

Type: Assignments

Subject: Qualitative Data Collection & Ethics

Subject area: Nursing

Education Level: Masters Program

Length: 2 pages

Referencing style: APA

Preferred English: US English

Spacing Option: Double

Additional information

Title: Data Analysis

Instructions: assignment content the next step in the research process is to find and critique appropriate academic articles that support your research topic. credible academic sources create a stronger argument about the significance of a research problem and validate your position on the topic. sources should address prior studies on your topic and will give you an indication of how to approach your research design. conducting a thorough critique of each article will help you to identify the purpose of the study and ensure it aligns with the problem you want to research. for the purposes of this assignment, we have provided two studies for you to critique, so you can practice interpreting report information and findings. review pp. 195-198 of nursing research before starting your critique. the information will be helpful when reading and interpreting the articles. access nursing research via this week's learning activities folder. read the following articles in the university library before using the templates to critique: quantitative study: "outcomes of an oral care protocol in postmechanically ventilated patients" qualitative study: "spirituality expressed by caregivers of stroke survivors" use the quantitative and qualitative critique templates to complete your assignment. all answers must be substantive, using specific content from the article as support. any answer that is the equivalent of "yes" or "no" will not receive full credit. submit your assignment using the templates - do not delete the questions in the templates. include a title page.

Week 3 - Quantitative Study Critique

Read [“Outcomes of an Oral Care Protocol in Postmechanically Ventilated Patients”](#) from the University library.

Complete the following critique to analyze the quantitative research report.

List Citation Information in APA Format

Author(s)	Chipps, E.M., Carr, M., Kearney, R., MacDermott, J., Von Visger, T., Calvitti, K., Vermillion, B., Weber, M.L., Newton, C., St Clair, J. and Harper, D		
Title	Outcomes of an Oral Care Protocol in Post-mechanically Ventilated Patients		
Journal	<i>Worldviews on Evidence-Based Nursing</i> ,		
Year 2016	Volume13	Issue 2	Pg. #102-111

Select Type of Study

☒Qualitative

☐Quantitative

Location(s)/Setting(s)	large academic medical center in the Midwestern United States
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List Key Concepts/Variables

Concepts	(1) Measures of oral health, (2) Rate of oral colonization with methicillin-sensitive SA (MSSA) and MRSA, and (3) Patient satisfaction with in-hospital oral care.
Intervention/Independent Variable	oral care protocol for hospitalized patients
Dependent Variable(s)	health outcomes in recently intubated patients
Controlled Variable(s)	Post-mechanically Ventilated Patients

Select Quantitative Approach

☒Experimental

☐Quasi-experimental

☐Non-experimental

Specific Design	Randomized controlled trial
Blinded?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Description of Intervention	To develop an evidence-based oral care protocol for hospitalized patients and determine the impact of this protocol on health outcomes in recently extubated patient
Comparison group(s)	None

Describe Study Sample

Size	74 randomized subjects
Sampling Method	randomized controlled trial,

Sample Characteristics	Post-mechanically Ventilated Patients
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Determine Data Sources

Type: ☐ Self-report ☒ Observational ☐ Biophysiologic ☐ Other

Describe Data

Description of measures	As measured by the R-THROAT, oral cavity health improved over time in both groups, but the intervention group demonstrated significantly more improvement than the control group (R-THROAT score improved by 1.97 intervention vs. 0.87 control; $p = .04$). Two categories, tongue and mouth comfort, demonstrated the most significant improvement
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Data quality	The revised THROAT (R-THROAT; oral cavity assessment) was used to ascertain the quality of data gathered
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Critique of Quantitative Research Study

Title Is the title clear enough to identify the key phenomenon and group or community under study?	The title of the article "effect of an oral care protocol in post-mechanically ventilated patients is clear enough to identify the key concepts and target group under evaluation in the study (Chipps et al., 2016).
Abstract Does the abstract clearly summarize the main features of the report?	The abstract clearly highlights and summarizes the main features discussed in the study.
Introduction	
Statement of problem <ul style="list-style-type: none"> Is the problem easy to identify? Is it significant for nursing? Is the research design appropriate for the problem? Is there a clear need for the study? 	The problem being evaluated in the study-effect of an oral care protocol in post-mechanically ventilated patients is clear and significant for the nursing practice. The research design –randomized controlled trials is appropriate for the research and clearly states its need for the study.
Hypotheses or research questions <ul style="list-style-type: none"> Are the questions or hypotheses explicitly stated? If not, is their absence explained? Can you easily identify the variables the way the questions or hypotheses are worded? 	The research hypothesis are clearly explicitly stated i.e. to (1) Measures of oral health, (2) Rate of oral colonization with methicillin-sensitive SA (MSSA) and MRSA, and (3) Patient satisfaction with in-hospital oral care (Chipps et al., 2016). Dependent, independent and controlled research variables can be easily identified based on the way the research questions, aims and hypotheses are worded.

Literature Review <ul style="list-style-type: none"> Is the literature review up-to-date and based mostly on primary sources? Did the review adequately summarize the evidence? Does the literature review make it clear there is a need for a study of this kind? 	<p>The literature review up-to-date since sources used is within 10years and based mostly on primary sources.</p> <p>The literature review has adequately summarized the appropriate evidence about the nature and stages used in the study (Chipps et al., 2016).</p> <p>The researchers holds that future should include exploring oral care protocols in edentulous patients and expanding the number of pathogenic organisms that are evaluated</p>
Conceptual/theoretical framework <ul style="list-style-type: none"> Is the conceptual or theoretical frame clearly identified? 	<p>The conceptual or theoretical frame clearly identified and described</p>
Method	
Protection of human rights <ul style="list-style-type: none"> Were rights of the study participants protected? Was the study externally reviewed by an IRB or ethics review board? Was the study clearly designed to minimize risks and maximize benefits to the participants? 	<p>Participants were required to have a minimum of three teeth and be able to provide informed consent, either directly or through a legally authorized representative. The study protocol was approved by The Ohio State University Institutional Review Board (FWA #00006378). Patients were excluded if they had an allergy to products or components of the oral care protocol or a history of oral or facial surgery or trauma in the 3 months prior to enrollment. This was meant to reduce risks and increase benefits to the participants (Chipps et al., 2016).</p>
Research Design <ul style="list-style-type: none"> Was the most rigorous design used given the purpose of the study? Was the number of data collection points appropriate? Did the design minimize biases and threats to study validity by using blinding and minimizing attrition? 	<p>Independent Student's t tests, chi-square, and Fisher's exact tests were used to summarize and compare the usual care and intervention groups on age, gender, race, baseline R-THROAT, and culture result. The number of data points was appropriate and validity was ensured through the use of THROAT- a valid and reliable instrument to assess the oral cavity score weighted kappa.</p>
Population and sample <ul style="list-style-type: none"> Was the population identified? Was the sample described in adequate detail? Were sampling biases minimized? Was the sample size adequate? 	<p>Study participants were recruited from 4 ICUs, including a 44-bed surgical ICU, a 25-bed medical ICU, a 14-bed medical ICU, and 30-bed cardiac surgical unit (Chipps et al., 2016). Patients were eligible to be enrolled if they were mechanically ventilated for at least 48 hours and being considered for ventilator liberation (criteria PEEP 8 and FiO2 50%) or had been recently extubated. This approach minimized sampling biasness and ensured that the sample size was adequate for the research.</p>
Data collection and measurement <ul style="list-style-type: none"> Were key variables measured using an appropriate method (interviews, observations, etc.)? Were the instruments identified? 	<p>Clinical observations were made as a way of ensuring that the key variables were measured using the appropriate method. R-THROAT and oral cavity assessment were conducted as instruments of data collection and ascertained that the methods were reliable, valid and responsive to the research problem.</p>

<ul style="list-style-type: none"> Did the report provide evidence that the methods were reliable, valid, and responsive? 	
Procedures <ul style="list-style-type: none"> If there was an intervention, was it well described? Did most of the participants allocated to the intervention group actually receive it? Was data collected in a non-bias manner? Were the individuals collecting data appropriately trained so they did not impact the results? 	<p>The intervention included a 4-day systematic oral hygiene program provided to patients who were post-extubation using the products like toothpaste, toothbrush, flossing, tongue care, mouth rinse and lip care (Chipps et al., 2016).</p> <p>All participants allocated to the intervention group actually receive it</p> <p>Data was gathered in a non-biased manner given that it was a randomized controlled.</p> <p>Individuals who collected data were properly trained as they were professionals with vast experience in oral health.</p>

Identify Statistical Tests

Bivariate (e.g., t-test, ANOVA, Pearson's r)	Independent Student's t tests, chi-square, and Fisher's exact tests
Multivariate (e.g., multiple regression, logistic regression)	R-THROAT

Summarize findings, limitations, and recommendations

Summary of study main points and learnings <ul style="list-style-type: none"> What is the effect size? Is the study statistically significant? Is the study clinically significant? What are the recommendations for future studies? 	<p>Evidence supporting an oral care protocol in the intubated patient has been well substantiated. However, there has been little or no discussion in the literature about the oral care provided to patients immediately post-intubation (Chipps et al., 2016).</p> <p>The study's findings suggest that attention to the oral care of the post-mechanically intubated patients is an important component of care and merits further attention. This implies that the study was clinically and statistically significant.</p> <p>Future research should include exploring oral care protocols in edentulous patients and expanding the number of pathogenic organisms that are evaluated</p>
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References

- Chipps, E. M., Carr, M., Kearney, R., MacDermott, J., Von Visger, T., Calvitti, K., ... & Landers, T. (2016). Outcomes of an oral care protocol in postmechanically ventilated patients. *Worldviews on Evidence-Based Nursing*, 13(2), 102-111.