

Improving provider understanding of the Risks and Benefits of Labor Analgesia using Epidural or Combined Spinal Anesthesia vs Natural childbirth: A Literature Review and Quality Improvement Project

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INTRODUCTION

- Despite the use of neuraxial labor analgesia, there are many misconceptions about its use among patients.
- Proper education and exposure to the epidural procedure may change a patient’s attitude and fears related to the procedure.
- Providers should take on the role to clarifying any misconceptions and fears they may have regarding the procedure and its outcomes.

OBJECTIVES

The purpose of this study is to educate providers on the risks and benefits of labor analgesia and evaluate their understanding of the information. A literature review was conducted to portray a realistic idea of the risks vs benefits of labor analgesia.

DESIGN & METHODS

- After conducting a thorough literature review, a PowerPoint presentation was created to educate student nurse anesthetists about the topic.
- A pre-test , post-test and PowerPoint was sent out via email. Pre and post tests were conducted via survey monkey and all data was collected anonymously.
- Participants were requested to take the 9 questions pre-test, review the PowerPoint presentation and then take a 9 questions post-test there after.
- The results of the pre and post test were analyzed using a paired t-test.
- IRB exempt approval was obtained.

RESULTS

	Pre-test	Post test
Mean	69.55555556	93.11111111
Variance	1132.527778	67.36111111
Observations	9	9
Pearson Correlation	0.090714139	
Hypothesized Mean Difference	25	
df	8	
t Stat	-4.295890738	
P(T<=t) one-tail	0.001315163	
t Critical one-tail	0	
P(T<=t) two-tail	0.002630327	
t Critical two-tail	0.706386613	

•Mean score for the pre-test was 69.55 whereas the mean score of the post test that was taken after reviewing the PowerPoint presentation was 93.11. The result analysis revealed a significant P value <.05 for the one-tail (0.001) and two-tail (0.002) which means that there is a statistically significant difference between the pre-test and the post test.



DISCUSSION & CONCLUSION

- The research has revealed that there is a lack of proper knowledge regarding the negative and positive outcomes of neuraxial anesthesia among parturients and providers.
- Educating providers will in turn result in better care and education for parturients regarding their options for a safe and effective labor analgesia.

IMPLICATIONS FOR CLINICAL PRACTICE

- Educating student registered nurse anesthetists about the risks and benefits of labor analgesia using neuraxial anesthesia contributed to better knowledge and awareness about the topic.
- The results also emphasized the lack of education regarding the topic.

RECOMMENDATIONS

- Adequately educating providers can result in better understanding of the risks and benefits of neuraxial labor analgesia.
- This in turn results in better care and education for parturients regarding their options for a safe and effective labor analgesia.

