
Effect of Quality of Nursing Documentation on Continuity of Patient Care

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Abstract:

Background: Nursing documentation is the record of nursing care that is organized and provided to specific patients and clients by licensed nurses or other caregivers acting under a licensed nurse's supervision. **Aim:** To investigate the effect of quality of nursing documentation on continuity of patient care at Elkharga general hospitals. **Study design:** Descriptive correlation design was used in this study. **Study setting:** This study was conducted at Elkharga General Hospital Affiliated to Ministry of Health and Population. **Samples:** Included two types of samples are convenient sample of nurses working at Elkharga general hospital with total number (no=80) and patient's records and departments records. **Data collection:** Data was collected using three tools adapted by the researcher **1st** tool Quality of nursing documentation questionnaire. **2nd** tool Concurrent auditing checklist for nurse's records. **3rd** tool continuity of patient care checklist observation. **Results:** This study indicated that there was a highly statistically significant positive correlation between quality of nursing documentation and continuity of patient care. **Conclusion:** There was an accepted level of nursing documentation quality, the majority of total nurses samples had an average level of continuity of patient care. **Recommendations:** Holding a workshop for the nurses on the value of nursing documentation, as well as frequent audits, regular feedback, disciplinary action for defaulters, and rewards for high achievers.

Keywords: *Quality of nursing documentations & Continuity of patients care*

Introduction:

Nursing documentation is crucial for nurses to provide nursing care. This documentation is used as a reference for nursing services provided to patients who need records and reporting that can be used as responsibility and accountability of various possible problems experienced by patients both satisfaction and dissatisfaction with the services provided (Herisiyanto et al., 2020).

The largest group of healthcare workers in the system, nurses, play a crucial role in every area of performance improvement in healthcare organizations. The position calls for planning patient treatment, keeping an eye on patient data, and collaborating with other multidisciplinary team members. Due of its time-consuming, repetitive, and inaccurate nature, paper-based documentation is thought to fall short of the criteria for high-quality documentation and provider communication. (Akh-Zaheya 2017).

Nursing documentation is crucial for nursing growth, particularly the professionalization process of nursing and maintaining nursing as a respectable and regarded profession in society. This is because documentation may show the quality of a given nursing treatment. (McCarthy et al., 2019).

A list of the nursing care that was planned for and provided to each patient and client by a registered nurse or by another caregiver working in accordance with the licensing of a licensed nurse constitutes nursing documentation. Nursing documentation comprises assessment, nursing diagnoses, interventions, implementation, and evaluation of progress and results in an effort to draw attention to problems that develop during the nursing process and data that aids in decision-making. (Abdelrahman, et al., 2021).

Documentation includes any original files or authentic records that may be used to support a claim or as proof in court. Nursing documentation serves as evidence of the recording and reporting abilities used by nurses to complete care records that are helpful to patients, nurses, and the healthcare team in providing health services based on precise and detailed written communication with nursing responsibilities. (Alqattan, et al., (2018)

Quality documentation of nursing care promotes consistency, distinctiveness, and defines the nursing process. By monitoring the patient's need for care and their response to nursing actions, it can also raise the standard of nursing care. Documenting the therapy given, the patients' reactions, and an evaluation of the

care given are all parts of effective documentation. (Wang, 2019).

Nursing Documentation is a crucial aspect of professional nursing practice. In order to provide consistent information on the assessment, care given, and assessment of patient responses to care, the documentation must be accurate, current, and thorough (Abdelrahman, et al., 2021).

An essential factor for planning nursing care is nursing documentation. Nurses are required by law to record their nursing procedures. Objectivity, specificity, clarity, consistency, comprehensiveness, maintaining confidentiality, and avoiding recording mistakes are just a few of the many criteria that govern appropriate nursing documentation.

In order for parties in the hospital, such as physicians, pharmacy units, radiology units, or nurses themselves, to use the document, it will be used to identify the patient's starting state and current status. The information in the nursing document is admissible as evidence in court and can be utilized to address legal issues that occur in the delivery of healthcare and nursing services (Herisiyanto et al., 2020).

All members of the health team can utilize the recording as a helpful source of information for communication, financial statements, teaching, studies, research, audits, and legal documentation (Alqattan et al., 2018). To guarantee the provision of safe and high-quality healthcare services, nursing documentation must be completed to the highest standard, regardless of the manner of recording (Abdelrahman, et al., 2021).

Significance of the Study

Incomplete records, incorrect patient depiction, and the labor-intensive nature of recording are just a few examples of nursing documentation shortcomings. The inability to effectively interchange and transfer information affects the continuity and quality of the care provided; as a result, hospital administration, nurses, and nursing researchers have all expressed a desire to improve nursing documentation. Changes in record keeping practices are frequently made to satisfy professional standards, reduce paperwork, and adhere to regulatory obligations (Aldosari et al., 2018).

There are many studies internationally was done as a meta-study of the essentials of quality nursing documentation and for improving quality of nursing documentation system in home health care setting (Goutun & syse, 2017).on the other side many studies was done in Egypt as on-the job versus off training of nurses in documentation of nursing practice and training as a mean for improving staff nurses documentation skills (Tasew et al, (2019).

while the researcher as an quality control member and her responsibility is to review the records to ensure accurate documentation. The researcher found problems in documentation at Elkharga hospital as inaccurate, inappropriate, incomplete and disorganized charts or records. That couldn't be reliable in clinical decisions or incomplete patient care for medical and nursing personal.

Few studies conducted this study so, the researcher investigate effect of quality of nursing documentation on continuity of patient care.

Aim of the Study

General objectives:

Investigate the effect of quality of nursing documentation on continuity of patient care.

Specific objectives:

1. Assess the quality of nursing documentation among staff nurses in Elkharga General Hospital.
2. Assess the continuity of patient care.
3. Investigate the effect of quality of nursing documentation on continuity of patient care.
4. Determine the factors affecting quality of nursing documentation.

Research Questions

To fulfill the aim of the present study, the following research questions are formulated:

1. To what extent the quality of nursing documentation is attained?
2. Is there a continuity of patient care?
3. Is there a relation between quality of nursing documentation and continuity of patient care?
4. What are the factors affecting quality of nursing documentation?

Samples and Method

The study was portrayed according to the four following designs.

- I. Technical design
- II. Administrative design
- III. Operational design
- IV. Statistical design

Technical design

This design was involved the research design, setting, subject and data collection tools.

Study design:

Descriptive correlational design was used.

Setting:

The present study was conducted in Elkharga General Hospital which located in The New valley governorate. This hospital consists of one building with three floors. Bed capacity of Elkharga hospital with total number (no=200 bed) included pediatric, Medical, General surgery, Neonate, Obstetric, Intensive care unit, Cardiology care unit, Dialysis Department. This hospital serves Elkharga city center and eight nearby Elkharga villages. Department's

name: Critical care departments, nursing staff (n=45), Surgery department, nursing staff (n=20) and Medical department, nursing staff (n=15)

Subjects:

There are two types of samples included in the current study.

First sample is convenient sample of nurses working in Elkharga general hospital with total number (no.=80).

Second sample: the patient's records (i.e. vital signs, fluid balance chart, nursing notes, laboratory investigation, shift reports, medication administration) all records (no.=120) of Critical, Medical, Surgery Departments all-over three-months period, one month for each department for the three shifts.

Data collection tools:

Three tools used in the study:

1st tool: Structured self-administered questionnaire which consists of two parts: -

First part: Personal data developed by the researcher to collect data related to demographic data of the staff nurses, it includes (6 items) as: age, gender, years of experience in hospital, educational level, years of work in the department and attending training program about documentation.

Second part: Quality of nursing documentation questionnaire it was developed by (Abdelrahman, 2021); it aimed to assess quality of nursing documentation by staff nurses. This tool consists of (9 dimensions) and (72 sub dimensions) as follow: types of nursing formats availability (12 items), the reasons of unavailability of formats (3 items), types of nursing formats kept in patient's file after discharge (11 items), keeping formats (2 items), standards of nursing documentation (10 items), attendance of training courses related to nursing documentation (12 items), factors influence quality of nursing documentation (9 items), importance of quality documentation (7 items), and importance of continuity of patient care from nurses view (6 items). it modified by the researchers one dimension was deleted which is (responsibility of reviewing recorded format), three dimensions have been added they were (standards of nursing documentation), (types of nursing formats availability) and, (factors influence quality of nursing documentation).

The scoring system: consists of three points were used to assess types of nursing formats availability as follow: available and use (2), available but not used (1) and unavailable (0). Two points were used to assess another dimension as follow (1) and (0) for Yes and No respectively. Five points Likert scale used for answers to assess importance of documentation quality and importance of continuity

of patient care as follow: (4) strongly agree, (3) agree, (2) disagree, (1) strongly disagree and (0) don't know.

2nd tool: Concurrent auditing checklist for nurses records for 3 months period; it was developed by (Abdelrahman, 2021). It consists of two parts. It aims to assess quality of nursing documentation by auditing check list.

First part: Content of sheets as patient's demographic data (patient name, age, date of admission, gender, medical diagnosis).

Second part: Concurrent auditing checklist, it consists of (8 dimensions) with (54 sub dimension) as follows: vital signs record (4 items), nursing notes (1 items), fluids balance chart (8 items), medication administration record (2 items), laboratory investigation record (4 items), contents of inter shift report (7 items), and general criteria for quality of documentation (18 items).

The scoring system for observed quality of nursing documentation: the observed items were checked against two points (1) and (0) for recorded and not recorded respectively.

3rd tool: continuity of patient care observational checklist developed by (Abdelrahman, 2021), it aims to assess continuity of patient care. It consists of (5 sub dimensions) and (26 sub dimension) as follows: medication administration record (2 items), vital signs record (4 items), fluids balance chart (4 items), laboratory investigations record (4 items), nursing notes record (12 items).

The scoring system for observed continuity of patient care was checked against (4) points Likert scale as follow: done and recorded (4), done but not recorded (3), not done but recorded (2) and not done and not recorded (1).

Administrative design

An official approval to carry out this study obtained from the Dean of Faculty of Nursing – Assiut University, Director of Elkharga general hospital, Nursing director, and Nurses in Elkharga general hospital to collect data.

Ethical considerations:

The ethics committee of the Assiut University Faculty of Nursing has authorized a research proposal. Participants in the study are not at danger when the research is applied. It is optional to take part in this study. oral consent obtained from the study's subjects. Each participant is free to leave the research at any time, for any reason. Assured anonymity and confidentiality. Privacy of study participants was taken into account while data was collected.

Operational design:

The study was conducted throughout three main phases: 1st preparatory phase, 2nd pilot study, 3rd data collection.

1st Preparatory phase:

After reviewing the pertinent literature on the subject of how well documentation affects patient care continuity, the study materials were translated into Arabic. Additionally, the study instruments' face validity was evaluated for "quality of nursing documentation." Five specialists (3 professors and 2 Assistant professor) from the Nursing Administration Department of the Faculty of Nursing at Assiut University assessed questionnaires, a concurrent auditing checklist on the quality of nursing documentation and continuity of patient care, and prepared observational checklists.

2nd Phase pilot study On eight nurses, who represent 10% of the study's total participants and work at Elkharga General Hospital, all the study tools were tested for internal reliability using Cronbach's alpha, scoring a "0.80" result, to ensure that they were clear, easily accessible, and easy to understand. They were also timed before the data were actually collected. The data from the pilot research was examined, and any required adjustments were made.

3rd Data collection phase

Real duration of data collection took place over a three-month period, from January to March 2021. The researcher visited each nurse to explain the purpose of the study, confirm their consent, and let them know that they might withdraw from the study at any moment. All nurses' data were gathered utilizing the research instruments. Each unit's data collection took

place over the course of around 4 weeks (one week for each shift). The information was evaluated from work records kept by the nursing staff on the ward. Three nurses, one from each unit, were taught by the researcher to assist them throughout the night shift by explaining the study's goals, relevance, methods, and timetable for observations.

Each observer began their observations with the people they had already met. The observer made an effort to repeatedly view several employees in the same time assist her in watching the nurses. During the morning shift (7:30 am to 1:30 pm), afternoon shift (1:30 pm to 7:30 pm), and night shift (7:30 pm to 7:30 am), the observers gathered data by continuously watching the recording of nursing actions on each unit for 6 hours.

Statistical design

Data collected and analyzed using the computer program SPSS" ver. 24" Chicago. USA. Data express as mean, Standard deviation and number, percentage. Mann-Whitney used to determine significant for numeric variable. Chi. Square used to determine significance for categorical variable. Person's correlation used for correlations between groups. Non-significant "n.s" $P > 0.05$ no significant, * $P < 0.05$ significant, ** $P < 0.001$ moderate significance, and ** $p < 0.000$ highly significance.

Results:**Table (1): Socio demographic data of the studied nurses group "n=80".**

Item	No.	%
1-Gender:		
- Male	11	13.8
- Female	69	86.2
2-Job:		
- Staff nurse	70	87.5
- Head nurse	10	12.5
3-Residence:		
- Rural	28	35.0
- Urban	52	65.0
4-Educational level:		
- Technical nursing associate diploma	17	21.2
- Secondary School of Nursing diploma +specialization	3	3.8
- Technical nursing diploma	60	75.0
5-Years of experience:		
- <1year	4	5.0
- 1-<5 year	8	10.0
- 5-<10year	26	32.5
- ≥10years.	42	52.5

Table (2): Distribution for quality of nursing documentation related to shift report per three shifts “n= 120”

Contents of shift report	Recorded						Not recorded					
	Morning		Afternoon		Night		Morning		Afternoon		Night	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
- Patients description	120	100	120	100	120	100	0	0	0	0	0	0
- Patients new treatment	23	19.16	20	16.67	14	11.67	97	80.83	100	83.33	106	88.33
- Patients new medications	120	100	120	100	120	100	0	0	0	0	0	0
- New lab investigation	0	0	0	0	0	0	120	100	120	100	120	100
- Patients referral	54	45.0	26	21.67	30	25.0	66	55.0	94	78.33	90	75.0
- Patients complaints	0	0	0	0	0	0	120	100	120	100	120	100
- Emergency situations	56	46.67	42	35.0	24	20.0	64	53.33	78	65	96	80.0

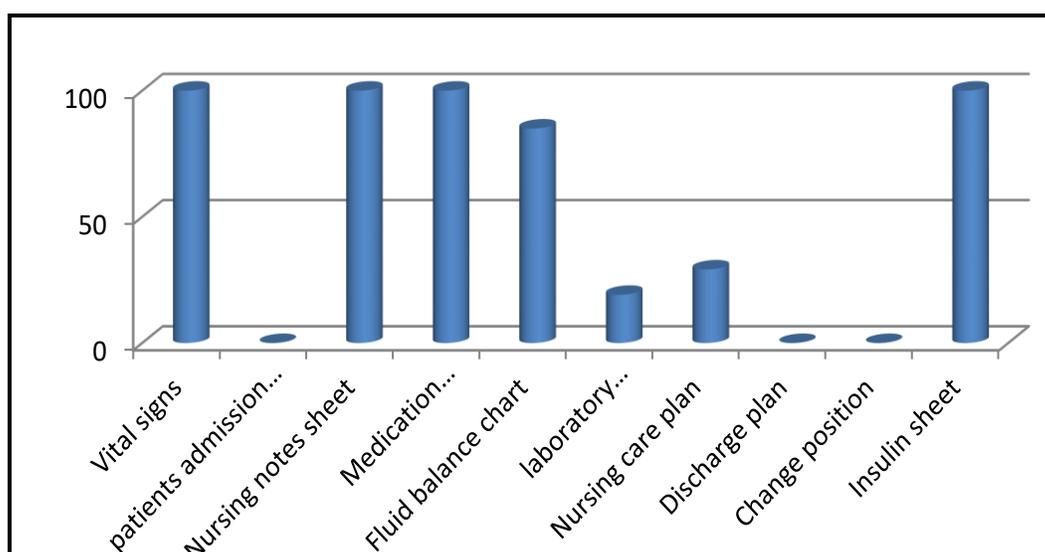


Fig (1): Observed nursing documentation formats availability in patients record per three shifts “n= 120”

Table (3): Distribution for observed criteria for quality of nursing documentation “n= 120”

General criteria for quality of nursing documentation	Yes		No	
	No.	%	No.	%
Documents date	76	63.3	44	36.7
Complete entry of each shift	120	100	0	0
All entries are timed logically	0	0	120	100
Not identified erasures	51	42.5	69	57.5
Correct use of abbreviation	0	0	120	100
Avoiding duplication of information in the health record	112	93.3	8	6.7
Nurses sign in full name for each entry	52	43.3	68	56.7
Errors have a single line marked	47	39.2	73	60.8
Correct spelling	67	55.8	53	44.2
Patient full name	120	100	0	0
Hospital number	101	84.2	19	15.8
No lines or spaces	51	42.5	69	57.5
Nurses actions are not recorded before they have been performed	46	38.3	74	61.7
Use with confidentiality	0	0	120	100
Recording using clients own words	0	0	120	100
The information is accurate, factual & complete	0	0	120	100
Using different forms appropriately & completely	0	0	120	100

Table (4): Distribution of the Factors influencing quality of nursing documentation by study subject (No=80)

Factor influence quality of nursing documentation	Yes		No.	
	No.	%	No.	%
- Nurses perform non nursing tasks	70	87.5	10	12.5
- documentation forms used by nurses	12	15.0	68	85.0
- The lack nurses' knowledge about nursing documentation	7	8.7	73	91.3
- Documentation takes long time	80	100	0	0
- Shortage of nursing staff	80	100	0	0
- Un availability of nursing records &reports	3	3.8	77	96.2
- Nursing is not convinced of the Importance of nursing documentation	2	2.5	78	97.5
- Not enough time	80	100	0	0
- The environment surrounding nursing has a negative impact on the quality of nursing documentation	80	100	0	0

Table (5): Distribution of the nurses opinions about the importance of quality of documentation (no=80).

Importance of quality of documentation	Yes		No	
	No.	%	No.	No
- Conduction education & research	72	90.0	0	10.0
- Protection of the nurse's rights	80	100	8	0
- Problem solving & decision making	18	22.5	62	77.5
- Keep the continuity of patient care	73	91.3	7	8.7
- Facilitates controls and supervision	7	8.8	73	91.3
- Away of communication among the health team members	80	100	0	0
- Protection in the patients and the hospital rights	80	100	0	0

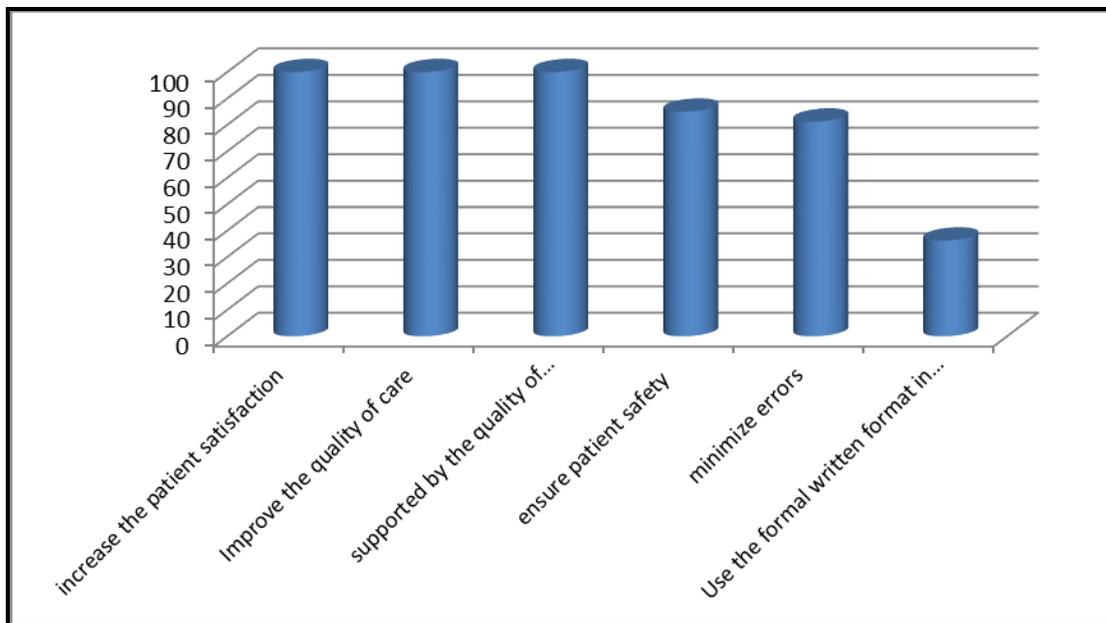


Fig (2): Distribution of the Importance of continuity of patient care items of nursing documentation (N=80).

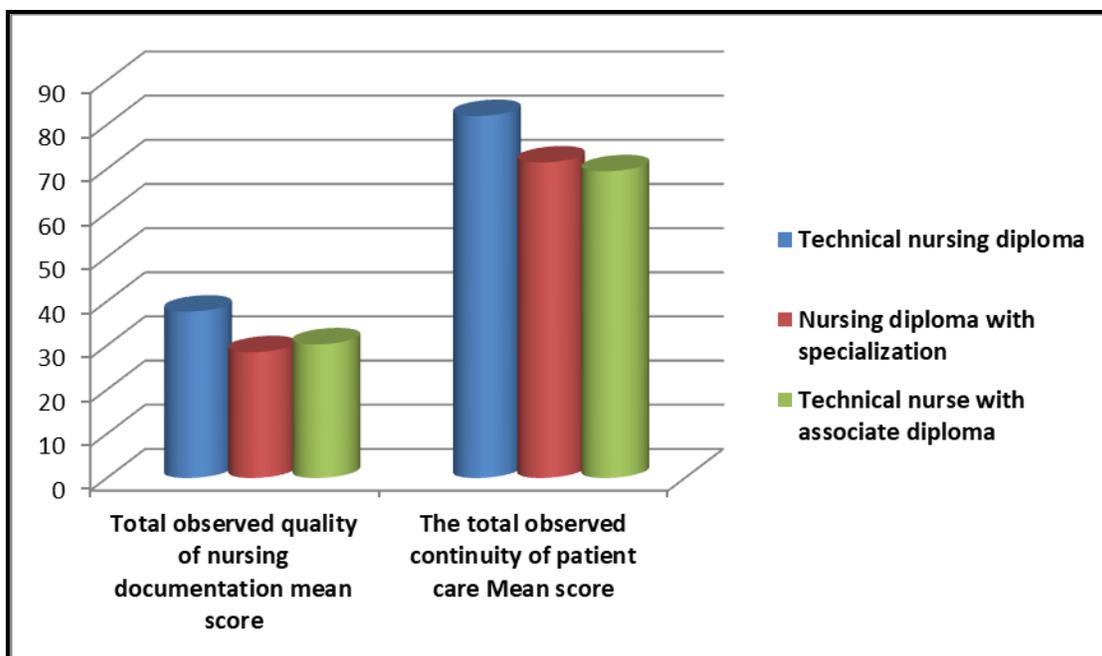


Fig (3): Relationship between educational level of nurses quality of nursing documentation and continuity of patient care “n=80”

Table (6): Correlation between observed quality of nursing documentation and continuity of patients care at Elkharga general hospitals

Items	quality of nursing documentation	
	R	P.V
Continuity of care of patients	r= 0.578	P<0.000***

Table (1): Clarifies that, according to their gender & job, the majority of studied nurses are females (86.2%) and staff nurses (87.5%). Regarding their residence, about two thirds of studied nurses from urban (65%). In relation to their qualification, the majority of studied nurses (70%) have a technical diploma in nursing. Concerning their experience and educational level, about half of studied nurses have (52.5%) equal or more than 10 years.

Table (2): Shows the distribution for quality of nursing documentation related to shift report at the three shifts. There was a decrease in the percentage of item recorded in afternoon shift and night shift than morning shift. All data (100%) regarding patients new medication and patient description were recorded in all shifts. There were many contents of shift report did not recoded as (patients complaints, new lab investigation) (100%) at the three shifts.

Fig (1): Shows observed nursing documentation formats availability in patients per three shifts. All nurses agree that vital signs, nursing notes, medication, insulin formats are available (120). While the majority of them report that laboratory investigation, change position, discharge plan,

nursing care plan, patient admission assessment sheet is not available.

Table (3): Shows distribution for observed criteria for quality of nursing documentation related to shift report per three shifts. All nurses applied complete entry of each shift and full patients name. While all of them don't applied recorded; all entries are timed logically, correct use of abbreviation, use with confidentiality, recording using clients own words, the information is accurate, factual & complete and Using different forms appropriately & completely.

Table (4): Clarifies factor influence quality of nursing documentation: in study subject. There is (100%) of nurses agree about documentation takes long time, shortage of nursing staff, not enough time and the environment surrounding nursing has a negative impact on the quality of nursing documentation and there is (87.5%) of nurses agree about nurses perform non nursing tasks

Table (5): Shows the nurses opinions about the importance of quality of documentation that observed by studied subject. All nurses agree that the importance of quality of documentation for protection of the nurse's rights, away of communication among the health team members and protection in the

patients and the hospital rights but majority (91.25%) of them agree about Keep the continuity of patient care and (90.0%) of nurses agree about documentation conduct education & research.

Fig (2): Shows the importance of continuity of patient care items of nursing documentation in study subject. All nurses agree about the increase of patient satisfaction, improve the quality of care and supported by the quality of documentation.

Fig (3): Declares the relationship between educational level of nurses and quality of nursing documentation and continuity of patient care. There is a significant difference ($P < 0.01$) between level of education with total observed quality of nursing documentation mean score. In addition, there is highly significant difference ($P < 0.000$) with the total observed continuity of patient care mean score. Also, this table illustrates that nurse having technical nursing diploma have the highest mean score regarding the quality nursing documentation and continuity of patient care.

Table (6): Shows correlation between observed quality of nursing documentation and continuity of patients care at Elkharga general Hospitals. There is a positive significant correlation between score of observed quality nursing documentation and score of total continuity of patients care.

Discussion

Nursing documentation is essential in healthcare settings and reflects a number of factors, including the nurses' degree of understanding of their duties in providing high-quality healthcare services (Osama, et al., 2016).

The nursing documentation is seen to be a requirement for effective communication, teamwork, and high-quality patient care. It should include nurse observations, evaluations, and choices (Chand & Sarin, 2019).

Among the shortcomings in nursing documentation are time-consuming recording, poor patient portrayal, and incomplete records. The continuity and quality of the care provided are impacted by ineffective information sharing and transfer, therefore hospital administration, nurses, and nursing researchers have all expressed a desire to improve nursing documentation. Changes in record keeping practices are frequently made to comply with legal obligations, reduce paperwork, and uphold professional standards. (Aldosari et al., 2018).

The majority of the literatures often ignore the behaviors and communication techniques that are involved in the nurse-patient interaction and the roles that each plays in it. There is a ton of information available on self-care techniques, medication

compliance, psychiatric treatments, and patient and nurse satisfaction. (Molin & Gallo, 2020).

The present study aimed to the explore effect of quality of nursing documentation on continuity of patient care.

Regarding to personal characteristics:

The current survey showed that the majority of the nurses were between the ages of 20 and 30. This result was in line with the findings of (Akhu Zaheya, et al., 2018), who indicated that the majority of nurses in the research sample were between the ages of 20 and 30.

Regarding to the quality of nursing documentation related to shift report per three shifts:

The results of the current study showed that the proportion of items recorded in the afternoon and night shifts is lower than in the morning shifts. With the exception of the patients' new medicine and their description, which were documented (100%) throughout each shift. According to the researcher, this outcome might be explained by the fact that there weren't enough nurses working the afternoon and night shifts.

This results is in line with that reported by (Abdelrahman et al. 2021), who found that the proportion of time spent on documentation was independently related to day versus night shifts (19.2% vs. 12.4%). Information retrieval is also affected by the time of day.

Regarding to observed nursing documentation formats availability in patients

The results of this study showed that all nurses concur that there were formats for vital signs, nursing notes, and medication formats accessible. While the bulk of them claim that there was no laboratory investigation sheet.

These results corroborated those of (Abdelrahman et al. 2021), who mentioned that there were available formats for vital signs, nursing notes, and medicines.

Regarding observed criteria for quality of nursing documentation

The results of this study showed that every nurse entered every shift's entire patient name and data completely. While not all of them apply, all entries were rationally timed, correctly abbreviated, used with confidentiality, recorded in the customers' own words, and used with the proper and thorough use of various forms.

These results are in line with those of (Abdelrahman et al., 2021) who reported that all entries are timed logically, that abbreviations are used correctly, that confidentiality is maintained, that clients' own words are used when recording information, that the information is accurate, factual, and complete, and that various forms are used appropriately and completely.

Regarding to the factors influence quality of nursing documentation by studied nurses:

All of the nurses who participated in the current study were overworked and lacked time to complete patient paperwork. This outcome might be the result of improper task assignment and insufficient nurse control, according to the study.

This result was in line with (Tasew et al.'s 2019) findings that inadequate documentation forms, a lack of time, and knowledge with operational standards of nursing documentation all had a substantial impact on the practice of recording nursing care. This was also in line with (Chand & Sarin's 2019) assessment, which said that inadequate records, erroneous patient portrayal, and the labor-intensive nature of recording are only a few examples of the shortcomings in nursing documentation.

Regarding to the importance of quality of documentation.

The results of the current study showed that all nurses agreed on the need for nurse rights to be protected in documentation, on the need for health team members to communicate openly, and on the preservation of patient and hospital rights. The majority of nurses concurred that it is important to maintain continuity in patient care, document it, and carry out research and education.

The research by (Molin & Gallo 2020), which shown that the majority of tested samples produced nursing documentation of a generally recognized standard of quality, is in keeping with these findings. The effectiveness of nursing documentation is seen to play a significant role in promoting organized, regular, and efficient communication between caregivers, facilitating continuity and individuality of care, and enhancing patient safety.

Regarding to Importance of continuity of patient care items of nursing documentation

According to the results of the current study, all nurses believed that better service and better documentation would boost patient satisfaction. From the perspective of the researcher, this outcome may be due to the fact that an observation checklist rather than a questionnaire was used to gauge the degree of continuity of patient care that was directly related to patient care and as the majority of the studied patients were exposed to this care through observation of nurses' activities.

The findings of Marie & Jaroslav (2016) study were in line with the findings of the current study in that good nursing documentation improves patient care quality and patient satisfaction with nurses, helps advance nursing as a profession, and advances clinical nursing and nursing education.

Regarding to correlation between quality of nursing documentation and continuity of patient care among study group:

The findings of the current investigation revealed a very statistically significant positive link between the standard of nurse documentation and patient continuity.

These results were in line with research by (Abdelrahman et al., 2021), who found that good nursing documentation improves clinical nursing, nursing education, and patient care while also promoting nursing as a profession and increasing patient satisfaction with nurses. As a result, it shown that there is a very statistically significant positive association between the standard of nursing documentation and patient care continuity.

These findings were also validated by additional research by Marie & Jaroslav (2016) and which demonstrated a highly statistically significant positive correlation between the standard of nursing documentation and the continuity of patient care. Moreover, the study's findings concur with those of (Petersen, et al., 2017), who indicated that continuity of patient care and the quality of nurse documentation had a highly statistically significant positive link. Additionally, a research by (Maarsingh et al., 2016) found that a strong statistically significant positive link between the caliber of nursing documentation and the continuity of patient care was consistent with the findings of the current study.

Regarding to nurses educational level, quality of nursing documentation and continuity of patient care:

The results of the current study showed a significant relationship between mean scores for overall observed quality of nursing documentation and educational attainment. Additionally, the mean score for the whole observed continuity of patient care showed a highly significant difference. Additionally shows that nurses with technical nursing degrees have the average score for the consistency of patient care and the quality of nursing documentation.

These results were in line with those of (Molina & Gallo 2020), who reported this result is that registered nurse had predominantly positive attitude towards adequate knowledge of and acceptable practice behavior relating to record keeping. In addition, this result agreed to study by (Petresen, et al., 2017) who found that qualified or senior nurse supervising can contribute to record keeping.

Regarding to relationship between nurses educational level continuity of patient care and total observed quality of nursing documentation

Technical nurses had the highest mean scores in relation to the total observed continuity of patient care and the total observed quality of nursing

documentation in the current study, which found a statistically significant relationship between educational level, continuity of patient care, and nursing documentation quality. This finding may be explained by the fact that the majority of staff nurses have technical nursing backgrounds and have studied this subject at their institutions.

The findings of this study did not agree with those of a study by (AkhuZaheya et al. 2018) that looked at the effect of nurse staffing and education on patient fatalities in hospitals with different nurse work conditions. They discovered that the quality of treatment and patient outcomes are both improved when there are more nurses with bachelor degrees. Additionally, the results of this study were at odds with those of the American Association of Colleges of Nursing, which claimed that schooling had a significant impact on nurse practitioners' knowledge and competencies, just as it did for all other healthcare professions. Additionally, the results of this investigation concurred with those of (Chand & Sarin 2019).

Conclusion

- All hospital nurses concurred on the significance of nursing documentation quality and patient care continuity; the majority of examined samples produced acceptable levels of nursing documentation quality, and the majority of all analyzed samples produced average levels of patient care continuity.
- The majority of the nurses had an average degree of continuity of patient care, and there was an accepted level of nursing documentation quality.
- The mean scores for the quality of nursing documentation and continuity of patient care were highest among nurses with nursing technical diploma degrees. The continuity of patient care and the quality of nursing documentation showed a highly statistically significant positive correlation.
- The majority of nursing documentation criteria, including utilizing different forms appropriately, correct use of abbreviations, confidentiality, and entries that are timed rationally, were all agreed upon by the nurses.
- All nurses agreed that almost of the nursing documentation criteria did not applied such as all entries are timed logically, correct use of abbreviations, use confidentiality, recording using clients own words and using different forms appropriately.

Recommendations

Based on the findings of the present study, the following recommendations were suggested:

- Holding workshop with the nursing staff about importance of nursing documentation.
- Apply nursing documentation policies to guide nurse's performance.
- Continuous supervision of nursing documentation through regular and periodic auditing is suggested, with constructive feedback, as well as disciplinary actions for defaulters and rewards for good achievers.
- The hospital administration should address the barriers to adequate nursing documentation identified by the nurses, and provide all needed resources.
- Provide opportunities to attend national and international nursing conferences to improve their knowledge about nursing documentation.
- Reinforce the application of the following sheets; laboratory investigation, discharge plan, nursing care plan, patient admission assessment.
- Nurse managers must ensure that nursing personnel apply all nursing documentation properly

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