This is a Sample Research Proposal about Lead Poisoning

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# Abstract

Make your abstract here with the first line flush left. The rest of the abstract should be a solid block of text with all the information included. If a journal states to use headings, each new paragraph should be indented 5 spaces. Normally an APA abstract will be 150-200 words.

This is a Sample Research Proposal about Lead Poisoning

This section will contain the Introduction and background information. Do not label this section *background* or *introduction*. The first section of a paper is assumed to be the introduction. Be sure the entire body of the paper is double spaced and in Times Roman 12pt font. Do not add extra spaces before or after the paragraph. Only use a single space between the period and beginning of the next sentence. Please review the APA review module and consult the APA 6<sup>th</sup> edition manual if you have questions about how to format a paper using APA.

State the importance of the problem. In this case study, a 12-month-old male infant presents to a clinic with elevated lead levels during a routine screening for his age group and exhibits delayed mental and cognitive development. Normal lead level in a child's blood should be below 5 mcg/dl (Blue, 2014). Doctors usually use a simple blood test to detect lead poisoning. A small blood sample is taken from a finger prick or from a vein. The child with lead poisoning will frequently complain of increased fatigue, constipation, abdominal pain, headache, school difficulties, loss of appetite, and behavior problems associated with hyperactivity (Blue, 2014; Red, 2010). When you put information in your case study be sure to tell why it is important. Do not just put a bunch of quotes of what other people think. I want to hear what you have to say on the topic.

Review the relevant literature. Review multiple studies to establish a literature base for the problem. You do not have to regurgitate all the information, instead make a concise case for why the topic is important and outline what is already known. A study by Blue (2014) showed that high lead levels cause delayed development. In a related series of studies, Red and associates (2010) developed a specific measure to determine how much lead was in the blood and how much it affected development. It is important to know that lead can be found in many household

products. Older homes with peeling paint or lead found in plumbing, pottery glazes, lead-based crystal, and even candies from other countries can have a high lead base (Blue, 2014). Children's toys are painted, and in this country, the use of lead-based paints is prohibited. With increased movement of the factory base outside of this country, there is always a concern about the use of inappropriate materials that can have a high lead base.

State your research question and hypothesis. Be sure to clearly state the question you are investigating. Do not make the reader search for the purpose of the paper/proposal. The hypothesis should state what you think will happen when the topic is tested. Does testing for lead produce healthier children? This research proposal will explore if the use of lead testing. The author's hypothesis is that lead testing in children leads to healthier children by the age of 5 compared to non-tested children.

#### Methods

Do not use any direct quotes when writing the section. Questions the nurse should ask include: Does the parent have a job or hobby that may use lead-based products? Does the family use ceramic pottery in cooking? Does the family use home-based medical remedies that could contain lead? Has the child lived or visited frequently outside the United States?

# **Participant Characteristics**

This section will include a description of the proposed audience for this study. Who will be included and why. State if there are any restrictions based on demographic information. Is the proposal only for pediatric patients?

# **Sampling Method**

In this section talk about where you would like to get your sample. Will you use patients on your unit? Family members? Is this study covering all the patients in the hospital or just a

select group? Will you choose a random sample or use convenience samples? Use information from the course to make a precise plan and explain your rationale.

# Sample size, power and precision

What is your intended sample size to reach power for this proposal? Does your population present with enough people to achieve a realistic sample?

## **Measures and Covariates**

In this section, define all measures and covariates. Do you propose to use a blood test to measure lead levels? Will you send out a survey to measure happiness? Define what you are actually trying to measure and find a tool to help you measure it. If using a standardized tool, present validity and reliability information about the tool here. Be sure to include a description of the Survey Monkey survey you produced for this project as a part of the class.

# **Research Design**

In this section describe the type of research design you propose to use when conducting this study. Identify the specific design from the course material and cite your source. Were conditions manipulated or naturally observed.

### **Results**

In this section be sure to talk about what results you would expect from the research and how they would impact nursing care on your unit, or as a profession.

## **Participant Flow**

Describe how the participants would flow through your proposed research. Would they take the survey first or last? Do they need to come back for a second survey? You can include a flow diagram of how you imagine the participants would navigate your proposed study. A visual is a good way to organize the plan so you don't forget any steps.

# **Recruitment, Statistics and Data Analysis**

Tell the reader the total number of people that responded to your sample survey. Use results from the tools described in the "Measures and Covariate" section of this paper. You should not be introducing new tools or unexpected results in this section. Describe the contents of the 2 tables produced from the Survey Monkey results. One table should show demographics and one should show the answers to the other 8 questions you chose. Use APA formatted tables and include in the appendix.

#### Discussion

Normally in this section you would discuss the finding of the study. Since this is a proposal, explain how this research, the results and chosen proposal would have an impact on nursing care of your chosen population. Do you think the research would have supported your hypothesis based on the literature you found? Was there any bias in your survey results? If you have found an alternative that is better than your plan though literature searches in the course, talk about that here and how you could modify the plan for better efficiency or outcomes. How could the nurse teach the mother the importance of decreasing lead levels in her child by integrating the impact elevated lead levels can have on both red blood cell formation and neurological development (Red, 2010).

# Conclusion

Provide a conclusion of the important finding that could result from this proposal. The conclusion should provide a short summary of your proposal, what you have learned from the major findings and future directions. You should not be introducing a lot of new information in this section. Lead interferes directly with the formation of hemoglobin by interfering with enzymes necessary for its formation and can cause anemia in children. It can cause direct nerve

injury and interference with neurotransmitters which can be responsible for learning difficulties, increased irritability, and school problems (U.S. Department of Red and Blue & Centers for Disease Causation, 2014).

It is important for the nurse to explain to the mother the impact lead can have on both red blood cell formation and neurological function. Lead exposure in children can cause behavioral changes, nerve damage and severe disability. Children should a avoid chewing on toys or items containing lead (Red, 2010). While treatment for lead poisoning is available, it is easier to prevent the poisoning with some simple precautions such as avoiding toys and candy from countries known to use lead in manufacturing and testing water for lead contamination.

## References

- Blue, B. (2014). Effects of high lead levels in young children. *Journal of Genetic Disease*, *3*(5), 24-29. doi:10.1.254/jgd.2014
- Red, R. (2010). *Essentials of pathophysiology: Symptoms of high lead levels in children* (3<sup>rd</sup> ed.). New York, NY: Multipublish Inc.
- U.S. Department of Red and Blue, Centers for Disease Causation. (2014). *The cause of lead in children* (CDD Publication No. 22456.2343/a). Retrieved from: https://www.cdd.gov/lead/causes.pdf
- HINT: Use the example 31 on page 205 of the APA manual to cite corporate authors and government reports such as Mayo clinic, American Diabetes Association, CDC, NIH, and the National Medical library. DO NOT use "Mayo Clinic Staff" as the author, use the corporate name "Mayo Clinic" or "Mayo Foundation for Medical Education and Research" as the author.

# For Example:

Mayo Clinic Foundation for Medical Education and Research. (2014). *Diseases and conditions: Diabetes* (Mayo Publication CON-20033091). Retrieved from http://www.mayoclinic.org/diseases-conditions/diabetes/basics/definition/con-20033091

# Appendix

Table 1

Demographics of Participants in the Proposal Survey

Measure	% of sample
Gender	
Male	50
Female	50
Employment	
Employed	47
Unemployed	53

Table 2

Questions from the Survey Monkey Poll

Measure	% Response
Question 1	_
Option 1	50
Option 2	50
Question 2	
Option 2	47
Option 3	53