

## Research Analysis

Name:

Institution:

## Research Analysis

**Roddy Analysis Worksheet**

What was the research question?	Investigate the oral care practices of nurses in ICU through evidence based comparison and determine if the evidence based practices were related to professional or demographic traits
What were the independent variables?	The independent variables were the nurses under investigation
What was the dependent variable?	while the dependent variable was the oral care practices
What was the sample size and how was it chosen?	The number of nurses chosen was 218. The sample was chosen considering only the practicing nurses at the time.

## RESREARCH ANALYSIS

What was the experimental design and use of control group?	The experiment involved questions based on the demographic and professional characteristics of the nurses. The nurses rated themselves on a scale of 0-100. The score was then computed using 14 items in total.
Were the instruments of measurement shown to be reliable and valid?	Yes
What data types were included?	Numerical

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## RESRESEARCH ANALYSIS

<p>Describe the statistics used, what they were used for, and the result.</p>	<p>The research used the ANOVA statistical method. The test was used in finding the EBP variation based on the professional and demographic characteristics of the nurses. The research found out that gauze pads were the most used equipment at 84%. This was followed by 55% on tongue depressors, and 34% on toothbrushes. The commonly used solution was chlorhexidine. 44% of the nurses admitted to brushing the teeth of their patients although majority of them admitted to carrying out an oral assessment on their patients. However, the nurses did not disclose the tools they used. There were differences between the units based on the techniques used, solutions, and equipment. Thus, there was no relationship between the evidence based practices and the professional and demographic practices of the nurses.</p>
<p>What were the researchers' conclusions? How did they answer the research question(s)?</p>	<p>Although the nurses prioritized oral care, most of them do not use the latest practices. Therefore, professional characteristics were not related to the research level. Due to this, all ICU nurses should be urged to use oral care practices that are evidence based.</p>
<p>How was error controlled?</p>	<p>The error was controlled by choosing a large sample size and considering several aspects of oral hygiene.</p>

## RESREARCH ANALYSIS

Did you see any concerns with the research study? If so, what?	No
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**Ganz Analysis Worksheet**

What was the research question?	Which new method can be used to determine the strength of recommendation through incorporating opinion from experts and research evidence?
What were the independent variables? What was the dependent variable?	The independent variables were patients suffering from Osteoarthritis of the knee or hip. The dependent variable was exercise therapy.
What was the sample size and how was it chosen?	There were 10 recommendation which were grouped A-D. These were chosen using the Delphi technique.
What was the experimental design and use of control group?	The SOR for each of the developed recommendations was determined using the visual analogue scale. The recommendations were given four categories and their mean calculated.

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Were the instruments of measurement shown to be reliable and valid?	Yes
What data types were included?	Categorical data types
Describe the statistics used, what they were used for, and the results.	The research used the ANOVA test to determine the difference among the chosen groups. It was found out that in one-way ANOVA test, the mean VAS scores of groups A-D and the recommended proposition were linear. However, some recommendations could not be measured using the random tradition trials were strongly recommended using the VAS method.
What were the researchers' conclusions? How did they answer the research question(s)?	The new grading system for the SOR is more convenient than the traditional method. This is because it enables the SOR for some procedures, which are difficult to assess using RCT. Therefore, according to expert opinion and ethical reasons the method is validated.
How was error controlled?	The error was controlled with one dependent variable.
Did you see any concerns with the research study? If so, what?	No

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The changes recommended in the two researches analysis are statistically valid. On oral care for ICU patients, it is evidently important that they observe good oral health. Their nurses can only ensure this. The nurses should actively take part in ensuring that the patient's oral hygiene is not only observed but using the current practices other than the traditional ones (Ganz, 2009). The patients' teeth should be cleaned everyday either by use of toothbrush or cleaning solutions. In patients who are critically ill, the microbial flora in their mouth may move and colonize their lings thus resulting to pneumonia. Although in some patients, the ventilator related pneumonia was not reported due to the use of Chlorhexidine before intubation, the solution's effect has not been reported in all patients. This therefore shows the need for thorough observation of oral care in the intensive care units (Ganz, 2009). However, more studies should be carried out to find out the best practices I ensuring oral health of the patients is observed. According to research, there is a great association between the microorganisms in the mouth and VAP. This is because dental plaque allows microorganisms to colonize the oral cavity. This therefore means that nurses who use dental care techniques on their patients, especially those that get rid of plaque are able to prevent the development of VAP. There are several methods used in the removal of dental plaque on patients. These are categorized into mechanical and pharmacological. The mechanical methods include tooth brushing and mouth rinsing. On the other hand, the pharmacological practices include the use of antimicrobial agents such as the much used chlorhexidine solution. However, for critically ill patients, it is sometimes difficult to maintain their oral health for both the patient and the nurse. This therefore makes the process of plaque removal difficult. Additionally, this accounts for the cases where nurses do not observe

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the oral health of their patients. The oral intervention techniques have not been documented. This therefore means that most hospitals do not give assurance of oral care to their patients. Currently, it is up to the nurses to put extra effort towards ensuring the oral health of their patients is observed. The recommendation that nurses should ensure they both assess and carry out dental care practice on their patients is therefore valid, as it will ensure that no other ailments develop on the patients because of poor oral health. Hospitals should also put the oral care practices in the intensive care unit mandatory so that all nurses may adhere to the practices. Finally, the nurses should use the current technologies in carrying out oral care practices.

In most clinical practices, the strength of recommendations is determined using support evidence. I believe that the recommendations on using VAS as a tool of analysis are valid in the case of analyzing the role of exercise therapy on osteoarthritis patients (Roddy, 2006). The method is reliable and takes a wide range of recommendations compared to the traditional method, which does not allow for the upgrading of the strength of recommendation. This is because it uses the randomized controlled trials, which seem to be unethical and impractical. Additionally, the research on the role of exercise is one that cannot be measured directly, there is therefore need to use questionnaires, which will enable the research to get the right information for computation. In using the method in analysis, the respondents who in this case are the osteoarthritis patients will indicate their level of agreement within a line that contains two ends. Those that believe exercise helped to reduce their pain will have a wide space between the starting point and their level as indicated by them. On the other hand, those who do not agree or slightly agree will have a smaller space between the two points. This enables the researchers to analyze the data quickly and appropriately thus eliminating the possibility of errors in the



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research process. The scale of this method makes it different from other methods such as the Likert scale. The visual analogue scales have a more powerful metrical traits compared to the other scales which are discrete in nature. This therefore means that the scale can integrate a wide range of statistical methods. Another Advantage of the VAS scale is that it contains measurement instruments, which are formed through combination of other scales in the same category. One example is semantic differentials. Additionally, according to expert reviews, VAS is the most appropriate scale of measuring pain. In the case of osteoarthritis, the scale can be used to determine whether the patients that engage in exercise suffer less pain compared to those that do not. The new method developed will therefore be able to deal with the shortcomings of the old method (Richardson, 2011). It enables one to make a comparison among groups and can handle situations that cannot be handled using the RCTs. The recommendation to use the method is therefore valid and supported by expert opinion and written reviews.

## References

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