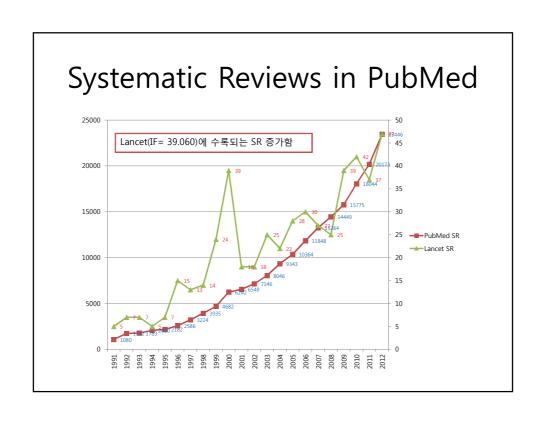
Author Keywords & MeSH

가톨릭대학교 성의교정 도서관 정 소 나 (sona@catholic.ac.kr)

목차

- Author Keywords의 중요성
- Author Keywords 분석
- 검색에 유용한 Author Keywords 작성
 - NLM MeSH 활용
 - Related Citations in PubMed 활용
 - MeSH Search in KoreaMed 활용
- Author Keywords & Abstracts
- 맺음말

Author Keywords 중요성



근거중심의학환경에서의 문헌검색 중요성

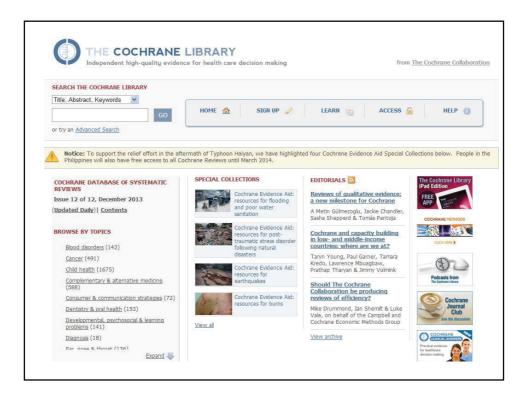
<체계적 문헌고찰(Systematic Reviews, SR)연구 흐름도>



한국보건의료연구원. NECA 체계적 문헌고찰 매뉴얼. 2011

체계적 문헌 고찰 검색 전략

- Systematic Reviews(SR): 명백하고 재현성 있는 방법론에 따라 확고한 연구 목적과 방법으로 이루어진 일차 문헌들의 개괄
- 포괄적으로 검색하면서도 배제되지 않게 검색전 략을 수립
- 광범위하게 검색하기 위한 통제어가 필수적임 - 대표적으로 MeSH 사용
- 검색: 통제어와 키워드 조합



Appendix I. MEDLINE search strategy 1. exp OSTEOARTHRITIS/ 2. osteoarthr\$.tw. SR 문헌의 Search strategy 사례 3. (degenerative adj2 arthritis).tw. 4. or/1-3 5. exp CHONDROITIN/ 6. chondroitin.sh,rn,tw. 8. 4 and 7 관련 데이터베이스에서 재현 가능한 검색전략으 9. randomized controlled trial.pt. 로 검색을 수행함. Appendix에 검색전략제시. 10. controlled clinical trial.pt. 11. randomized controlled trials.sh. 12. random allocation.sh. 13. double blind method.sh. 14. single-blind method.sh. 15. clinical trial.pt. 16. clinical trials.sh. 17. clinical trial.tw 18. ((singl\$ or doubl\$ or trebl\$ or tripl\$) and (mask\$ or blind\$)).tw. 19. placebos.sh. 20. placebo\$.tw. 21. random\$.tw. 22. Research Design/ 23. comparative study.sh. 24. evaluation studies.sh. 25. follow-up studies.sh. * 포괄적인 검색 •MeSH 검색 절대적임 (빨간색 밑줄): DB구축시 26. prospective studies.sh. 주제색인 필요함 27. control\$.tw. 28. prospectiv\$.tw. •다양한 Text words를 조합하여 검색 29. volunteer\$.tw.

31. (animal not human).mp.

Text Words in PubMed

Text Words [TW]

all words and numbers in the title, abstract, other abstract, MeSH terms, MeSH Subheadings, Publication Types, Substance Names, Personal Name as Subject, Corporate Author, Secondary Source, Comment/Correction Notes,

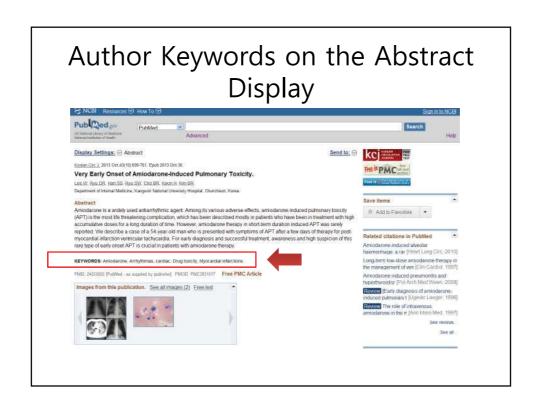
Other Terms (see Other Term [OT] above) typically non-MeSH subject terms (keywords)<-추가

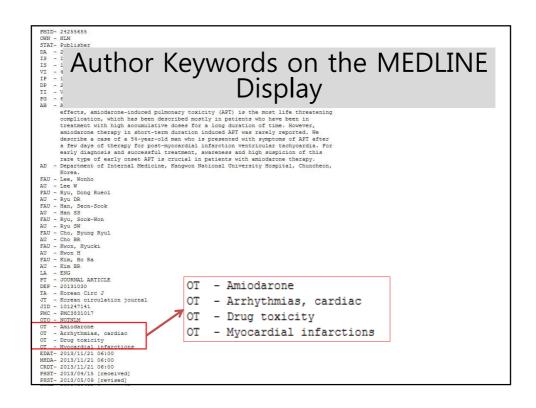
http://www.ncbi.nlm.nih.gov/books/NBK3827/#pubmedhelp.PubMed_Quick_Start

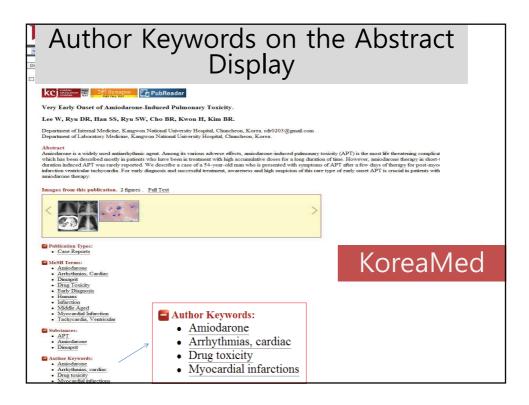
Author Keywords in PubMed

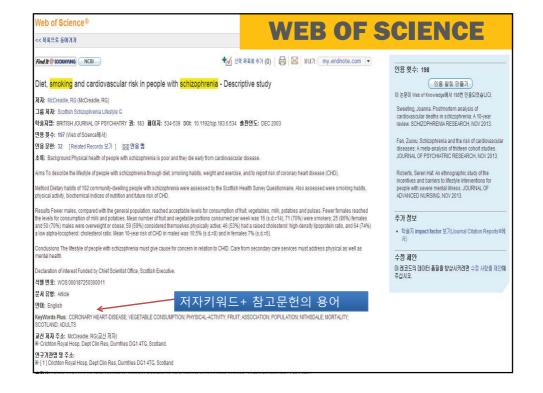
- 2013-
- PubMed now displays author keywords when supplied by publishers. NLM will not review author keywords for accuracy or add them to non-publisher supplied citations.
- Author Keywords are available on the Abstract, MEDLINE, and XML displays.

Torre S. Author Keywords in PubMed. NLM Tech Bull. 2013 Jan-Feb;(390):e2.









ICMJE 2005 URM의 Key words권고

- Some journals request that, following the abstract, authors provide, and identify as such, 3 to 10 key words or short phrases that capture the main topics of the article.
- These will assist indexers in cross-indexing the article and may be published with the abstract.
- Terms from the Medical Subject Headings (MeSH) list of Index Medicus should be used
- if suitable MeSH terms are not yet available for recently introduced terms, present terms may be used.

http://www.icmje.org/2005_urm.pdf

2) Abstract and Key Words





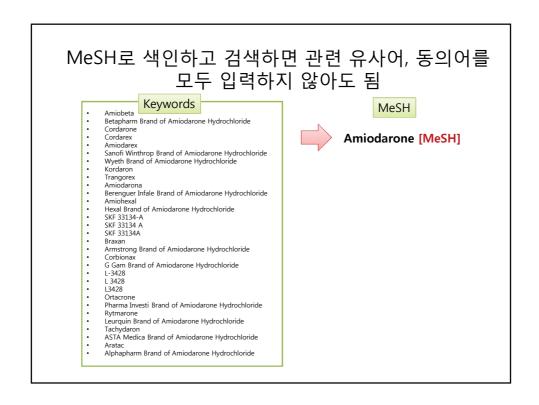
- Do not cite references in the abstract.
- Limit use of acronyms and abbreviations. Define acronym or abbreviation at its first use in parentheses.
- Be concise (250 words maximum).
- Use the following headings; Background and Objectives, Subjects (Materials) and Methods, Results, and Conclusion. Conclusion should include succinct statement of data interpretation, not the reiteration of data summary.
- Key words; Key words(5 words maximum) should be used from the Medical Subject Headings (MeSH) list of Index Medicus(https://www.nlm.nih.gov/mesh). If suitable MeSH terms are not available for recently introduced terms, present terms may be used.

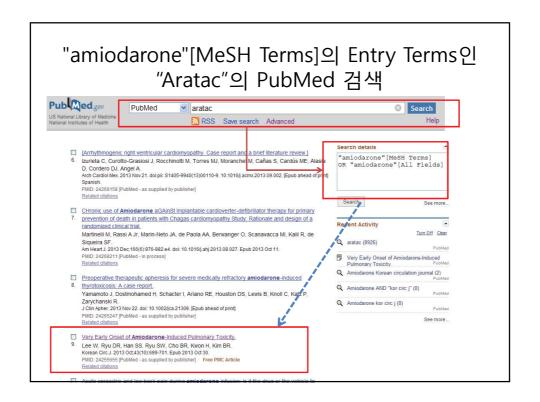
Medical Subjections and an investment of the subject of the subjec

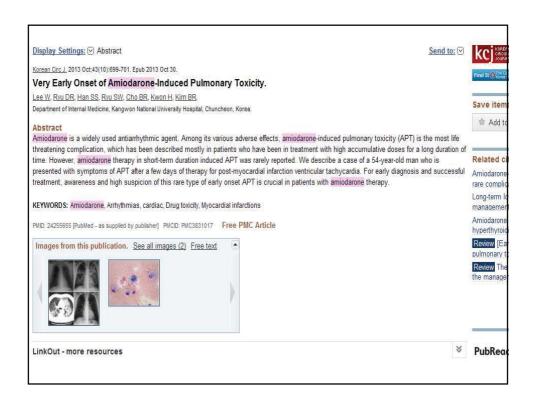
Key Words: List 3-6 key words from the list provided in Index Medicus under "Medical Subject Heading (MeSH)."

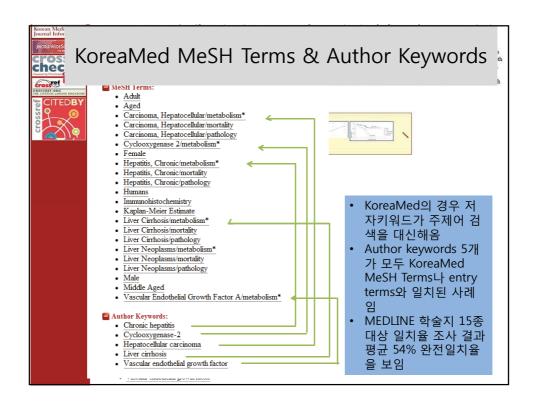
Abstract and Key Words:

The abstract should be concise, less than 200 words, and describe concisely, in a paragraph the purpose, methods, important results, and derived conclusions of the study in an unstructured format. Abbreviations, if needed, should be kept to an absolute minimum with proper identifications. Up to 10 key words should be listed at the end of the abstract to be used as index terms. For the selection of key words, refer to Medical Subject Headings (MeSH) in Index Medicus, or at the internet site, http://www.nlm.nih.gov/mesh/MBrowser.html.









Author Keywords 분석

MeSH 용어와 Author Keywords 일치도 관련 연구

- 가정의학회지, 1992-1997년
- Author Keywords : 897종류
 - MeSH 일치 : 161개 (17.9%)
 - 단, 복수 등 부분일치: 34개(3.8%)
 - MeSH 불일치: 702개(78.2%)
- 결론
 - MeSH와 부합하지 않음
 - 주제어 자체가 논문의 내용을 정확히 반영하지 못하는 경우가 있음

김병성, 김수영. 가정의학회지 논문의 영어 주제어 선택에 있어서 MeSH 용어 사용여 부와 선택 정확도. 가정의학회지 1998. 19(7) 531-537

MeSH 용어와 Author Keywords 일치도 관련 연구

- 1993-2010년
- 대한작업치료학회지 논문 346편
- Author Keywords: 1,2257
 - MeSH 일치: 225개 (20.8%)
 - 단, 복수 등 부분일치: 377개(30.8%)
 - MeSH 불일치: 593개(48.4%)

박수현, 박경영. 대한작업치료학회지 논문의 영문 주제어와 MeSH 용 어의 비교분석. 대한작업치료학회지 2011. 19(4) 131-145

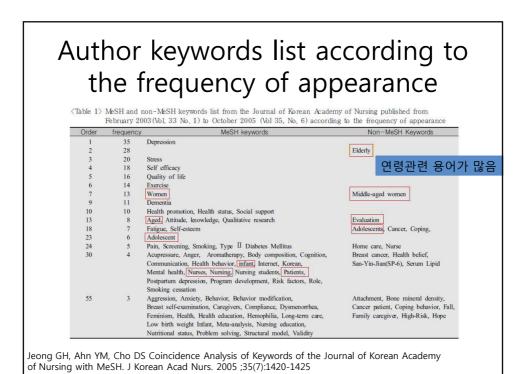
Author Keywords 분석결과

- MeSH 용어에 대한 이해 부족
- 연구의 내용을 나타내는 Main Topics 이외의 용 어 사용
 - Check tags: 연령, 성별, 연구재료 ex) child
 - Publication Types : systematic reviews
 - Study Design 관련 용어: cohort studies
 - 지리표목 ex) Korea
 - 약어사용 ex) STEM (Scanning Transmission Electron Microscopy)



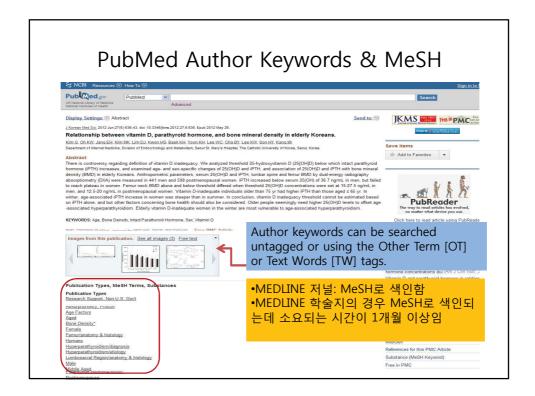






제목, 초록, 저자키워드를 핵심단어로 작성 해야하는 이유

- 독자
 - 전문(full text)을 읽기보다는 초록을 읽음
 - 초록보다는 논문의 제목만 읽는 독자가 더 많음
- 서지데이터베이스
 - 제목, 초록, 저자키워드를 대상으로 색인어 추출
 - 검색어와 매칭되는 색인어를 검색결과로 추출
- =>저자 혹은 편집위원회는 제목, 초록, 저자키워드를 핵심단어로 작성하고 있는가?





서지 DB에서 논문이 검색되게 하려면?

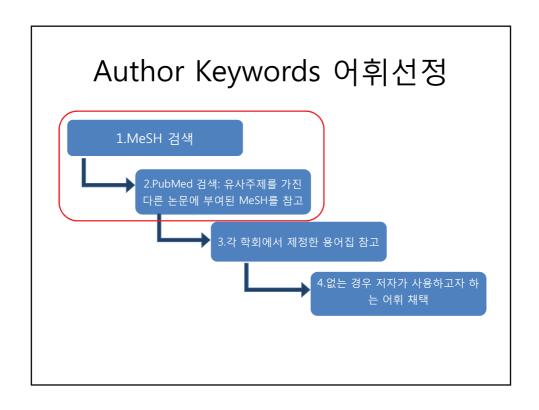
- "DB에서 쉽게 검색될 수 있도록 핵심단어 를 사용해 제목, 초록, 저자키워드 작성"
- "MeSH, 관련분야 용어집을 참고하여 통 제된 어휘로 저자키워드를 작성"

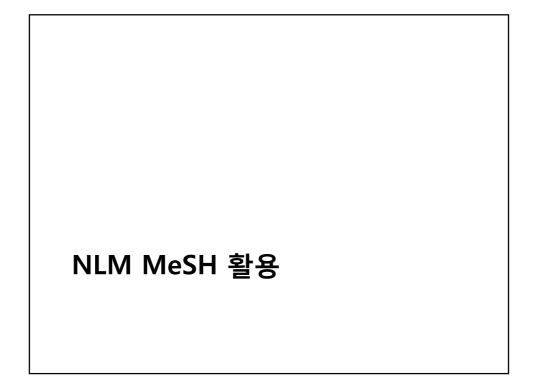
검색에 유용한 Author Keywords 작성

Author Keywords

- 3-10개의 주제어 작성
- 연구의 내용을 가장 잘 표현할 수 있는 단어 선정
- 모두 제목에 나타나는 수준의 단어로 선정
- MeSH 사용 (학술지의 투고규정에 정함)

홍성태. 의학논문 매력있게 쓰자. 서울 : 서울대학교출판문화원, 2012.





Medical Subject Headings (MeSH)

- 미국 국립의학도서관 (National Library of Medicine, NLM) 구축
- 통제어휘집, 주제명 사전 혹은 시소러스
- MeSH의 주표목 23,000여개
- 매년 갱신
- www.ncbi.nlm.nih.gov/mesh
- MeSH 추천: https://www.nlm.nih.gov/mesh/meshsugg.ht ml

MeSH, 2013

- There are 26,853 descriptors in 2013
 MeSH. There are also over 213,000 entry
 terms that assist in finding the most
 appropriate MeSH Heading
- MeSH files are updated every week on Sunday (Supplementary Concepts)

MeSH 유형

- Descriptors
 - Main Headings
 - Publication Types
 - Geographicals
 - Check Tags
- Subheading (=Qualifiers)
- Supplementary Concepts

MeSH Categories

- 3. Diseases [C]
 4. Chemicals and Drugs [D]
- 5. 🛨 Analytical, Diagnostic and Therapeutic Techniques and Equipment [E]
- 6. Psychiatry and Psychology [F]
- 7. Phenomena and Processes [G]
- 8. Disciplines and Occupations [H]
- 9. 🛨 Anthropology, Education, Sociology and Social Phenomena [I]
- 10. Technology, Industry, Agriculture [J]
- 11. Humanities [K]
- 12. Information Science [L]
 13. Named Groups [M]
- 14. Health Care [N]
- 15. Publication Characteristics [V]
- 16. 🛨 Geographicals [Z]

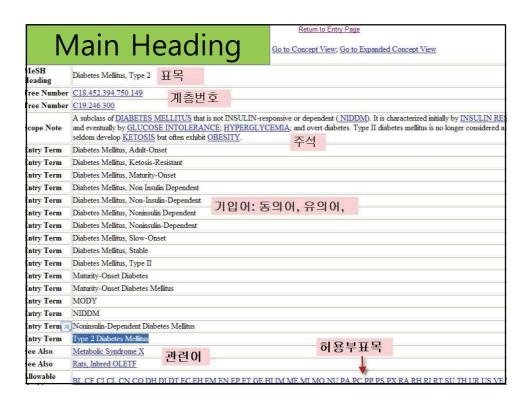
MeSH Tree Structures

- Neoplasms [C04]
 - Neoplasms by Site [C04.588]
 - Abdominal Neoplasms [C04.588.033] +
 - Anal Gland Neoplasms [C04.588.083]
 - Bone Neoplasms [C04.588.149] +
 - Breast Neoplasms [C04.588.180]
 - Breast Neoplasms, Male [C04.588.180.260]
 - Carcinoma, Ductal, Breast [C04.588.180.390]
 - Hereditary Breast and Ovarian Cancer Syndrome [C04.588.180.483]
 - Inflammatory Breast Neoplasms [C04.588.180.576]
 - Digestive System Neoplasms [C04.588.274] +

MeSH Browser

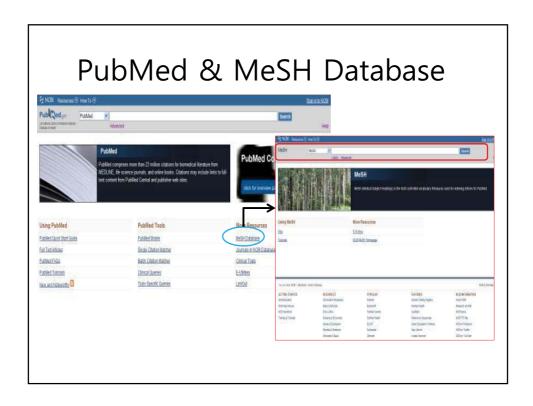
- The MeSH browser is an online vocabulary look-up aid available for use with MeSH®. The browser does not link directly to any MEDLINE or other database retrieval system and thus is not a substitute for the PUBMED system
- (http://www.nlm.nih.gov/mesh/MBrowser. html)

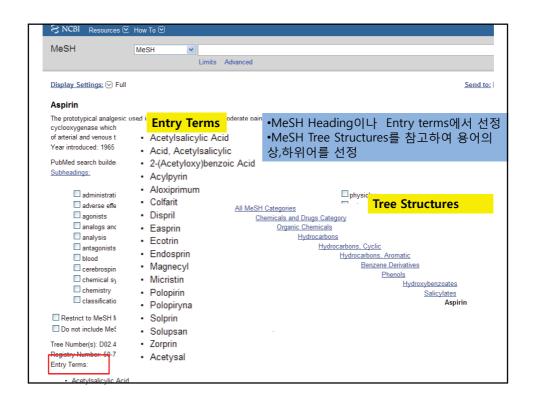
	Library Services Research Programs New & Noteworthy General Information
	Navigate from tree top
	MeSH Browser (2013 MeSH):
	The files are updated every week on Sunday. <u>Go to 2012 MeSH</u>
S	earch: diabetes mellitus, type 2
Find Exact Term	Find Terms with ALL Fragments Find Terms with ANY Fragment
	Search Options:
	⊙ All
	O Main Headings
	O Qualifiers
	O Supplementary Concepts
	MeSH Unique ID
	O Text words in Annotation & Scope Note
	O Search in these fields of chemicals:
	☐ Heading Mapped To (HM) (Supplementary List)
	☐ Indexing Information (II) (Supplementary List)
	Pharmacological Action (PA)
	☐ CAS Registry/EC Number/UNII Code (RN)
	Related Registry Number (RR)



MeSH Database

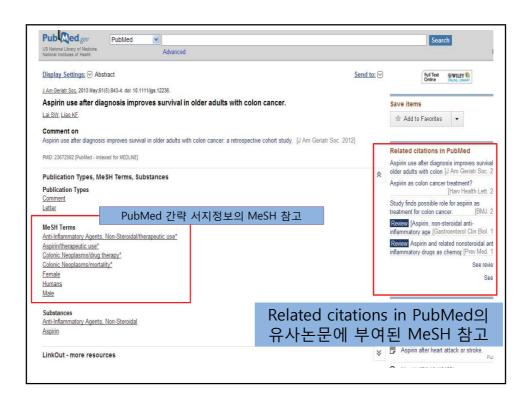
- Use the MeSH database to find MeSH terms, including Subheadings, Publication Types, Supplementary Concepts and Pharmacological Actions, and then build a PubMed search
- http://www.ncbi.nlm.nih.gov/mesh



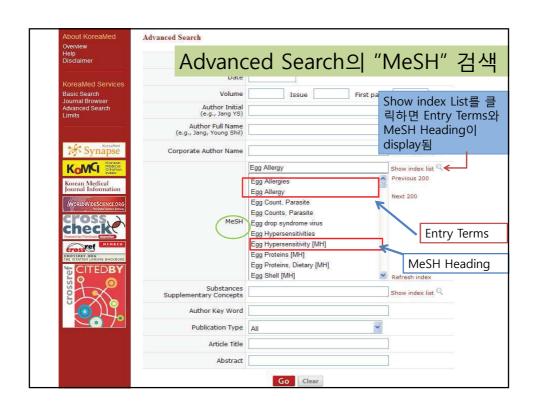




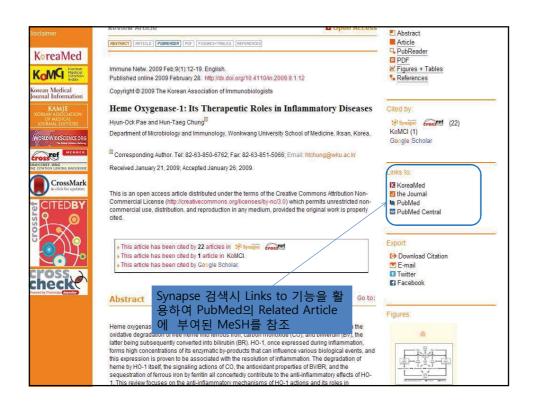
Related citations in PubMed

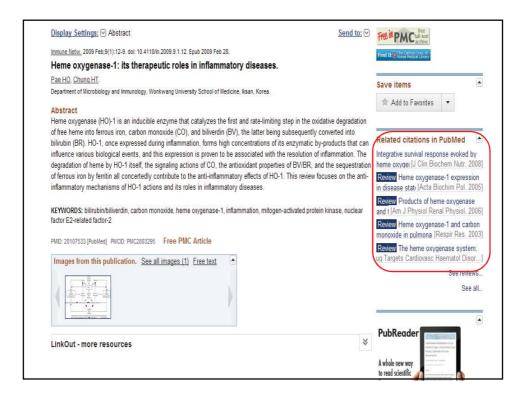


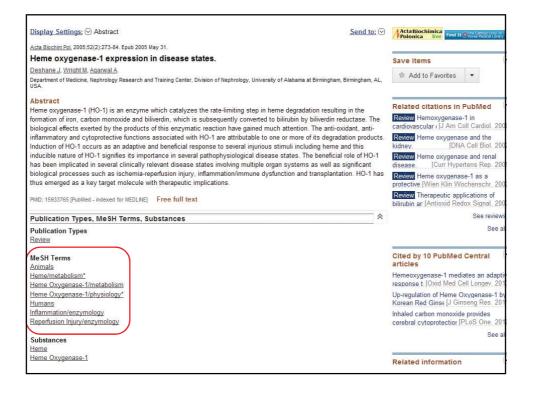
MeSH Search in KoreaMed











Title & Author Keywords & Abstracts

Title & Author Keywords & Abstracts

- 저자가 기술하는 단어, 어구, 문장의 종류, 단어의 출현위치 등에 의해 검색여부가 결정됨
- 제목에 채택되지 않은 중심개념은 저자키워드로 추가
- 저자키워드로 채택되지 않은 중심개념은 초록에 기술
- 연구재료의 성별, 종별, 연령, 동물명등은 초록의<연구 재료와 방법>에 함축적으로 요약

Age Groups

- Newborn: birth-1 mo
- Infant: 1-23 mo
- Preschool Child: 2-5 yr
- · Child: 6-12 yr
- Adolescent: 13-18 yr
- Young Adult: 19-24 yr
- · Adult: 19-44 years
- Middle Aged: 45-64 yr
- Aged: 65+ yr
- 80 and over: 80+ yr

예) "10 patients (7 males and 3 females; 68 years and 48 to 78 years, respectively)"

-> 색인: Humans, Male, Female, Middle Aged, Aged

예) "58-yr old man", "14-yr old girl"과 같이 정형화된 어구 사용

Animals

• 동물실험의 경우 연구대상이 되는 동물명을 정확하게 초록에 기술할 필요가 있음

Sprague-Dawley rats, Hamsters, Dogs

예) hepatic damage induced by carbon tetrachloride in **Sprague-Dawley rats**

Geographicals

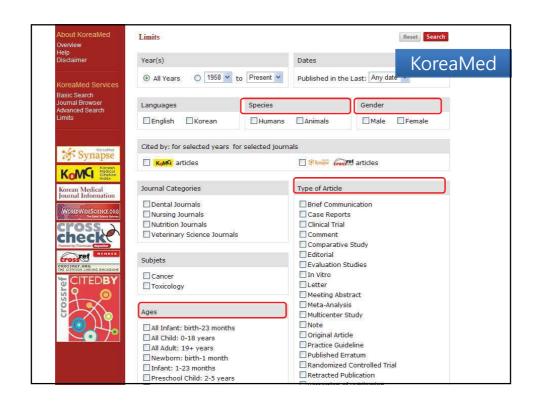
• 지리명 (Geographicals) Korea, Seoul 등

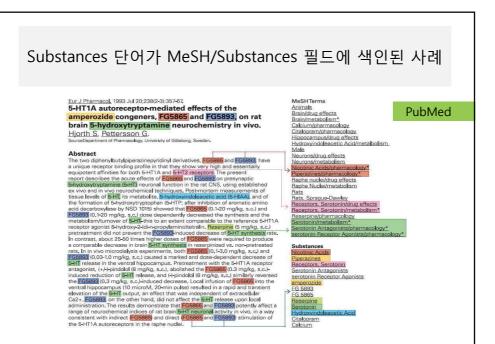
예) The study subjects were 30~80years old, 513 women living in **Seoul** and **Kyunggi area** who participated in 2011 KNHANES

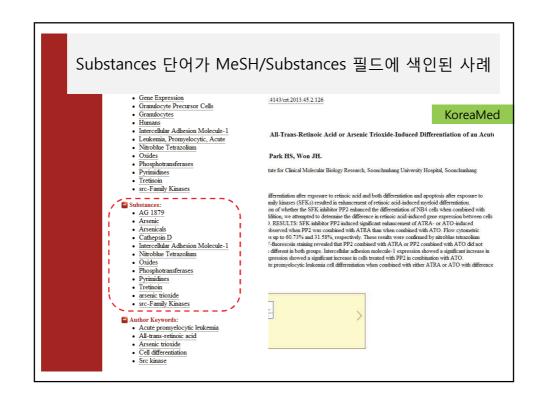
Study Designs

- Randomized Controlled Trial
- Retrospective Studies
- Cohort Studies
- Case Control Studies
- Multicenter Study
- 예) Combined treatment with headgear and the Frog appliance for maxillary molar distalization: a randomized controlled trial









맺음말

- 저자
 - 매력있는 제목
 - 함축된 초록
 - 핵심단어, MeSH (entry terms포함)로 저자키 워드 작성

참고문헌

- 김병성, 김수영. 가정의학회지 논문의 영어 주제어 선택에 있어서 MeSH 용어 사용여부와 선택 정확도. 가정의학회지 1998. 19(7) 531-537
- 박수현, 박경영. 대한작업치료학회지 논문의 영문 주제어와 MeSH 용어의 비교분석. 대한작업치료학회지 2011. 19(4) 131-145
- 정금희, 안영미, 조동숙. 대한간호학회지 게재 논문 주요어 분석: 2003-2005. J Korean Acad Nurs. 2005. 7(12); 1420-1425
- 한국보건의료연구원. NECA 체계적 문헌고찰 매뉴얼
- 홍성태. 의학논문 매력있게 쓰자. 서울 : 서울대학교출판문화원, 2012.
- KoreaMed
 - http://koreamed.org/SearchBasic.php
- · MeSH Browser
 - http://www.nlm.nih.gov/mesh/2013/mesh_browser/MBrowser.html
- PubMed
 - http://www.ncbi.nlm.nih.gov/pubmed/