Full Title of Your Paper

Your Name (First M. Last)

UCSF Latino Center for Medical Education and Research Doctors Academy

Name of School or Institution

(Adapted from: Sonia Mendoza, notes 2017)

Abstract

Begin a new page. Your abstract page should already include the **page header**. On the first line of the abstract page, center the word "Abstract" (no bold, formatting, italics, underlining, or quotation marks).

Beginning with the next line, *write a brief summary of the key points of your research, reviewing main points and purpose (Do not indent.) Your abstract should contain at least your research topic, research questions, participants, methods, results, data analysis, and conclusions*. **Your abstract should be a single paragraph, double-spaced.**

Your abstract should be between 150 and 250 words. Abbreviations and acronyms used in the paper should be defined in the abstract. You may also want to list keywords from your paper in your abstract. To do this, indent as you would if you were starting a new paragraph, type *Keywords:* (italicized), and then list your keywords. Listing your keywords will help researchers find your work in databases.

****Your abstract should be a single paragraph, double-spaced.**

Your Full Title of Your Paper

Introduction

The introduction will contain scientific background/purpose/history of information (signs, symptoms, geography, significance of disease, the causes, stressors, genetic, environmental, etc.). The purpose of the introduction is to contextualize your research topic and provide an in-depth analysis for your research paper. The introduction presents the problem that the paper addresses (defines the problem). A hook is not necessary but you do need scientific evidence to provide a scientific background.

Utilize all of the five research articles as references. Educate the reader and place unknown or foreign terminology here. [**Example**: Many of us are unaware of BRAC1 genes or type II diabetes mellitus and the importance of beta cells. Discuss medical terminologies and cite the work (Mendoza, 2017).]

Discuss the health problem of your research topic: stating the health disease, the prevalence demographics, risk factors, severity, pathophysiology, molecular, cellular mechanisms, statistics and again state the purpose of your paper at the very end.

Explain who is affected by the disease the most and compare other ethnicities and races if you can. [In an **example** of preterm birth I would state that 11.1% of the hispanic population is affected by preterm birth in California.] **It is imperative to incorporate statistics and demographics.**

The sequence can be:

- pathophysiology;
- molecular/cellular functions (the foreign medical terminology that will help the reader understand what the background of the disease is);
- demographics (education, socioeconomic status-the population if it is low-income, age, race);
- in what location are they primarily affected (if it is stated in the research journals you found);
- prevalence rate/frequency rate;
- include diagnosis, or is there any differential diagnosis (this pertains to confusion on obtaining the correct diagnosis, for example, people can often mistake cancer with autoimmune disorders);
- signs and symptoms;
- state any treatment associated with the health disease.

Writing Tips:

- Have a paragraph for each of the topics mentioned.
- The writing should always be in the past tense except when referring to established facts.
- Ideas must be organized into their respective paragraphs
- Present relevant information to establish a logical sequence. Each idea generated must collaborate with their corresponding paragraph.
- Clarity, sentence structure, phrases and in-text citations should flow and efficacy should be adhered to.
- Mechanics should also be noted-pay close attention to spelling and sentence syntax errors
- The introduction should be **2 pages-3 pages.**

Problem Statement

The Problem Statement is just that. It associates and incorporates the problem of your research question. This is where you address the *health disparities*. Discuss in particular the health disparity in your problem statement *utilizing analytical or descriptive questions*. [**For example**, since I love neuroscience I often do not see any research linking health disparities. It's rather difficult to incorporate distinct populations that are affected by neurological impairments or degenerative diseases. However, I see a lot of research that demonstrates Huntington's disease primarily affects caucasian men and women in their early 40s. The HTT gene can mutate and cause individuals to have Huntington's disease. I would definitely state the problem and why it's important for readers to be more acquainted with the research.]

Do not place solutions to the problem statement. Just state the problem, the importance of the problem, how it occurs, and where and when it occurs. cognitive, mental, psychological, movement and logical thinking capabilities diminished.

[**My example:** Men and women over the age of 40 begin to show signs of degenerative, cognitive, mental, psychological, movement and logical thinking capabilities diminished. They have the dominant gene HTT and it is mutated, and many will begin to suffer a rather slow, debilitating death (Norman, 2016). Families may not have the resilience, nor the financial resources to continue with the ongoing medical care. The age expectancy for Huntington's disease is around 60 years. Due to late diagnosis, the degeneration may occur in a gradual and slow process (Castle, 2015). This is of relative importance and imperative to study Huntington's disease because a substantial amount of rare cases are increasing at an alarming rate. Neurological defects and capabilities are affected as well . Psychological and kinetics are

affected and the results become magnified when no treatments are provided. The treatment therapy, such as tetrabenazine, alleviates the writhing movements and involuntary jerking associated with Huntington's but it is not a prevention (Loucks, 2014). There are not preventable treatments, just pharmacological treatments to alleviate the involuntary jerking movements. Cognition and other potential diagnoses related to Huntington's can be misdiagnosed. All populations are virtually affected by this dominant gene. There are no preventable measures and no gene therapy to prevent Huntington's Disease. Future offspring will continue to acquire the gene and the results are increasing at a relatively high frequency rate. There are various studies that concentrate on HTT and continue to become innovative in research to decrease the rate of Huntington's disease.]

That last sentence leads to my Methods. The problem statement needs to be **1 page possibly 2 pages.**

Methods

The methods section is an important concept that will give you the results and from there it will provide a reasonable explanation if the research question was answered or it was not. One paragraph can provide an explanation as to where the the research was acquired.

[**Example**: The peer-reviewed journal articles were ascertained from the database PubMed, commonly titled as National Institute of Health. Out of the many articles collected, three articles were selected based on their relevance geared toward health disparities and comparison groups. The demographics, in-depth description of how the study conducted was also selected to demonstrate the outcome of the medical research.]

From there you can provide how the methods were performed.

Study 1: Early Predictors of Lumbar Spine Surgery after Occupational Back Injury: Results from a Prospective Study of Workers in Washington State.

[*Italicise* if you are going to provide specific titles of each of the headings. For example: *Setting and Participants, Population, Baseline Variables, Statistical Analyses, etc.]*

Methods **Example** provided below:

Methods

Study 1: Early Predictors of Lumbar Spine Surgery after Occupational Back Injury: Results from a Prospective Study of Workers in Washington

Settings and Participants

The study conducted by Keeney et al., (2014) had used D-RISC and other database resources to obtain work claim injuries. The D-RISC study has been previously described according to prior literature obtained from various peer-reviewed articles and applied strictly with back injuries. Back injuries were reported weekly and were collected from the Washington State Department of Labor and Industries (DLI) State Fund (Keeney et al., 2014). To be eligible for the study, workers had to receive some wage-replacement compensation for temporary total disability, which resulted in four days off of work, according to Keeney et al., (2014).

There were 4,354 potential participants identified from the DLI claims database in the years 2002 and 2004 (Keeney et al., 2014). Of that original number, 2,147 (49.3%) actually participated in the study and the other individuals were not contacted successfully [1,178 (27.1%)], [909 (20.9%)] and did not wish to enroll any longer. The remainder of the group was not eligible to participate because they did not satisfy the requirements [120, (2.8%)]. In this study conducted, those not eligible did not receive compensation, had to be hospitalized for the initial injury, age was missing on the demographics and therefore could not be utilized, and some participants did not have a back injury. The numbers for ineligible participants are as follows: [(n=240, n=16, n=3, n=3)] (Keeney et al., 2014). Those who were eligible had successfully completed a telephone interview that was conducted 18 days after the claim submission. Again, the eligible participants that participated were 2,147.

The D-RISC sample that was used in the statistical analysis was 1,885 (43.3%). The other literature had utilized these numbers to ensure a statistical analyses would be provided for back claim injuries. These values are baseline values for comparison groups. The numbers listed are as follows: [mean age (SD) which means standard deviation= 39.4 (11.2) vs. 38.2 (11.1 years), P=0.001] with more women (32% vs. 26%, P<0.001) and more workers had received compensation 1 year after their claim submission (13.8% vs 11.3%, P=0.02). (Keeney et al., 2014).

Baseline variables

Other literature was utilized to help with the study conducted according to Keeney et al., (2014). The D-RISC baseline data came from administrative claims, medical data, medical record review and worker self-report in telephone interviews (Keeney et al., 2014). Medical nurses were trained to fill in medical records and record the visits for the participants back injury. The baseline variables associated were (P<0.10) with Lumbar Spine Surgery by Three Years after Claim Receipt for Occupational Back Injury. The domain and variables included the following: socio-demographics (age, education, gender, region of worker residence, Race/ethnicity), employment-related, Pain and Function, clinical status, health care, health behavior and psychological (Keeney et al., 2014).

Outcome Measures

To ensure participants had spine surgery, the study conducted by Keeney et al., (2014) had used medical bill database that DLI had obtained. Lumbar spine surgeries were obtained from CPT codes, which is known as Current Procedural Terminology. According to Keeney et al., (2014), the CPT codes slightly differed from previous literature but did not differ when they

needed to count for number of lumbar spine surgeries (keeney et al., 2014). The date of surgery was determined by the first date that was provided in the CPT code. These numbers were utilized for the statistical analysis of D-RISC for the 1,885 participants and were categorized according to the different surgeries. The surgeries were either fusion, decompression, or both (Keeney et al., 2014).

Statistical Analyses

The study conducted bivariate logistic regression analyses to help determine the associations between baseline variables and lumbar spine surgery, as well as worker age and gender (Keeney et al., 2014). The research team also developed a multivariate model to predict lumbar surgery and bivariate baseline variables ($P<0.10$). Analyses were conducted using Stata versions IC10 and MP12 (Keeney et al., 2014). AUC was utilized to better assert multivariate model to compare those who went to surgery and those who did not participate in research. AUC was measured using numbers 0.70 to 0.80 which is considered acceptable and 0.80-0.90 to be excellent (Keeney et al., 2014).

Study 2: Lorem ipsum dolor sit amet

Participants & Setting (Population)

Baseline Variables (if relevant or provided)

Outcome Measures (if relevant or provided)

Statistical Analyses

Study 3: Lorem ipsum dolor sit amet

Participants & Setting (Population)

Baseline Variables (if relevant or provided)

Outcome Measures (if relevant or provided)

Statistical Analyses

Results

[This is the section where you provide descriptive analyses. Again same format will apply.]

Study 1: Early Predictors of Lumbar Spine Surgery after Occupational Back Injury

Results from a Prospective Study of Workers in Washington State

Sample Characteristics

The study conducted by Keeney et al., (2014), consisted of 1,885 participants. The participants were mainly white non-hispanic which comprised of 71%. Hispanic comprised of 15% and other were considered 14% who participated. The amount of males in the study consisted of 68% of the participants. Within 3 years after the submission of work related injury, there were 174 (9.2%) of the workers who had one more lumbar spine operations that was covered by DLI (Keeney et al., 2014). According to Keeney et al., (2014), The 174 who had an operation there was 137 (78.7%) that had decompression surgery, 6 (3.4%) who had fusion surgery and finally 31 (17.8%) had underwent both decompression and fusion surgery (Keeney et al., 2014).

Bivariate Analyses

All baseline variables are associated with a P value of P<0.10 that had Lumbar spine surgery within three years of submitting their claim. The significant P-value for baseline variables within three year were sociodemographics (<0.001), gender (0.08) and region of worker residence (0.06). Race/ethnicity non-hispanic white, had a significant P value score of (<0.0010). Employment related had several significant values and their scores are [(fast pace (0.02), Job duration ≥ 6 months (0.09) and employment offered job accommodation (0.001)] (Keeney et al., 2014). Pain and function were reported to have a P value score of less than 0.001. Health care had a P value that was less than 0.001. Health behavior had a significant P-value of 0.07 and psychological effects of less than 0.001.

Not significant values are reported with a P value score of P ≥ 0.10. These were the baseline variables with Lumbar Spine Surgery by One Year after the initial claim of Back Injury. According to the Appendix generated by Keeney et al., (2014), the non-significant bivariate associations are Education (0.25) with a P value greater than 0.10 and marital status as 0.32 (Keeney et al., 2014). Employment-related had a non significant value of 0.42 and Co-worker relations had a P-value score of 0.24 (Keeney et al., 2014). Pain and function had a P-value score of 0.59, health care was reported as 0.96, and health behavior reflected a P-value score of 0.56 (Keeney et al., 2014).

With significant effects showed sociodemographic in suburban residence had more lumbar spine surgeries. If they were younger, female and hispanic they had decreased odds of having surgery, according to keeney et al. (2014). Those who worked in a fast-paced environment, less than six months at their current job and did not return to work with job accommodations were most likely to have surgery. Pain that radiated past their knees, had either

missed work due a related injury from previous jobs, or had opioids for the injury were most likely to have surgery (Keeney et al., 2014). Tobacco use was also reported to have a significant effect on health and had a greater odds of surgery.

Multivariate Model

Study 2:Lorem ipsum dolor sit amet

Sample Characteristics (Data or charts if relevant)

Bivariate Analyses

Study 3: Lorem ipsum dolor sit amet

Sample Characteristics

Bivariate Analyses

Discussion

This section might be called Discussion or it might be called Summary of Findings. The purpose of this section is to highlight the major statistical findings from the results section and interpret them. You are discussing the results you described in the results discussion. How do each of the peer-reviewed articles relate to each other, more importantly how do they answer the research question? Limitations and biases need to be addressed

For each study, restate the overall purpose of the study. Then explain the main findings as related to the overall purpose of the study. Next, summarize other interesting findings from the results section. Explain how the statistical findings relate to the purpose of the study. Also describe how the results are related to health disparities in general and discuss the strengths and weaknesses found for each study. All explanations must be supported by the results of the data analysis. How do each of the peer-reviewed articles relate back to your introduction? This is the last impression of your research paper. It really demonstrates if you have a basic understanding of the entirety of the research paper.

Things to consider including:

Discussion Importance:

- Why was this important? What was important?
- What did you find?
- What are the differences in each of the study and how does it pertain to the research question?
- What did previous research show? State the significance and explain how it affects the population or specific ethnicity
- Examine strengths and weaknesses
- Written in 3rd person

Discussion: Compare & Contrast

- Compare and contrast all the results in each of the studies
- Compare and show the strengths of the study, show any weaknesses.
- What are the importances of the study (this will show the significance of each of the studies, and what was not significant)
- Each of the peer-reviewed articles that you are comparing and contrasting will show how your research question was answered or not.
- It is imperative to show how the research question was answered or not.
- Must be third person

Discussion: Limitations and Biases

- Provide the limitations of each of the peer-reviewed articles.
    - Limitations can show how future studies can develop from the research you analyzed.
- Show if there are any biases.
- Was the health disparity non-existent? What can they do in the future to focus on the health disparity
- Mention how future studies can extend on this topic or what they can do differently
    - Think back to the problem statement; this is an opportunity to provide solutions.
    - Discuss how future studies can improve
    - Mention how more studies need to focus on other minority groups, or they need to examine the weaknesses of the study.
    - What can future research focus on

Conclusion

The final section of the paper is the Conclusion section. Briefly summarize the overall conclusion of the data analysis based on the purpose of the study. Also explain the importance of the major finding to educational practice.

References

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