searches	Results	Type	Actions	Annotations
1	(vitamin\$ adj2 (d or d2 or d3)).ti,ab. [search for Vitamin D in title and abstract whereever reference to be comprehensive and not just use MeSH term]	52256	Advanced	Display Results More ▼	
2	dihydrotachysterol\$.mp. [synthetic vitamin D analog activated in the liver that does not require renal hydroxylation like vitamin D2 ergocalciferol]	784	Advanced	Display Results More ▼	
3	calcitrol\$.mp. [form of vitamin D that is used to treat and prevent low levels of calcium in the blood of patients whose kidneys or parathyroid glands] [type annotation betw	reen bra	Advanced ackets on sea	Display Results More ▼ arch line, view inline with sea	□ arch,
4	hydroxyvitamin\$.mp. & saves when search is			Display Results More ▼	, ^C
5	ergocalciferol.mp.	34 VCU	Advanced	Display Results ∣ More ▼	\Box
6	exp 25-hydroxyvitamin d2/	/34	Advanced	Display Results More ▼	\Box
7	or/1-6 [combining with OR all the Vitamin D substances to further limit with asthma terms]	55458	Advanced	Display Results More ▼	\Box



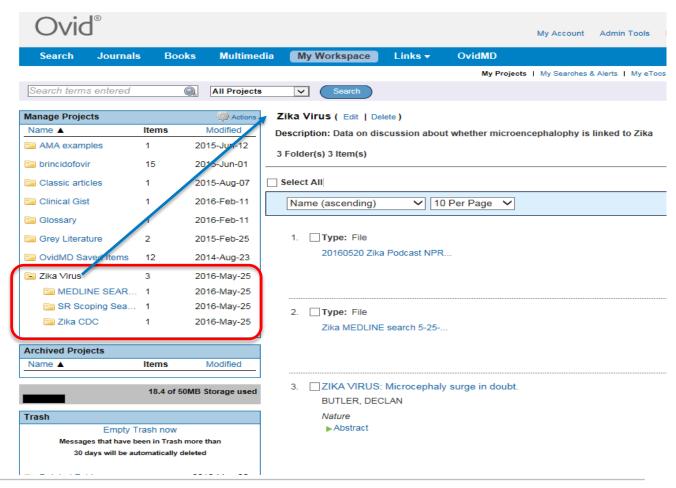
TOOL 'Customize Display' aids intellectual workflow ~ customize results for browse, just turn the key!



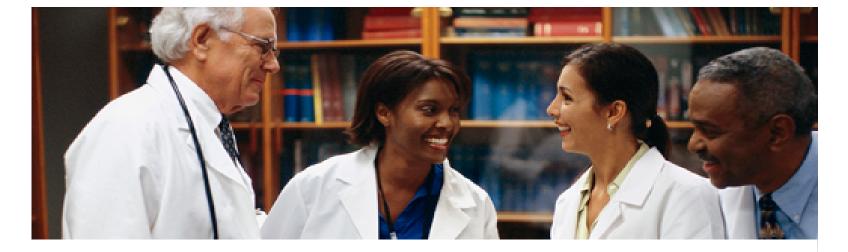
TOOL:

'My Projects'

Effectively organize
Ovid & external
documents, research,
searches etc. for
systematic reviews







Conclusion & Resources





From JAMA - Journal of the American Medical Association

"Medical librarians ... play an important role in developing high-quality narrative and systematic reviews, constructing search strategies, managing references, reviewing references for inclusion, documenting the search methodology, and contributing to the drafting of the final manuscript.

Having a medical librarian closely involved ensures that the review will be thorough and its methodology reproducible.

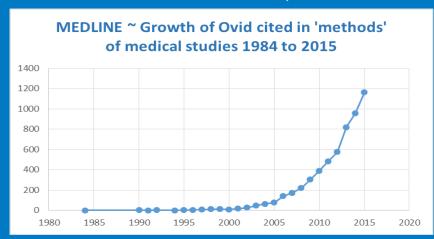
Medical librarians bring expertise to the review process based on their understanding of the medical literature, search methods, and review guidelines and standards. Their neutrality and expertise can help minimize bias in the review process, leading to more robust and unbiased review articles."

Source: Rethlefsen, M.L., M. Hassan Murad, MD, and Edward H. Livingston, MD, MPH. "Engaging Medical Librarians to Improve the Quality of Review Articles," *Journal of the American Medical Association (JAMA)*, September 10, 2014, V.312, N.10, pp. 999-1000.



So, is Ovid used in Systematic Reviews? Yes! Cited in the 'methods section ' of **6,319+ medical studies**

- Ovid is identified as a research source in approximately 6,319+ articles published and indexed in MEDLINE from 1985 to the present (May 2016), and increases annually.
- Studies include clinical trials, systematic reviews, review articles.
- Used more than most other research platforms.



Year	Studies w/Ovid
2016 Jan to May	623
2015	1,163
2014	957
2013	820
2012	575
2011	485



Checklist ~ Summary of Ovid & Systematic Review TIPS

- ☐ Systematic Review searching standards
- Ovid open access content
- ☐ Journals@Ovid Full Text
- ☐ Grey Lit "Northern Light Life Sciences Conference Abstracts"
- ☐ Grey Lit PsycEXTRA
- Ovid MEDLINE
- Ovid Embase
- Ovid EBMR
- PsycINFO
- Joanna Briggs Institute EBP Database
- BIOSIS Previews
- ☐ DERWENT Drug File

- ADJ proximity operator
- ☐ AB field search
- Multi-file search
- ☐ .MP. Multipurpose field search
- ☐ Search trick to remove animal studies in Ovid MEDLINE and Embase
- Ovid Search History Launcher Tool
- Annotate search with brackets []
- Annotate search with 'note'
- ☐ Customize display on the fly
- ☐ My Projects
- Your favorite "tip":__

Resources for Systematic Reviews

Systematic Review Standards:

- Cochrane Handbook http://handbook.cochrane.org/
- PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) http://www.prisma-statement.org/
- ☐ Finding What Works in Health Care
 Standards for Systematic Reviews. Institute
 of Medicine [PDF] http://bit.ly/1WUV8vA
- CRD's Guidance for Undertaking Reviews in Health Care
 http://www.york.ac.uk/crd/SysRev/!SSL!/Web
 Help/SysRev3.htm

Systematic Review Resources:

- "Systematic Reviews: Planning, Writing, and Supporting: Project Management & Record Keeping," Dartmouth College Library Research Guides. http://bit.ly/20E9EWB
- "The InterTASC Information Specialists' Sub-Group Search Filter Resource" http://bit.ly/1TL4Ain
- "McMaster Health Informatics Research Unit" Validated search strategies in MEDLINE, Embase, CINAHL, and PsycINFO for studies on therapy, diagnosis, etiology, prognosis, economics, etc. http://bit.ly/1TB5mLh
- "Finding clinical trials, research registers and research results" by Julie Glanville (York Health Economics Consortium) and Carol Lefebvre (Independent Information Consultant http://bit.ly/1lddN4W
- Evidence Based Practice. Yale University. [Videos] http://bit.ly/1sQU8fA



