



Comparing Nurses' and Head Nurses' Perspectives on the Factors Behind the Quality of Nursing Documentation

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Abstract

Background: Nursing documentation has significant roles in giving coherence to teamwork, making effective use of healthcare providers' knowledge, improving care quality, maintaining care continuity, and identifying changes in patients' conditions. However, studies show its poor quality.

Objectives: This study compared nurses' and head nurses' perspectives on the factors behind the quality of nursing documentation.

Methods: This descriptive-correlational study was conducted in 2017 in Valiasr (PBUH) Hospital, Birjand, Iran. Accordingly, 140 eligible nurses and all 15 head-nurses in the hospital were recruited to the study through simple random sampling and census, respectively. They filled out a researcher-made 26-item questionnaire about factors behind the quality of nursing documentation. Because of the non-normal distribution of the study variables, the Mann-Whitney U, Kruskal-Wallis, and Friedman tests were used for data analysis. The level of significance was set at less than 0.05.

Results: Head nurses did not significantly differ from nurses respecting the mean scores of personal, managerial, and organizational factors behind the documentation quality ($P > 0.05$). The highest-scored factors were organizational factors.

Conclusions: Organizational factors are the most important factors behind the quality of nursing documentation. Thus, adequate nurse staffing and avoidance from assigning non-nursing responsibilities to nurses are recommended to improve the quality of nursing documentation.

Keywords: Nursing Documentation, Nurses, Perspectives, Care Quality

1. Background

Nursing documentation is a useful framework for presenting and evaluating nursing care (1). It is a set of written information about care services provided to patients and is an important tool to evaluate and verify the accuracy of healthcare services and to support patient and nurse rights (2). It is also used to determine healthcare costs, patients' educational needs, and discharge plan and is considered as the main source of reliable patient data, a reminder tool for nurses, and a base for identifying patient problems (3-7). The documentation gives coherence to teamwork, helps make use of other staff's professional knowledge, improves care quality, ensures care continuity, enables nurses to execute care plans effectively, and helps them to identify changes in patients' conditions quickly (8).

Despite the importance of nursing documentation, evidence shows problems in its performance. For instance, a study reported that 50% of nursing documentation is of

poor quality. The same study also reported that nurses considered documentation as an unnecessary paperwork that just increases their workload (9). Another study showed that one out of every four cases of professional negligence in patient care is related to documentation errors (10). Poor nursing documentation can cause different negative consequences for patients, nurses, and healthcare systems. For instance, ambiguous or untimely documentation, improper correction of documentation errors, or documentation of personal views instead of actual care delivered to patients can cause legal problems for nurses. Pitfalls in nursing documentation may also be used to confirm nurses' malpractice (11).

Different studies assessed factors behind poor nursing documentation. A qualitative study on 20 nurses and 30 patient medical records found that factors such as the heavy workload, the insignificant effects of proper documentation on nurses' career advancement, and the higher importance and priority of care provision com-

pared to documentation could negatively affect documentation quality (1). Two other studies reported that factors behind poor nursing documentation were nurses' limited self-confidence, poor writing skills, attitudes towards documentation (12), low nurse-to-patient ratio, heavy workload, fatigue, insignificant effect of documentation on nurses' career advancement, higher priority of care, job dissatisfaction, and lack of knowledge about the principles of quality documentation and the negative legal consequences of poor documentation (10).

Our extensive literature search revealed that no study had yet evaluated factors behind nursing documentation from the perspective of nurses and head nurses. However, there were studies into the barriers of using nursing diagnosis and nursing process. For instance, a study reported that the main barriers to the documentation of nursing diagnoses were managerial and executive factors from nurses' perspectives and organizational factors from nursing managers' perspectives (13). Other studies found personal, managerial, and organizational factors as barriers to the use of the nursing process (14, 15). Coordination and collaboration between nurses (as staff who perform documentation) and nursing managers (as documentation-related decision-makers) may help improve the quality of nursing documentation. A key prerequisite for such coordination and collaboration is to compare their perspectives in this area.

2. Objectives

The present study was conducted to compare nurses' and head nurses' perspectives on the factors behind the quality of nursing documentation.

3. Methods

This descriptive-analytical study was conducted in 2017 in Valiasr (PBUH) Hospital, Birjand, Iran. For sampling, a list was initially created of all nurses and head-nurses in the hospital. Then, 140 eligible nurses and all 15 head-nurses in the hospital were recruited to the study through simple random sampling and census, respectively. The number of nurses to be recruited from each hospital ward was determined based on the sample size of the study and the total number of nurses in that ward. The inclusion criteria were clinical work experience of more than one year and willingness to participate in the study. Participants who voluntarily withdrew from the study were excluded. The sample size was calculated using the Cochran formula (i.e. $n = Z^2 pq / d^2$) and the results of an earlier study that reported the low nurse-to-patient ratio as a major factor behind poor documentation, with a relative frequency of 90% (10). Thus, with a d of 0.05 and a confidence level of 0.90, the sample size was estimated to be 138.

The data collection tool was a researcher-made 26-item questionnaire with three main domains of personal factors (13 items), managerial factors (5 items), and organizational factors (eight items). The item scoring was done on a five-point scale from 1 ("Very little") to 5 ("Very much"). The total score of each domain was calculated by dividing the sum of its item scores by the number of its items, resulting in a score of 1 - 5 for each domain. The content validity of the questionnaire was evaluated and confirmed by six faculty members of the Birjand Faculty of Nursing and Midwifery, Birjand, Iran. For reliability assessment, 10 nurses were recruited to fill out the questionnaire and then, the Cronbach's alpha values of the questionnaire and its personal, managerial, and organizational factors were calculated to be 0.93, 0.92, 0.76, and 0.71, respectively. For data collection, we referred to the study setting, recruited eligible participants, and asked them to fill out the questionnaire in our presence within 30 minutes.

Data were analyzed via the SPSS program (V. 16.0). The Kolmogorov-Smirnov test indicated that the study variables did not have a normal distribution. Therefore, data analysis was conducted using Mann-Whitney U, Friedman, and Wilcoxon signed-rank tests at a significance level of less than 0.05.

The Institutional Review Board and the Ethics Committee of Birjand Faculty of Nursing and Midwifery, Birjand, Iran, approved this study (with the codes of 4587 and IR.BUMS.REC.13960221, respectively). The participants were provided with explanations about the aim of the study and the anonymity of data collection and reporting.

4. Results

Among 140 recruited nurses, nine did not completely fill out their questionnaires and hence, the final data analysis was conducted on the data retrieved from 15 head nurses and 131 nurses. The head nurses were mostly females (93.3%), held bachelor's degrees (86.7%), and had a work experience of more than 15 years (73.3%) and all of them were married and secured permanent official employment. As Table 1 shows, the most participating nurses were also females (89.3%), married (86.3%), and held bachelor's degrees (90.8%).

Among personal factors, the highest mean scores were related to the items of time limitation during a work shift, assigning a higher priority to care provision rather than documentation, and work-related fatigue while the lowest scores were related to the items of assigning limited importance to documentation and low self-confidence in the documentation. The highest scores in the organizational factors domain were related to the items of nurses' heavy paperwork, assignment of non-nursing responsibilities to nurses, and heavy workload while the lowest mean

Table 1. Participating Nurses' Characteristics

Characteristics	N	%
Gender		
Male	14	10.7
Female	117	89.2
Age, y		
≤ 30	62	47.3
31 - 40	45	34.4
> 40	24	18.3
Marital status		
Single	18	13.7
Married	113	86.3
Academic degree		
Associate	6	4.6
Bachelor's	119	90.8
Master's	6	4.6
Work experience, y		
≤ 5	56	42.7
6 - 15	40	30.5
> 15	35	26.7
Employment status		
Under a contract	21	16
Permanent official	59	45
Conditional official	30	22.9
Post-graduation service	21	16

score was related to the item of fear of the negative consequences of precise documentation. Finally, the highest-scored managerial factors were low nurse-to-patient ratio and the insignificant effects of proper documentation on nurses' career advancement while the lowest-scored items in this domain were the inefficient labor division and inadequate supervision of nursing documentation (Table 2).

Comparison between nurses and head nurses revealed no significant difference between them respecting their perspectives on factors behind the quality of nursing documentation ($P > 0.05$; Table 3). The highest- and the lowest-scored domains among both nurses and head nurses were organizational and personal factors, respectively. The Friedman test revealed no statistically significant difference within the head nurse group and at least one statistically significant difference within the nurse group respecting the mean scores of the personal, managerial, and organizational factors (P value = 0.28 and < 0.001). The Post hoc analysis using Wilcoxon signed-rank test indicated that in the nurse group, the mean scores of organi-

zational and managerial factors were respectively greater than the mean scores of managerial and personal factors ($P < 0.0001$; Table 3).

5. Discussion

The present study aimed to compare nurses' and head nurses' perspectives on the factors behind the quality of nursing documentation. The findings revealed that organizational factors were the most important factors in this area. The most important organizational factors were the assignment of non-nursing responsibilities to nurses and their heavy workload while the most important personal factors were time limitation during work shift, assigning higher priority to care provision rather than documentation, and work-related fatigue and the most important managerial factors were low nurse-to-patient ratio and insignificant effects of proper documentation on nurses' career advancement. In line with these findings, previous studies reported that the most important factors affecting documentation quality were the lengthiness of documentation, ineffective reward and punishment system (16), time limitation (17, 18), insignificant effects of proper documentation on nurses' career advancement, (10, 16), low nurse-to-patient ratio, heavy workload (1, 10, 18, 19), higher priority of care compared to documentation, unfamiliarity with technical terms and documentation principles (10, 18), lack of appropriate place for documentation, heavy documentation load, and inefficient quality control (18). Another study also reported that the most important barriers to the documentation of nursing diagnoses were managerial factors from nurses' perspectives and organizational factors from nursing managers' perspectives (13).

Quality care delivery and proper maintenance of care continuity largely depend on accurate information exchange among healthcare professionals in different work shifts, which is determined by proper and quality nursing documentation (14, 20, 21). Accordingly, the accurate information exchange, shift report, and documentation are considered among the heaviest and most important responsibilities of nurses. Any documentation error or negligence can cause nurses' different professional and legal problems (21).

5.1. Conclusion

Organizational factors are the most important factors behind the quality of nursing documentation. Thus, appropriate and adequate nurse staffing and avoidance from assigning non-nursing responsibilities to nurses are recommended to improve the quality of nursing documentation.

Table 2. The Mean Scores of Factors Behind the Quality of Nursing Documentation

Factors	Head Nurses	Nurses
Personal		
Low self-confidence in nursing documentation	2.87 ± 1.41	3.15 ± 1.28
Poor documentation skills	3.07 ± 1.34	3.47 ± 1.32
Unfamiliarity with the principles of documentation	3.47 ± 1.41	3.60 ± 1.32
Work-related fatigue	3.60 ± 1.45	3.85 ± 0.97
Job dissatisfaction	3.47 ± 1.46	3.36 ± 1.17
Time limitation during the work shift	4.60 ± 0.63	3.96 ± 0.96
Poor job motivation	3.20 ± 1.42	3.25 ± 1.12
Lack of knowledge about the legal consequences of incomplete documentation	3.27 ± 1.53	3.67 ± 1.15
Assigning a higher priority to care provision than to care documentation	4.07 ± 1.03	4.00 ± 0.80
Following routine documentation by novice nurses	4.40 ± 0.74	3.72 ± 0.90
Illegibility of nursing documentation	3.33 ± 1.23	3.35 ± 1.04
Limited importance of nursing documentation for nurses	2.93 ± 1.10	2.92 ± 1.30
Nurses' lack of knowledge about different documentation styles	3.07 ± 1.03	3.31 ± 1.19
Organizational		
Authorities' attention to nursing documentation	4.07 ± 0.70	3.69 ± 0.84
Heavy workload	4.33 ± 1.05	4.46 ± 0.65
Clear guidelines for nursing documentation	3.73 ± 1.16	3.71 ± 0.93
Nurses' heavy paperwork	4.40 ± 1.06	4.48 ± 0.64
Assignment of non-nursing responsibilities to nurses	4.53 ± 0.83	4.44 ± 0.85
Lack of managerial positive feedbacks to precise nursing documentation	3.80 ± 1.42	3.91 ± 1.02
Fear of the negative consequences of precise documentation	3.20 ± 1.27	3.53 ± 1.13
Physicians' inattention and lack of positive feedbacks to precise nursing documentation	4.00 ± 1.31	3.76 ± 1.03
Managerial		
Inefficient labor division	3.73 ± 1.34	3.33 ± 1.08
Inadequate supervision of nursing documentation	3.47 ± 1.13	3.34 ± 1.03
Low nurse-to-patient ratio	4.20 ± 1.21	4.40 ± 0.80
Lack of timely feedbacks from executive managers	3.60 ± 1.24	3.58 ± 0.98
The insignificant effects of proper documentation on nurses' career advancement	4.20 ± 1.42	3.83 ± 0.98

Table 3. Comparison of Head Nurses' and Nurses' Perspectives on the Factors Behind the Quality of Nursing Documentation

Factors	Head Nurses (Mean ± SD)	Nurses (Mean ± SD)	P Value ^a
Personal	3.49 ± 0.91	3.51 ± 0.79	0.87
Managerial	3.84 ± 1.18	3.70 ± 0.67	0.49
Organizational	4.01 ± 0.62	3.99 ± 0.52	0.78
P value^b	0.28	< 0.001	

^aThe results of Mann-Whitney U test.^bThe results of the Friedman test.

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Footnotes

Conflict of Interests: The authors declare that there are no conflict of interests.

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