UCSF Stanford Center for Research & Innovation in Patient Care

How to Write a Good Abstract: Dos, Don'ts, and Helpful Hints

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Before You Begin

Abstracts are required summaries of presentations, posters, publications and research studies. The focus of all abstracts is not the same, but the goal of literally abstracting the structured highlights of the overall presentation, poster, publication or research study are fairly universal. Before you begin writing an abstract take time to obtain, review and understand the structure and function of THIS abstract. Take note of any suggested "subheadings", required font type and size; specific instructions related to length, number of words and any format rules. Once you have mastered the specifications for THIS abstract, be sure to use them. If possible, obtain and review the criteria the editors or reviewers will use in evaluating your abstract and use those, in addition to the required specifications, to guide your work. Avoid the temptation to be innovative. You are more likely to be successful in your abstract submission, publication, or selection if you honor the guidelines and directions provided. With these tools you are ready to go the next step and write that abstract! Remember, abstracts are expected to be short, pithy summaries—usually limited to one page of print or less. You can do this!!!!

Structure of the Abstract

If the call for abstracts did not include a template of suggested or required subheadings be sure you systematically approach the sequence of the abstract content. Try these generic subheadings to provide structure for your abstract:

Purpose/aims/research question: Begin like this: "The purpose of this (study/project/investigation) is to…" or "The question guiding this (study/project/ investigation) is…" or, "The aim of this (study/project/ investigation) is…." You get the picture. Three sentences *at most* should cover this.

Background: no more than 5 sentences here, explaining why this study is important, what it will add to the science, or why your project matters. You may cite a critical reference here if crucial to substantiating the significance of this work. **Content in this section should relate directly to the purpose/aims/question.**

Methods: if this is a research study, include the design, the setting, the sample, the measurement tools, and the analysis approach. If the abstract is for a project, include the setting, the composition of your team, the participants you worked with, your project intervention, and your evaluation strategy. **These should be appropriate to the purpose/aims/questions.**

Results: Here you state just the facts. If a research study, include final sample size and composition, simplified demographics, primary results. If a project, what was done and what did the evaluation show. **This should flow directly from the methods and be consistent with the purpose/ aims/questions.**

Discussion: *Relate your results directly back to your purpose/aims /research question*. This is critical. Did you achieve your purpose, either in your research or project? If not, why not? How was your question answered? Is the answer what you expected? Why or why not? What were the major limitations of the study or project

(every study/project has them, so don't leave this out).

Implications/Conclusions: This may be folded into the discussion section, but what are the practice/research/education implications of your study? Should nurses adopt this intervention? If more research is needed, what are the questions that should be addressed next?

Format Principles

Good abstracts are easy to ready, clear and concise. The abstract provides a glimpse of the author's work and attention to detail. **PROOF READ YOUR WORK**! Avoid grammatical errors and typos. Read your abstract out loud to yourself—how does it sound? Ask someone you trust and respect to read it and give you feedback. **Double check any instructions or guidelines and confirm that your abstract reflects these specifications—recheck your margins, font, type size and word count if appropriate.** Because your thinking may have evolved as you wrote the abstract take time to be sure the entire abstract evolves from your stated purpose/aim/question. The background discussion should be narrowly focused; the methods have to be right for the purpose/aim/question; and the discussion should use the same words as found in the statement of purpose, etc.

Check Yourself

Did you :
  Follow the instructions!!!!
  Include headings *exactly as stated* in the instructions/template?
  Use short, clear sentences; one idea per sentence?
  Limit your abstract to the word count/character count requirement?
  Technically edit your work?

You Did It! Submit Your Abstract

Be sure to submit your abstract on or before any relevant deadline and to the correct address. Late or misaddressed abstracts are likely to be returned without review. Be sure to factor in time zones and delays in mail. Even electronic submissions can be complicated by technological glitches. Plan ahead!

Sample Abstracts

Sample Abstract #1 This abstract was submitted to the Society for Academic Emergency Medicine in December, 2003, was accepted, and was presented as a poster at their regional meeting in Oakland in 2004. The format was strictly prescribed, and including the title and section headings, contains 300 words.

EMS Treatment of CHF: How Well Do We Do?

Background: Reported error rates in out-of-hospital (OOH) diagnosis of CHF range from 12-40%, using ALS provider diagnosis.

Objectives: To determine the error rates in OOH diagnosis for CHF based on choices of ALS treatment.

Methods: Retrospective case series; convenience sample of OOH and emergency department (ED) records on patients 50 and older who received OOH care for respiratory distress. Dates: January 1, 2001 through June 30, 2002. Field intubated patients were excluded. OOH treatment for CHF defined as treatment of older patients ($>=50$) with complaint of respiratory distress with furosemide, nitroglycerine (NTG), or morphine sulfate (MS). ED diagnosis was defined as one of the first three ED diagnoses as CHF or pulmonary edema.

Results: 310 matching charts with complete data. 70 patients were treated with one or more of the target treatments: 5 patients received MS, 46 received furosemide, and 53 received NTG. 98 patients received an ED diagnosis of CHF or pulmonary edema. Sensitivity=0.357 (35/98); Specificity= 0.835 (177/212);Treated for CHF but did not have (false positive rate)= 0.165 (35/212); Not treated for CHF but had it (false negative rate) = 0.642(63/98); agreement = 0.684 (kappa= 0.21, $p<.001$).

Conclusions: Both over and under-treatment of CHF in older patients with respiratory distress remains a problem, even when field diagnosis is not required. Clinical decision rules may be helpful in this regard. Until the treatment accuracy can be improved, limit treatment to those in severe distress (benefits outweigh risks of erroneous treatment), or long transport times. Limitations include: retrospective cases series analysis limits generalizability; convenience sample and exclusion of patients intubated in the field may bias results; no outcome data to evaluate any benefits or risks associated with unnecessary or missed ALS treatments; relying on ED diagnosis as gold standard for presence of CHF.

Unit Level Nurse Workload Impacts on Patient Safety Study

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Research-In-Progress Abstract

The aims of this 2-year descriptive correlational study build on the established integrity and capacity of the California Nursing Outcomes Coalition (CalNOC) to engage California acute care hospitals in voluntarily using ANA nursing quality indicators for reporting standardized nurse staffing, patient safety and quality indicators in a collaborative research, repository development and benchmarking project. For the purposes of this study, it is posited that the daily unit level configuration of nurse staffing and workload may buffer patients from the effects of error and resulting injury or compromise patient safety when variance in these factors exceeds a staffs' adaptive capacity and breaches a unit level margin of safety. The aims of this study are grounded in the knowledge that the potential to compromise patient safety through human error is inherent in nursing practice and medical care (IOM, 1999; QUIC, 2000; Reason, 1990). In collaboration with CalNOC's statewide voluntary convenience sample of medical-surgical acute care units from 77 hospitals, this study will break new ground in tracing daily unit-level direct care nurse staffing, in 100 patient care units over a two (2) month period, to examine associations between the structure of hospital nurse staffing and patient safety and outcome indicators such as—falls, pressure ulcers, restraint prevalence and significant clinical events. In addition the effect of patient activity (turnover) and nurse staffing will be examined. The staff measures to be studied include hours of direct nursing care per patient day, nursing skill mix, percent of contracted or agency nursing staff, ratio of required to actual hours of care, and RN years of post-licensure experience. This study recognizes and quantifies the impact of patient turnover, a key factor in nurse staffing workload, and integrates it into multiple regression analyses examining associations between nurse staffing and patient care outcomes.

Unit Level Nurse Workload Impacts on Patient Safety

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Abstract—Final Report (limited to 250 words)

Purpose
Study aims were to test associations between daily nurse staffing in adult medical-surgical units and hospital acquired pressure ulcers, patient falls and other significant events. This study integrated a measure of workload, admissions, discharges and transfers to explore how the "pace" of patient care impacted patient safety.

Scope
This 2-year AHRQ Working Conditions and Patient Safety study built on the work of the California Nursing Outcomes Coalition (CalNOC) to engage acute care hospitals in using ANA nursing indicators for reporting staffing, patient safety and quality indicators in a research, repository development and benchmarking project. In 25 acute care, not-for-profit California hospitals participating in CalNOC, the sample included urban and rural sites with an average daily census from 100 to 400 plus. Most patients' principal diagnosis was medical (66%).

Methods
A prospective, descriptive correlational design tested associations between daily unit level nurse staffing, skill mix, hours of care, contract hours of care, workload and patient outcome measures. Falls were "unplanned descents to the floor".

Results
Registered Nurse (RN) Hours of Care was significantly associated with outcomes. In addition, percent RNs with BSN or higher was associated with fewer falls. Unit activity index and hospital complexity (measured by bed size) were also significant predictors of falls. Percent of patients with hospital acquired pressure ulcers was significantly associated with mean staffing ratio and with percent days with the staffing under 100% for week PRIOR to the prevalence study. Greater percent certified RNs was associated with lower percent of restrained patients.

Key Words
Acute care; nurse staffing, patient falls, hospital acquired pressure ulcers, patient care safety.

Additional Resources: How to write an abstract

Writing an Abstract
http://www.csupomona.edu/~jcclark/classes/bio190/abstract.html

How to Write an Abstract: Links and Tips
http://research.berkeley.edu/ucday/abstract.html

Koster, J. 2008. Dr. J's Short and Snappy Guide to How to Write an Abstract.
http://www2.winthrop.edu/english/handbook/AbstractTips.pdf

The Structure, Format, Content, and Style of a Journal-Style Scientific Paper
http://abacus.bates.edu/~ganderso/biology/resources/writing/HTWsections.html#abstract