Strategies For Improving Nursing Documentation And Record-Keeping

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Abstract

This study aims to address the topic of which techniques have shown to be the most successful in enhancing clinical nursing documentation in the acute hospital environment. A search using keywords was performed in the CINAHL and Medline databases to find relevant papers. The studies were assessed for their level of evidence based on the standards of the GRADE framework. The data obtained from each trial were included into a Summary of Dataset (SOD) spreadsheet. For each trial, if available, we estimated the percentage compliance scores before and after the intervention. This was done by dividing the mean score by the potential total score and multiplying it by 100. The proportion of the improvement in adherence for each trial was determined by reducing the pre-intervention value from the post-intervention value. The compliance score modification and the post-intervention compliance score were included in the SOD and used for comparative analysis amongst the trials. The intervention techniques adopted in each research were evaluated thematically. The study evaluated compliance rates and interventions to assess the effectiveness of different tactics in producing a significant increase in compliance. Several research used documentation audits along with personalized comments as a strategy to enhance nursing documentation. Ten of these trials had a compliance rate of 70% or higher after the intervention. Despite the limits of this research, it is possible

that conducting a record-keeping inspection with personal input, together with additional context-specific tactics, may be a dependable approach for achieving substantial enhancements in clinical nursing record. The current level of proof is deemed to be very insufficient, necessitating the need for more study.

Keywords: Nursing documentation, records, healthcare, review, strategies, nursing record.

1. Introduction

Clinical documentation refers to the systematic creation of a written or electronic record that provides a comprehensive account of a patient's medical history and the treatment they have received (Blair & Smith, 2012; Wilbanks et al., 2016). It functions as a vital means of communication for sharing information among healthcare practitioners and is recorded in either a physical or digital medical record (Duclos-Miller, 2016; Mishra et al., 2009). Wilbanks et al. (2016) describe excellent quality documentation as documentation that is accurate, thorough, employs precise language, and is easy to read, timely, brief, and credible.

Inadequate nursing documentation in the acute care context may have adverse effects on patient outcomes and may lead to legal action (Duclos-Miller, 2016). Hence, it is crucial to ascertain if there exist any techniques that might provide significant enhancements in the quality of nursing documentation in the acute care scenario. Currently, there are four systematic reviews pertaining to nursing documentation. Three studies (Johnson et al., 2018; Müller-Staub et al., 2006; Saranto et al., 2014) investigated the effects of standardized nursing languages (SNL) on the quality of nursing documentation.

The evaluations were narrative in nature and included research that were not limited to the acute sector. The study showed that implementing SNL would enhance the accuracy and completeness of nursing documentation, ensure compliance with legal documentation standards, and streamline the use of an electronic health record (EHR). A systematic study conducted by McCarthy et al. (2019) investigated the impact of electronic nursing documentation (END) and concluded that using an END system may enhance

the quality of nursing documentation, reduce documentation mistakes, and improve adherence to nursing documentation requirements.

These systematic reviews were presented in a narrative format, without any effort made to assess if the improvements shown in any of the examined trials are clinically significant. The objective of this systematic review is to comprehensively analyze the literature in order to identify the most effective strategies for enhancing compliance with clinical nursing documentation guidelines and improving the quality of nursing documentation in acute care settings. This analysis will be conducted both qualitatively and quantitatively.

2. Methods

We did a thorough examination of the available literature using the Preferred Reporting Items for Systematic Reviews and Meta-Analyzes (PRISMA) standards, if applicable.The references to Page et al. (2021a, b) are mentioned. A keyword search was performed in CINAHL and Medline in May 2019 and October 2020 to find relevant studies, as a result of the time that had passed. Restrictions only applied to works published in English-language peer-reviewed journals. The search method was informed by analyzing the textual words included in the titles, abstracts, and index keywords of relevant papers. Additional papers were sought for by manually examining the reference lists of the chosen articles .

2.1. Criteria for inclusion

Included studies were limited to quantitative research that examined techniques aimed at enhancing clinical nursing documentation in acute hospitals. Whenever feasible, the numerical aspects of mixed method research were also included. Wherever feasible, the nursing documentation components were included into studies that also encompassed allied health or medical documentation. No research were eliminated due to intervention; we made an effort to include as many trials as feasible .

3. Results

A research conducted by Müller-Staub et al. (2008) found that participants spent a total of 22.5 hours on instruction, resulting in a final compliance rate of 94.5%. Nevertheless, a separate

research conducted by Linch et al. (2017) included a total of 30 hours of teaching and discussion, resulting in a final compliance rate of 45%. Consequently, it is challenging to make any definitive conclusions about the impact of education duration on documentation compliance. Considering the limited number of research that just focused on education, it seems that education alone can enhance compliance. However, it may not significantly increase compliance in a meaningful way.

When using documentation auditing with personalized or individualized feedback as a strategy, ten out of the eleven studies obtained a compliance rate of 70% or above. Caution should be used when using the data from Elliott's (2018) study, since it is possible that some negative outcomes were excluded during the computation of compliance rates. When an Electronic Health Record (EHR) was used for conducting audits, there was a consistently high improvement in compliance rate. Specifically, out of the 11 studies that employed an EHR for audits, 10 of them obtained a compliance rate of 70% or above. The use of an Electronic Health Record (EHR) for data extraction improves the efficiency of the time-consuming audit procedure (Lieow et al., 2019).

Out of the thirteen studies analyzed, EHR was used as a method to enhance nursing documentation in all of them. Six of these studies successfully achieved a significant compliance rate. However, in the case of Larrabee et al. (2001), the improvement rate was just 0.2%. These researches suggest that using an EHR may not necessarily lead to a significant improvement in nursing documentation. In fact, the studies conducted by Rykkje (2009) and Akhu-Zaheya et al. (2018) indicate that it might potentially have a negative impact. The EHR system was not well characterized or identified in almost all of the investigations, making it impossible to ascertain if the specific features of the EHR had any impact on the outcomes.

Ten researches used Standardized Nursing Language, with four of them attaining a compliance rate of 70% or above. Utilizing NANDA and NIC has shown to be more efficacious than PES or VIPS in enhancing nurse documentation adherence. Among the six studies that used NANDA and NIC, four of them reported a final compliance rate of at least 80% (Larrabee et al., 2001; Müller-Staub et al., 2007; Thoroddsen et al., 2011; Thoroddsen & Ehnfors, 2007). However, it is important to note that Larrabee et al. (2001) only showed a

marginal improvement of 0.2%. Implementing a standardized nursing language will enhance nursing documentation, while its impact on improvement may not be significant.

Out of the 10 studies that included electronic health record (EHR) alteration, seven successfully obtained a significant rate of compliance. The following portion of this systematic review includes new or redesigned electronic health record (EHR) templates, which are categorized as New Forms. Multiple EHR adjustments were used in the different trials (refer to Table 2), and there are signs that prompts in the EHR might be effective in enhancing compliance. However, it should be noted that no one alteration guarantees substantial compliance.

In this review, new forms refer to recently developed or altered paper forms and electronic health record (EHR) templates. Out of the total number of research, 32 of them included novel methods as a means to enhance nursing documentation. Among these, 17 studies were successful in significantly improving the quality of nursing documentation. Out of the 12 studies that used the technique of creating new standards or modifying current guidelines, five were successful in achieving a significant rate of compliance. Guidelines may enhance nursing documentation, however the extent of improvement may not always be significant.

Ten researches used administrative or systemic modifications as a strategy to enhance compliance. The trials exhibited significant heterogeneity, making it impossible to establish the effectiveness of any one technique in achieving a substantial improvement. All studies that implemented system improvements shown enhanced nurse documentation. Out of the 10 trials, six revealed significant improvement.

In the future, technology solutions such as digital scribes may be used to address problems related to clinical nursing documentation. Utilizing advancements in voice recognition, natural language processing, artificial intelligence, machine learning, and clinical decision support technologies, digital scribes will convert clinical interactions into precise and useful recordings (Coiera et al., 2018). Nevertheless, significant advancements in voice recognition systems and artificial intelligence are necessary in order to overcome the hazards associated with using a digital scribe. Meanwhile, the

investigation of techniques to enhance nursing documentation continues to be a relevant subject for study.

4. Limitations

A single reviewer conducted full text screening and performed quantitative and thematic analyses, which may have introduced some bias into the findings. Due to the lack of funding, we were unable to obtain the full text of all the publications found in the search results for this systematic review. Consequently, there is a possibility that some important research was not included in the final analysis. The research papers reviewed in this study exhibited significant heterogeneity in terms of their design, statistical analyses, and applied methodologies. Consequently, doing a standard systematic review meta-analysis was not feasible. Instead, a simple percentage analysis was performed. Only data that could be translated into percentages were included in the study, resulting in the exclusion of certain data.

The studies often included many techniques, making it difficult to isolate the effects of individual tactics. The duration between the intervention and the post-intervention audits differed across the studies and was not examined in this systematic review. This may have put the studies that employed a longer time period at a disadvantage in determining if the gains in documentation were maintained over time. The evidence has a very low degree of confidence, as seen in Table 5. These shortcomings might be addressed with a subsequent research that emphasizes audit and personal feedback and use more thorough statistical analyses. Practitioners should consider using documentation audits with personal input as a strategy to enhance the quality of nursing documentation.

5. Conclusion

Despite the limits of this research, it is possible that conducting a documentation audit with personal input, together with other context-specific tactics, may be a dependable approach for achieving significant improvements in nursing clinical documentation. Using an Electronic Health Record (EHR) to conduct audits may enhance the efficiency of the process. The data lacks clarity; hence more study is needed to explore the effectiveness of employing audit and personal feedback as a technique to enhance clinical nursing documentation.

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