

Database Searching

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Search Strategy



International Databases

❖ MEDLINE	http://www.pubmed.gov
❖ ISI	http://www.isiknowledge.com
❖ Scopus	http://www.scopus.com
❖ EMBASE	http://www.embase.com
❖ ScienceDirect	http://www.sciencedirect.com
❖ Cochrane	http://www.cochrane.org
❖ DOAJ	http://www.doaj.org
❖ Others	

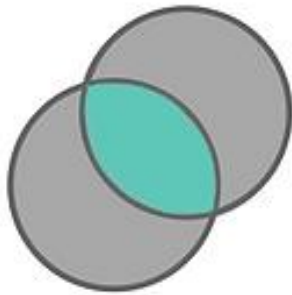
National Databases

- ❖ SID <http://www.sid.ir>
- ❖ Iranmedex <http://www.iranmedex.com>
- ❖ Magiran <http://www.magiran.com>
- ❖ Irandoc <http://www.irandoc.ac.ir>

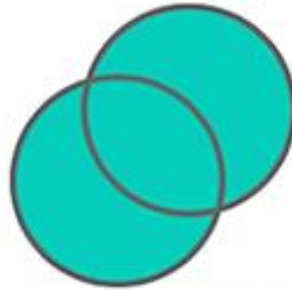
Search Engine

- ❑ Google Scholar <http://scholar.google.com>

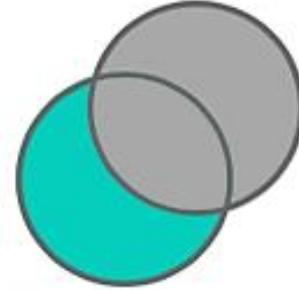
Boolean Search Operators



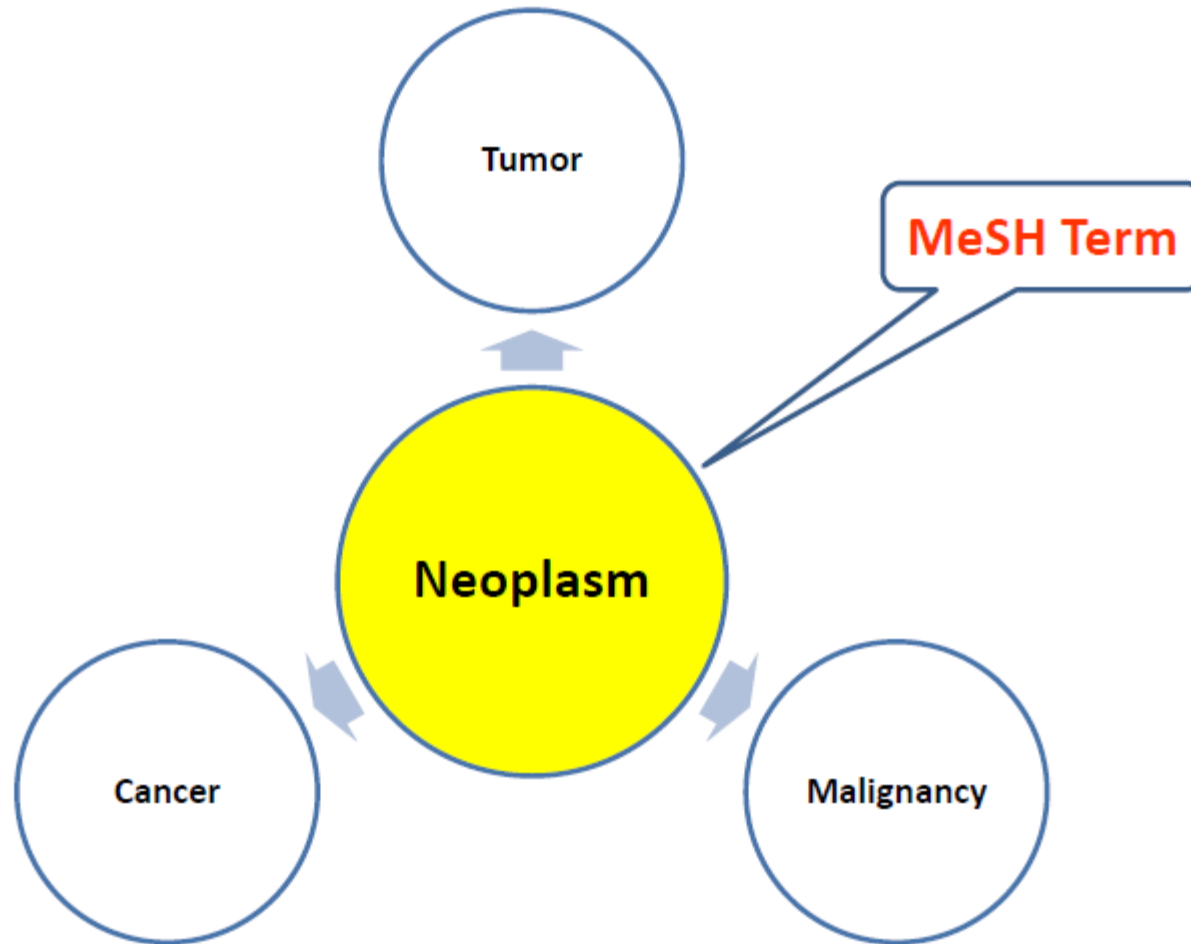
DAY AND NIGHT



DAY OR NIGHT



DAY NOT NIGHT



Example for MeSH Terms

❖ Cigarette	Smoking
❖ Convulsion	Seizures
❖ Itching	Pruritus
❖ Murder	Homicide
❖ Blood sugar	Blood Glucose
❖ Nose bleeding	Epistaxis
❖ Antibiotic	Anti-Bacterial Agents

Literature Search

Precision vs. Sensitivity - Key to Effective Searching

When searching for literature, it's important to ask yourself:

Do you want to do a **PRECISE** search of the literature or a **SENSITIVE** search of the literature?

Literature Search

A **Precise** Search:

Captures **some** relevant literature

Captures fewer irrelevant results, **less time** filtering and screening

Risk of missing relevant literature is high

Literature Search

A Sensitive Search:

Captures **most** relevant literature

Risk of missing relevant literature is low

Captures higher proportion of irrelevant literature, **more time** filtering and screening

Precision vs. Sensitivity

There's a logic to searching:

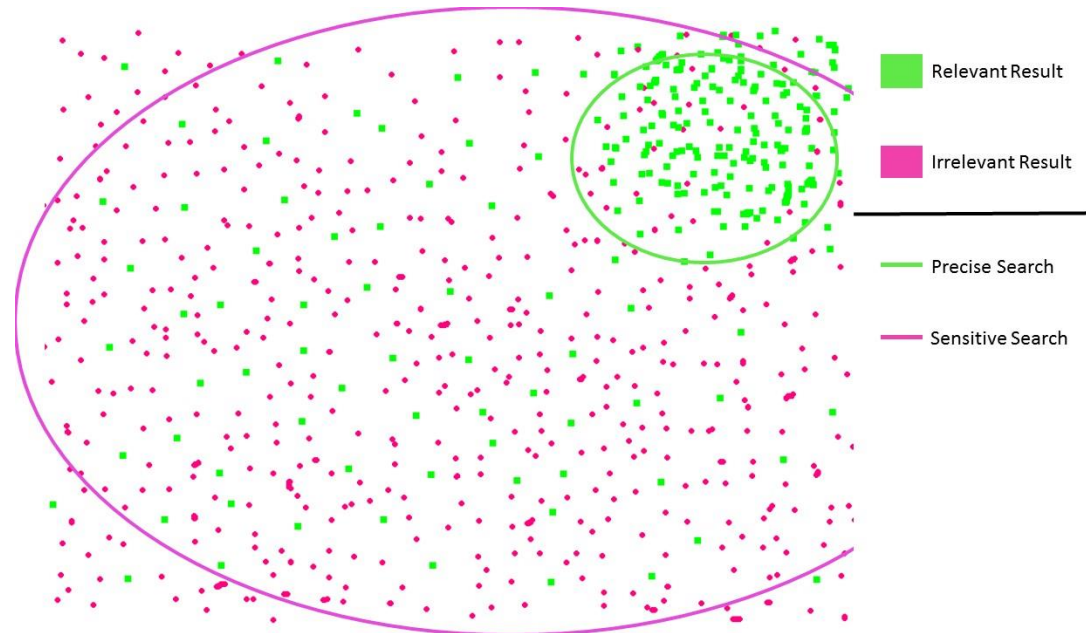
As sensitivity goes up, precision goes down ;

THEREFORE,

A sensitive search must retrieve a high proportion of irrelevant results;

THEREFORE,

If your search results are mostly-to-all relevant, it's highly likely you're **missing** things



- بررسی اثر پرتوگیری شغلی با دوزهای پایین پرتوهای یونیزان بر فاکتورهای خونی تکنولوژیست های رادیولوژی

Identify key
concepts &
term

hematological parameter, occupational exposure, low dose, ionizing radiation, radiologic technologist

Select
relevant
databases and
resources

For example: PubMed

Combine
search terms
with Boolean
operators

((("Hematology"[Mesh] OR "hematological parameter"[Title] OR hematolog* [Title] OR blood [Title] OR lymphocyte[Title] OR leukocyte[Title] OR leukemia[Title] OR "white blood cell"[Title]) AND ("Radiologic Health"[Mesh] OR "medical radiation worker"[Title] OR technician[Title] OR "occupational exposure"[Title] OR "hospital staff"[Title] OR staff[Title] OR worker[Title] OR "radiology staff"[Title] OR "radiologic technolog*"[Title] OR radiographer[Title]) AND ("Radiation, Ionizing"[Mesh] OR chronic[Title] OR "low level"[Title] OR "low dose"[Title] OR "ionizing radiation"[Title] OR radiation[Title] OR "x-ray"[Title])) NOT ("Animals"[Mesh] OR animal[Title] OR mice[Title] OR mouse[Title] OR rabbit[Title] OR "high dose"[Title] OR "high-dose"[Title] OR fluoroscopy[Title] OR intervention[Title]))

موضوع □

- بررسی اثر محافظ پرتویی بیسموت بر دوز دریافتی بافت پستان و کیفیت تشخیصی تصویر در آزمون های توموگرافی کامپیوتری (CT) قفسه سینه بزرگسالان



Identify key
concepts &
term

Bismuth OR shield, Dose OR radiation OR exposure, Breast OR "mammary gland", Quality OR "image quality", CT OR "computed tomography", Chest OR lung OR thorax OR thoracic, adult

Select
relevant
databases and
resources

For example: PubMed

Combine
search terms
with Boolean
operators

("Bismuth"[Title] OR "shield"[Title]) AND ("Dose"[Title] OR "radiation"[Title] OR "exposure"[Title]) **AND** ("Breast"[Title] OR "mammary gland"[Title]) **AND** ("Quality"[Title] OR "image quality"[Title]) AND ("CT"[Title] OR "computed tomography"[Title]) **AND** ("Chest"[Title] OR "lung"[Title] OR "thorax"[Title] OR "thoracic"[Title])

(((((CT[Title] OR "computed tomography"[Title] OR "computerized tomography"[Title])
AND (chest[Title] OR thoracic[Title] OR lung[Title])) **AND** (COVID[Title] OR
corona[Title])) **AND** (cancer[Title] OR neoplasm[Title] OR malignancy[Title] OR
tumor[Title])) **AND** (radiation[Title] OR exposure[Title])