



## Quantitative and Qualitative Research Report Critique by Nursing Students: Why and How to Conduct it?

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### Abstract

**Background:** Critiquing research is one of the core skills that nursing students must learn for several professional reasons. This is particularly important because it helps them to: apply evidence-based interventions that enhance patient care, reduce variation in nursing care, perform quality assurance principles, further their knowledge about the most efficient and cost-effective intervention, contribute to research by identifying gaps in the literature, further patient advocacy by ensuring the research was ethically conducted, protect human rights and enhance their critical thinking and analytical skills. **Aim:** The aim of publishing this report is to provide a tool of reference for incoming nursing students when attempting their own research critiques for the first time. **Method:** The main literature sources used to guide our critique analysis included multiple resources provided by our course professor and Fain's (2017) textbook titled: "Reading, Understanding and Applying Nursing Research". **Conclusion:** Through the process of critiquing research reports, we developed our critical thinking skills on how best to use and interpret future studies in our other projects and in our nursing roles, as well as enhancing our explicit and tacit knowledge surrounding the validation of research before implementing it into practice. This ability to constructively critique research proves to be an asset to both novice and more seasoned nurses and to continue to support positive outcomes for those who come into contact with the healthcare system.

**Keywords:** Research Critique rationale and process, Quantitative Research, Qualitative Research, Nursing Students

Critiquing research is one of the core skills that nursing students must learn for several professional reasons. Examples of these reasons are: (1) engaging in evidence-based practice, (2) enhancing quality of patient care, (3) reduction in variation in nursing care, (4) providing knowledge of quality assurance principles, and the most efficient and cost-effective interventions, (5) contributing to research by knowing the gaps in the literature, (6) fostering patient advocacy by ensuring the research used has been ethically conducted, and human rights were protected, and (7) enhancing their critical thinking and analytical skills (Critique/Review of Research Article (n.d), Fain, 2017; Mallion et al., 2019; Melnyk & Fineout-Overholt, 2019; Polit & Beck, 2020). As future practicing nurses, nursing students must prepare to be ready to review new research because the literature and technology surrounding the healthcare field is evolving continuously. As Fain (2017) has noted, nursing students will be responsible for developing and maintaining competency in evaluating the rigorous research processes, including the strengths, weaknesses, and applicability of findings to clinical and non-clinical settings, such as community and health policy. For example, research is typically performed within a subset of a population in a particular setting; however, nurses are often faced with determining the suitability of applying findings in alternative settings and populations. If nursing students appraise the research as meeting their required criteria, this gives them the evidence they require to move forward in applying these practices. If they fail to evaluate and objectively judge research, they cannot be reasonably sure whether the actual outcome of applying the same methods will match the outcomes observed within the research under examination. To uphold nursing students as future nurses' committed to ensuring safe, reliable, and ethical care, they must be aware of when additional findings must be obtained to support the implementation of changes to their practices sufficiently (Melnyk and Fineout-Overholt, 2019). Research critique goes hand in hand with engaging in evidence-based practice and making sound clinical judgements in the nursing discipline, thereby underpinning its inclusion in nursing studies as a foundational professional skill (Fain, 2017).

The first six authors, as students of the Bachelor of Nursing program at xyz University, were able to engage in research critique through our Nursing Research Methods (NRSG 3501) course, with a requirement of performing group-led research critiques on qualitative and quantitative peer-reviewed articles concerning nursing practice. To tackle this assignment reasonably and efficiently, we held regular group meetings in person and through online platforms to distribute the workload among group members, work gradually over ten weeks and ensure ample opportunity for intra-peer group support. As undergraduate students, this was the first time we attempted to critique peer-reviewed articles, and we found this to be an effective time management strategy, while balancing other coursework and clinical placement hours.

The primary source used to guide our critique analysis was "*Reading, Understanding and Applying Nursing Research*" by James Fain (2017). However, multiple other resources provided by our course professor were also utilized ((Mallion et al., 2019; Melnyk et al., 2019; Polit & Beck, 2020; Ryan et al., 2007 a, b)). We found that one of the most impactful skills for conducting research critique is the ability to recognize and utilize the tools and assets at one's disposal. We were both fortunate and appreciative to have resources available to us from the xyz University library as well as the wisdom and guidance from our course professor to orient us to the process of research critique. With this endorsement, we made plans to publish our work to

provide a tool of reference for incoming nursing students when attempting their own research critiques for the first time.

The first part of this paper involves a quantitative research report critique for a paper entitled “Experimental Study with Nursing Staff Related to the Knowledge about Pressure Ulcers” by Baron et al. (2016), the second part involves a qualitative research report critique for a paper entitled “A Grounded Theory Study of the Intention of Nurses to Leave the Profession” by Alilu et al.(2017), then our conclusion.

## **Quantitative Research Report Critique**

### **Report Title and Writing Style**

The research article’s title, “*Experimental study with nursing staff related to the knowledge about pressure ulcers*”, although specific, clear and unambiguous, does not seem completely accurate (Baron et al., 2016). That is, the target population appears to be quasi-experimental because a convenience sample was used to expedite collection of data before being randomly assigned.

The writing style in this report is clear and easily understood. The paragraphs flow coherently and are easy to navigate. The content is concise without the unnecessary use of words and phrases. The tone and grammar remain consistent throughout the text. The text does not contain jargon that might make reading difficult for the reader. The style throughout the texts is consistent and appropriate (Baron et al., 2016).

### **Authors**

All authors and researchers are well qualified in this research and their qualifications can be found within the text. Mirium Vivian Baron, who is the head researcher, holds a Master of Science degree and works at the Federal University of Rio Grande do Sul. Cézane Priscila Reute is an assistant professor at the University of Santa Cruz do Sul in the department of Health Science. Miria Suzana Burgos has a PhD and is a professor at the University of Santa Cruz do Sul in the Health Science department. Veniria Cavalli is a Registered Nurse (RN), and intensive care specialist at the Santa Cruz Hospital. Cristine Brandenburg has a Master of Science degree and is a researcher at the Federal University of do Ceará. Suzane Beatriz Frantz Krug has a PhD and is a professor at the University of Santa Cruz do Sul in the Health Science department (Baron et al., 2016).

### **Abstract**

The abstract is structured, concise and provides clarity on the study. It informs the reader of the objective (comparing the scores of knowledge in nurses participating or not participating in educational interventions about pressure ulcers), the method (a quantitative study with experimental design in which data were collected by a questionnaire), results of the study (post-intervention the group receiving educational intervention answered 87.8% correct and the control group received 79.1%) , and conclusion of the study (those who received educational intervention had an increase in correct answers). Although the abstract was included in the text, it is not clearly titled. It would be beneficial for novice readers for the abstract to be clearly identified and titled in the text (Baron et al., 2016).

## **Introduction**

### ***Statement of the Problem and Significance of the Study***

The research phenomenon was clearly stated within the introduction. In Brazilian hospitals, the incidence of a pressure ulcer is high with little preventative measures in place to eliminate or mitigate this injury (Baron et al., 2016). This is why this study is significant especially within the context of Brazilian hospitals, where education on prevention and intervention for pressure injury is needed most (Baron et al., 2016).

The purpose of the study, which can be found in the text, is to test the impact of continuing education on nurses' level of knowledge about pressure injuries. The significance of this study is not only to show the importance of continuing education and the implementation of pressure injury prevention, but to offer clarity on where education is needed in nursing staff. It is hoped that increasing educational interventions on pressure ulcers leads to decreased incidence of pressure injuries (Baron et al., 2016).

### ***Literature Review***

The problem of pressure injuries was selected and defined, and the authors' review went from general to specific. It was detailed why patients in the ICU were susceptible to pressure injuries. Problems caused by pressure injuries were detailed, including issues for patients and staff. The prevalence of these conditions was noted to be high, and these were demonstrated with the use of statistics and were compared to those seen in different locations around the world. National and international guidelines for prevention were mentioned along with the role of ICU nursing teams in pressure injury prevention. Additional studies were mentioned which showed a correlation between knowledge dissemination about pressure injuries and resultant decreases in incidence of same. The positive impact of identifying knowledge deficits and implementing preventative measures was noted and gave further support to the basis of this study.

The majority of the literature in the review was within 5 years, however, some of the studies were difficult to access due to broken links or links to general search engines and not to the specific article listed. Most of the studies are primary sources. The literature review appears adequate for the purpose of this study and provides the reader with the foundational knowledge on the significance of the study and prepares them for understanding the structural design of the study.

### ***Conceptual/Theoretical Framework***

The article stated the study used an experimental design, but there was no mention of which framework had been used. A conceptual framework is referenced in the citations; however, it is not clearly stated in the study. It is recommended that conceptual definitions and description of the theoretical framework be added to the article's introduction, ensuring to identify concepts or variables and their relationships.

### ***Study Objective and Hypothesis***

The objective of this article was to identify a positive effect of educational interventions on scores on knowledge tests of pressure injuries in nursing teams working in ICUs in Brazil

(Baron et al.,2016). This objective provides a clear idea of what the study is trying to achieve. The hypothesis is clearly stated in the discussion portion of the article. The hypothesis was that professional nurses participating in educational interventions would score higher on the Pieper test than nurses who did not participate (Baron et al., 2016). The hypothesis/research question is specific, testable, and relevant to the research, however one recommendation to improve the logical consistency of the article would be to introduce the hypothesis in an explicit manner within the introductory section. The hypothesis may also be inaccurate. Only 12 of the 74 participants were Registered Nurses, with the rest of the staff having a title “nursing technician” (Baron et al., 2016, p.3) which is not recognized in Canada as a nursing title.

## Method

### *Research Design*

An experimental design was stated and further identified as a pretest posttest control group design, however due to convenience sampling the design was quasi-experimental. Due to the interaction between research design and sampling method, participants included in the study were mostly “nursing technicians” not nurses, which could affect the generalizability of the findings of this study. In addition, most of the participants in the study were females, therefore generalizability to male nurses is questionable. Nursing technicians is not a familiar job title internationally, however, the authors did not give a precise definition of this group.

There was a very narrow range for pre-intervention scores, between 75-90%. Anyone who scored less than 75% initially would have been excluded from the study. However, the authors later stated that mean pre-interventions scores were 74% in the intervention group and 76% in the control group, meaning the prior exclusion criteria were not implemented.

“Training time” was an undefined term attributed to subjects in the study. The intervention group had a “training time” of 9 years on average, compared to 6.7 years in the control group (Baron et al, 2016, p. 3). The difference in training time between groups could have influenced results, such as familiarity with academic studying. It is questionable whether studies on groups with such training time would be applicable to other groups of nurses with less training.

In relation to controlling for researcher bias, the instructors teaching the intervention group were not anonymous to the participants and may have helped the participants get a higher score by providing them answers to the test questions during educational sessions. Completed questionnaires *were* anonymously delivered to scorers of the test without knowledge of the identity of either party. A weekly workshop was held for ten weeks of one hour duration each. The teaching methods were powerpoint, group discussions, positioning practice, and printed slide handouts. The content was pressure injury description and prevention recommendations based on international guidelines. Because the control and intervention groups worked together, participants in the experimental group could have given their slide handouts to the control group, invalidating internal validity of the study.

The authors followed due process to ensure ethical considerations were met and professional guidelines were followed in order to maintain an appropriate research design which operated through ethical practices. This report was granted ethical permission to conduct the

study by the Ethics Committee of the University of Santa Cruz do Sul. All participants were voluntary and agreed to participate in the study. All agreeing participants signed an Informed Consent Form (ICF) consent form, before which they were informed and fully understood the nature of this study. Autonomy and confidentiality of the participants were protected, this was guaranteed when signing the consent form. All participants were protected from harm as data were collected through a validated questionnaire and handwritten consent was given.

### ***Population and Sample***

The target population has not been clearly identified. The target population was termed “nursing teams”; however, this term was not defined in the article (Baron et al., 2016, p. 3). The sample size was 74, including 12 registered nurses (RNs) The rest of the sample were nursing technicians, a title not recognized in xyz province and not defined in the article.

The sample appears to be a nonprobability convenience sample based on quota sampling chosen through the accessible population of three hospitals in Rio Grande du Sol. The participants were all “professional staff of the acting nursing teams” who were not on vacation at the time of the study (a quota based on convenience) or people who scored >90% on the pre-test for pressure injury knowledge (Baron et al., 2016, p.2).

Exclusion and inclusion criteria were made clear in the article. The authors excluded participants who either knew a lot about the subject already or who did not participate in an adequate number of educational sessions. The intervention group (n=50) was significantly larger than the control group (n=21 to n=13), and the control group had a significant drop out rate by post-intervention.

The participants were drawn from hospitals in Rio Grande do Sul, a state in the southern region of Brazil. The context of the study should be assumed to be different from healthcare systems and nursing practice in other countries. Therefore, a replication of study should be done in other countries.

### ***Data Collection and Measurement***

The researchers defined a measurement tool known as the Pieper test, a true/false questionnaire which asks questions about pressure injury knowledge and care. It was described in detail in the text, and a copy of the questionnaire was attached to the results section. It was validated for use for “nursing professionals” in the ICU based on a previous study in Brazil (Baron, et al., p.3). The instrument appears appropriate at face value, and other studies were linked which used the Pieper test in ICUs in Brazil to measure this impact of education on knowledge. All the questions appear to be relevant to pressure injury care. A pilot study was reportedly carried out for instrument verification in respect to presentation, understanding and time taken to complete. Data was collected through questionnaires distributed and scored by two researchers. The questionnaires were returned to the researchers anonymously via sealed envelope. Data was transcribed using the EpiInfo 7.0 program, then analyzed in the Statistical Package for the Social Sciences (SPSS).

While the term “Pieper test” was clearly defined operationally, the term pressure ulcer was not (Baron et al., 2016, p.3). The hypothesis was the prediction that staff education on pressure injuries can increase scores representative of staff knowledge, which was conducted International Journal of Nursing Student Scholarship (IJNSS). Volume 11, 2024, Article # 86. ISSN:2291-6679. This work is licensed under a Creative Commons Attribution-Non-Commercial 4.0 International License <http://creativecommons.org/licenses/by-nc/4.0/>

deductively. In order to support the specific findings of relationships which deductive reasoning aims to provide, an operational definition of pressure injuries should be explained to better facilitate the interpretation of the findings.

### ***Data Analysis***

First the distribution of data was determined using the Kolmogorov-Smirnov test, which determined the data was not normally distributed, therefore, non-parametric tests were justifiably used. Sociodemographic variables were shown descriptively through distribution of frequencies and percentages and the scores of correct answers were shown as means and standard deviations. Chi-square was used to assess relationships between sociodemographic variables and knowledge and to verify the association of correct scores at both times. To verify possible differences in scores between the groups, the Mann-Whitney test was used. Between the pre and post periods, the Wilcoxon sign test was used. The significance level was an alpha of 0.05.

Of the 74 sample members, 71 participated in educational interventions. Eight staff members were lost in the final collection of questionnaires in the post test due to vacations, days off and layoffs. The results were interpreted to mean that educational interventions have a positive impact on knowledge of pressure injuries. The control group lost eight participants between pre and posttest due to vacations, days off and layoffs. Attrition reduced the group to less than 2/3<sup>rd</sup>s of the original size. The control group is arguably not the same group with such a high level of attrition. Comparing the control group pre and posttest may therefore not be a valid indicator of group knowledge.

### **Discussion**

The hypothesis that education increases knowledge was supported and the research findings were used to highlight the role of education in decreasing pressure injury incidence. A 3% decrease in pressure injury incidence was observed following educational intervention in the experimental groups. The authors noted that the gaps in knowledge around pressure injury staging and repositioning while sitting in the posttest results reflected national study results conducted with “nursing teams” in Brazil (Baron et al., 2016, p.7). It was recommended that interventions be made to educate nursing teams in these deficient areas. The categorization of sociodemographic variables by nurses and nursing technicians may have made an impact on the showing of an association between knowledge and sociodemographic variables, in which no relationship was found.

The intervention group received 87.8% in the post-intervention assessment. However, at least a 90% score is needed to assume competency in pressure injury knowledge, according to the criteria for the measurement tool. Additionally, because a pre and posttest intervention was done with the same test questions, participants could have memorized the answers to the questions in between interventions or looked the questions up online.

A limitation noted by authors was that no third test was done to test for knowledge consolidation. Another study mentioned by the authors in the discussion section stated that educational interventions had only a short-term impact on knowledge consolidation. The authors recommend there should be less workload in ICUs so that staff can participate in educational interventions, however in practice, reducing workload may be a complex and unrealistically

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demanding ask of managers, given that a nursing shortage has been an issue in nursing for at least two decades (World Health Organization, 2006).

The 3% decrease in pressure injuries within eight months may or may not be clinically significant and may have been due to chance. Follow up studies should be done to assess knowledge retention post intervention in addition to monitoring pressure injury levels to examine whether this decrease is stable over time. The authors acknowledged the need for such a study.

Because the current study was performed more than five years ago, the correct information about pressure injuries may have changed. For example, in the study pressure injuries are referred to as “pressure ulcers,” a term which is no longer used. Test items on the Pieper test may also be out of date and no longer accurate.

## References

This study cited 24 different articles ranging from various platforms. The articles were relevant in terms of time, as the article was published in 2016 and the majority of the references were from 2010-2014, with one outlier being from 2008. The citations were appropriate and cited accurately for the time it was created. If the article had been written more recently an updated version of APA format would have been indicated. Overall, the references were done well.

Having finished critiquing the quantitative research report, let us move to critique a qualitative research report

## Qualitative Research Report Critique

### Report Title and Writing Style

The title of the report, *A Grounded Theory Study of the Intention of Nurses to Leave the Profession*, is clear, accurate, and unambiguous (Alilu et al., 2017). It accurately reflects the focus and scope of the study, providing a clear understanding of the topic and precisely states the nature of the study, its methodology (grounded theory), the phenomenon of interest (nurses' intention to leave the profession), and the participants (nurses).

The writing style of the report appears to be well-written, with a clear and concise presentation of the study's findings. The language used is grammatically correct and easily understandable, avoiding unnecessary jargon that might hinder comprehension. The text is well-organized, following a logical structure with distinct sections for the introduction, methodology, results, and conclusion. Additionally, the use of headings and subheadings helps in navigating the content smoothly (Fain, 2017).

### Authors

The researchers' qualifications and positions are provided in the given text. The authors of the study are well-qualified and hold positions in relevant academic and professional institutions. The lead author, Leyla Alilu, holds a Ph.D. and is an Assistant Professor in the Department of Medical Surgical Nursing at Urmia University of Medical Sciences. Vahid Zamanzadeh, another author, also holds a Ph.D. and is a Professor in the Department of Medical Surgical Nursing at Tabriz University of Medical Sciences. These qualifications indicate that the



researchers possess the necessary expertise and knowledge in the field of nursing and qualitative research to conduct the study effectively.

## **Abstract**

The abstract provides a clear overview of the study, covering essential aspects such as the research problem (nurses' intention to leave bedside nursing), the sample (21 nurses from teaching hospitals in Iran), the methodology (grounded theory approach using constant comparative analysis), the findings (factors influencing nurses' intention to leave), and the recommendations (identification of needs to overcome intention to leave bedside care) (Alilu, 2017, p. 1). It effectively summarizes the main points of the study, giving readers a concise understanding of the research. Although the abstract was not titled as all the other sections in the article were, it was provided at the beginning of the article. For the novice reader, a heading may aid in the identification of this section.

## **Introduction**

### ***Problem Statement and Phenomenon of Interest***

The research question seeks to explore the process of nurses' intention to leave bedside nursing and the factors influencing this decision. The text explains that the study aims to explore “the process of developing this intention” as well as the contextual factors which influencing it through gaining an understanding of the experiences behind nurses' desire to leave the profession (Alilu, et al., 2017, p.1).

There is consistency between the phenomenon of interest (nurses' intention to leave bedside nursing) and the research question. The phenomenon of interest, which is the central focus of the study, is the "intention of nurses to leave bedside nursing," (Alilu et al., 2017, p. 1; Fain, 2017). This phenomenon is clearly identified in the study's introduction, framing the research question, and guiding the data collection and analysis process.

### ***Purpose/Significance of the Study***

The purpose of the study, as stated in the provided text, is to explore the process of nurses' intention to leave bedside nursing and to identify the contextual factors that influence their decision. The significance of this study lies in addressing the critical issue of nursing turnover, which negatively impacts healthcare systems globally. By understanding the factors and processes involved in nurses' intention to leave, healthcare organizations can develop targeted interventions to improve job satisfaction, retain experienced nurses, and enhance the overall quality of patient care.

The study's findings are particularly significant in the context of Iran, where there is a shortage of nurses and a high level of intent to leave the nursing profession. The country's healthcare system faces challenges due to population growth, an aging population, and a deficit in the number of nurses required to meet the healthcare needs of the population. Understanding the specific factors leading to nurses' intention to leave bedside care in Iran can inform policy decisions and interventions aimed at improving working conditions, job satisfaction, and retention rates among nurses. Understanding how the potential findings can add to a body of study help to justify and distinguish its significance (Ryan et al., 2006).

## ***Literature Review***

Varying opinion is present among researchers on the inclusion of a literature review prior to data collection activities in grounded theory methodology to avoid the formation of any prejudgments or assumptions of the phenomenon to be studied (Ryan et al., 2006). The undertaking of a preliminary literature review is supported by the requirement to identify gaps in existing research and to determine the context under which the study will take place (Glaser 1998; Hussein et al., 2017). The authors suitably chose to include preliminary research in the introduction of the article to provide justification for their inquiry as being grounded in a reality-based problem. They also provide a background of previous research conducted on the situation involving a shortage of nurses, prior recommendation for this phenomenon to be explored further, and enhance this further with statistical evidence derived from additional previous studies.

In the discussion section of the article, a secondary literature review is detailed post data collection, and comparison is made on the similarities and differences of findings from previous study outcomes using primary sources. Through this approach, the researchers are able to better form an appropriate interpretation of their findings through a context-based approach to encompass the meaning of the participants' experiences within the perceived reality of society. This comparison highlights the dynamic nature of the conceptual relationships formed between themes identified as drivers for the intention to leave bedside nursing.

Considering the authors' educational statuses and positions of employment within nursing research, offering a clear picture on any insight into previous knowledge on the subject would have allowed for a more holistic view of the findings in relation to the potential impact on the research process from conceptualization of design to analysis of data.

## ***Conceptual/Theoretical Framework***

Due to the fact that the systematic methodology chosen for this study is grounded theory, the approach to data collection is one which aims to be free from any predetermined theories or theoretical framework (Fain, 2017). This approach allows the researchers to permit participants to construct their own meanings and experiences based on social interactions in order to genuinely guide the direction of new theory formation without the influence of prior theories (Fain, 2017; Ryan et al., 2006). In the introduction section of the article, the authors clearly outline the intention to understand "individual decision-making set against the context of wider social interaction," and acknowledge that there are many influential factors which could impact the developmental process resulting in the decision to leave bedside nursing (Alilu et al., 2017, p.2). Therefore, the omission of a theoretical framework is reasonable in this instance.

In the Method section of the article, the authors further explain that grounded theory is an interpretation of social actions based on symbolic interaction situated in the contextual factors of reality and that emerging theory was derived from data as it was collected (Alilu et al., 2017, p.3). While this design is appropriate and well-founded based on the authors' intention to explore and understand nurses' decision-making processes, a recommendation for enhancing the quality of this article would have been the inclusion of a more detailed explanation of grounded theory, specifically the benefits of the central principle of theory generation originating from and

occurring concurrently with the collection and analysis of data as the attribute which makes it the most fitting methodology for this study, explicitly in relation to the researcher's goals.

## **Method**

### ***Methodology and Philosophical Underpinnings***

Symbolic interactionism is the philosophical underpinning of the Grounded Theory Methodology and is implied throughout the article (Fain, 2017). The authors fittingly included the term “symbolic interaction” in the Methods section as a direct reference for the purposes of defining Grounded Theory (Alilu et al., 2017, p. 3). According to Ryan et al. (2006) philosophical roots are known to impact the ways in which sampling, data collection and analysis activities are conducted through the type of methodology applied, and there is mention of the exclusion of data collection techniques based on the application of Grounded Theory in the introduction section, specifically questionnaires and closed-ended questions. While the authors describe symbolic interactionism in relation to the methodology of grounded theory, a recommendation to elevate the understanding of research literature consumers would be to introduce the concept of symbolic interaction alongside the first mention of grounded theory and to directly link the effect it has on research design as stated in the introduction section of the article. This approach would provide a more direct justification for the research method used and demonstrate thoroughly how the design was impacted by the philosophical underpinnings.

### **Research Trustworthiness**

Credibility, dependability, and transferability occurred but goodness was not mentioned. Credibility was practiced with the study selecting an appropriate data analysis model and also transcribing the interviews word for word to present them to the participants to ensure the accuracy of the statements. Dependability was discussed using a professional translator from Farsi to English and then back translated to Farsi to help capture subtle expressions of the participants answers. Transferability was discussed using thematic analysis and also a coding process through consensus.

Rigor was not spoken directly about the study but was indirectly spoken about in some parts. Some things that raised the confidence of the study that were discussed are the validity of data analysis, limitations of the study, and appropriate data selection. Rigor should be added in as a separate subsection to clearly articulate how a high level of confidence was achieved.

The study was granted ethical permission to be conducted. This permission was given by the Ethics Committee of Tabriz University of Medical Sciences located in Iran. Prior to the study being conducted on the participants, the nature of the study was conveyed to all participants who understood fully why this research was occurring. The confidentiality of the participants was protected. This was done through written informed consent with the guarantee that privacy, anonymity, and confidentiality would be respected. Along with this, while obtaining informed consent the researchers made sure that all the participants were there voluntarily and willing to be included in this study.

### ***Sampling***

The recruitment of study participants involved the selection of an accessible population from teaching hospitals from which all but one author was affiliated. Criteria for inclusion in the study was clearly outlined, and coupled with the use of non-probability sampling, supported both the design and overall goals of the study by allowing selection of individuals for their specific “views and experiences in their practice environment,” (Alilu et al., 2017, p. 3). The authors effectively describe how the hallmark sampling technique of grounded theory encompassed a total of 21 participants through two-pronged approach beginning with purposive sampling for the first eight participants to develop initial categories and subsequently employed a theoretical sampling approach for the remaining 13 in order to further explore and advance the themes identified from the earlier approach until saturation was achieved. In this case, a small sample is expected, and non-probability sampling is appropriate given generalizability is not relevant to the goals of this exploratory study based on the conceptualization of the problem being investigated (Fain, 2017). Demographic data was included to provide depth to contextual factors within the study and included mean age, mean work experience, marital status and level of education within the nursing discipline to further inform about transferability of the findings into other settings (Alilu et al., 2017, p. 3). All relevant data relating to the sampling technique as well as participant characteristics and involvement were provided by the authors.

### ***Data collection and Measurement***

The data collection was described thoroughly in the methods section of this report. The subjects participated in semi structured interviews that were conducted individually with the researchers in which they used open-ended questions. The interviews lasted for approximately 40-60 minutes each. However, the location of the interviews took place in different areas with 16 taking place in the workplace and 5 outside of the workplace. The researchers did not describe the exact location of the interviews which can have tremendous impact on the answers provided to them as there may be environmental factors that could alter the subjects' questions. A recommendation would be that the place is the same for all participants to minimize variables with data collection.

### ***Data Analysis***

The method of data analysis used in this study was stated by the researchers as the constant comparative analysis of Corbin and Strauss was used to analyze the data. The report identified the three stages of this method which were open coding, axial coding, and selective coding. While they did state the process, they did not go into detail on describing each of the sections to the reader. The responses to the interviews were first dissected in order to find common themes which were then grouped into several different categories of problems. Two main causal conditions were then described regarding the data. A recommendation would be a detailed explanation regarding the three coding sections and to offer examples from the interviews to help the reader better understand the data analysis process for greater comprehension.

### ***Findings and Discussion***

The findings are thoroughly represented in the discussion aspect of the study with findings being compared to other studies as well. The context described in the report for leaving

bedside care was the “social image of nursing” and “culture and structure of bedside care.” (Alilu et al., 2017, p. 4).

Some of the limitations of the study were discussed such as that the nurses in the study were all sourced from teaching hospitals. One major limitation that was not discussed is how the findings of the study could be attributed to sociopolitical factors in the country in which the study took place. One way to address this would be to consult with researchers in other areas with different nursing cultures to have the findings of be more usable in other countries.

The original purpose of the research was to exam the process of the intention to leave bedside nursing care. The interviews with the nurses displayed many different factors as to why they would leave at the moment. However, this only represents what the nurses are currently experiencing and does not represent the whole process. It would have been more effective to discuss how the feelings of the nurses changed over time in response to the mitigating factors to establish an approximate timeline on the development of the intent to leave bedside care.

## **Conclusion**

The authors detail some suggestions under the relevance to clinical practice section based on their findings to bring forward into the clinical setting which may help enhance the retention of nurses by improving their working conditions and providing opportunities for professional development. The conclusion of the study offers a superficial overview of the findings with little to no articulation on how the findings impact the field of nursing in general. The study also did not offer any further areas of research to help extend their findings to become more well-rounded. Some recommendations for further development of the research findings would be identification of specific themes to work on, such as providing opportunities for professional development, putting this into practice and re-evaluating the results on the impact of the decision process to leave bedside nursing.

## **References**

Referencing was one of the many strengths within this article. There were 30 sources referenced throughout the article which were mostly primary sources. The journal articles cited were within a reasonable time frame of the publish date. Citations appeared appropriate and accurate. Together, the collection of resources supported the scientific inquiry and were directly related to the qualitative design and grounded theory approach.

## **Conclusion**

Critiquing research articles is an important skill to learn for nursing students due to the vast amount of research being conducted in the healthcare field and our legal and ethical obligations to be accountable for maintaining our professional competencies throughout our nursing profession. By engaging in critical appraisal, nurses can ascertain the quality, relevance, and reliability of research findings, enabling them to make evidence-based decisions in their clinical practice. This, in turn, leads to improved patient outcomes, safety, and overall quality of care. This was a new learning experience, one which aided in laying a strong foundation to pursue further interests in nursing research. Through the process of critiquing these articles, we have developed our critical thinking skills on how best to use and interpret future studies in our

other projects, as well as in our nursing roles. This project also initiated the development of our explicit and tacit knowledge surrounding the validation of research before implementing it into practice. The ability to constructively critique research is an asset to both novice and more seasoned nurses and the ability to vet emerging research findings is a foundational skill which ultimately aims to support positive outcomes for those who come into contact with the healthcare system.

## References

- Alilu, L., Zamanzadeh, V., Valizadeh, L., Habibzadeh, H., & Gillespie, M. (2017). A Grounded theory study of the intention of nurses to leave the profession. *Revista Latino-Americana de Enfermagem*, 25. <https://doi.org/10.1590/1518-8345.1638.2894>
- Baron, M., Reuter, C., Burgos, M., Cavalli, V., Brandenburg, C., & Krug, S. (2016). Experimental study with nursing staff related to the knowledge about pressure ulcers. *Revista latino-americana de enfermagem*, 24, 1-10. <https://doi.org/10.1590/1518-8345.1134.2831>
- Critique/Review of Research Article* (n.d). Retrieved from University of Calgary Writing Support Services <https://www.ucalgary.ca/live-uc-ucalgarysite/sites/default/files/teams/9/critique-or-reviews-of-research-articles-academic-genre.pdf>
- Fain, J. A. (2017). *Reading, understanding, and applying nursing research* (5th ed). Philadelphia, PA: F.A. Davis  
<http://ebookcentral.proquest.com/lib/cbu/detail.action?docID=4838232>.
- Glaser, B. G. (1998). *Doing Grounded Theory: Issues and Discussions*. Sociology Press.
- El Hussein, M., Kennedy, A., & Oliver, B. (2017). Grounded Theory and the Conundrum of Literature Review: Framework for Novice Researchers. *The Qualitative Report*, 22(4). <https://doi.org/10.46743/2160-3715/2017.2661>
- Mallion, J., Brooke, J., Pegg, J., & Barton, C. (2019). A framework for critiquing health research. *Nursing Standard*, 33(9), 45-50.
- Melnyk, B. M., & Fineout-Overholt, E. (2019). *Evidence-based practice in nursing & healthcare: A guide to best practice* (4th ed.). Wolters Kluwer.
- Polit, D. F., & Beck, C. T. (2020). *Nursing research: Generating and assessing evidence for nursing practice* (11th ed.). Wolters Kluwer.
- Ryan, F., Coughlan, M., & Cronin, P. (2007 a). Step-by-step guide to critiquing research. Part 1: quantitative research. *British Journal of Nursing*, 16(11), 658-663. <https://doi.org/10.12968/bjon.2007.16.11.23681>.
- Ryan, F., Coughlan, M., & Cronin, P. (2007 b). Step-by-step Guide to Critiquing research. Part 2: Qualitative Research. *British Journal of Nursing*, 16(12), 738–744. <https://doi.org/10.12968/bjon.2007.16.12.23726>
- World Health Organization. (2006). New Global Alliance Seeks to Address Worldwide Shortage of Doctors, Nurses and Other Health Workers. *World Health Organization*. <https://www.who.int/news/item/25-05-2006-new-global-alliance-seeks-to-address-worldwide-shortage-of-doctors-nurses-and-other-health-workers#:~:text=A%20new%20global%20partnership%20that%20will%20strive%20to,they%20plan%20for%2C%20educate%20and%20employ%20health%20workers>