

# CAN I BEAT PUBMED'S FILTERS AT THEIR OWN GAME?

Michael P. McGraw, MLIS  
Cleveland Health Sciences Library  
Case Western Reserve University  
Cleveland, Ohio

I'm a Reference Librarian at an institution with a large nursing program. Nursing undergraduates often ask me to filter the literature databases for articles that are both authored by a nurse, and clearly research-based in nature. I had been using PubMed's Filters feature, but decided to see if I could write a Boolean search clause that would do a better, more consistent job.

Each of the following clauses:

A) "Substance-Related Disorders/prevention and control"[MeSH]

B) "kangaroo care"

C) "Obesity"[MeSH] AND "Diabetes Mellitus, Type 2"[MeSH]

1) Was searched under the PubMed Filters "Clinical Trial"; "Meta-analysis"; "Practice Guideline"; "Randomized Controlled Trial", "Review", and "Nursing Journals"

2) And then linked with a Boolean AND to the phrase: (randomi\* OR cohort OR systematic OR RCT) AND (nurs\* OR LVN OR LPN OR RN OR BSN OR MSN OR ND OR DNSc)

**COMPARISON:** I obtained all six sets of articles and subjected them to a pre-determined test as to whether they qualified as "nurse-authored research articles". For an article to qualify, it had to have at least one author with an identifiably nursing-related degree or job title; and it had to follow a standard Introduction/Review/Methods/Results/Conclusion research structure. I then determine what percentage of each of the six groups qualified.

## RESULTS

Combination A2 (my filter) beat A1(control) by 52%[12/23] to 17%[17/99]  
Combination B2 beat the control by 81%[9/11] to 56%[9/16]  
Combination C2 beat combination C1 by 36%[4/11] to 18%[7/39].  
All three differences are statistically significant based on a Chi-square test assuming one degree of freedom. There is a no greater than 1% chance that the differences are due to chance alone.

**SO WHAT?** I've used this new filter at the Reference Desk. Should PubMed adopt something like this as an option?

**See also** McGraw, M. P. (2009). Narrowing PubMed Searches to Nursing-Related Articles. *Computers Informatics Nursing*, 27(5), 272-275