

FOCUS CHARTING MODEL: EFFECT ON NURSING STAFF'S DOCUMENTATION SKILLS IN DIFFERENT MATERNITY HOSPITALS

Fatma Aboul Khair Farag^{1*}, Hanaa Azmi Saad²

¹Lecturers of Maternal and Neonatal Health Nursing, Faculty of Nursing, Fayoum University, Egypt

²Lecturer of Nursing Administration, Faculty of Nursing Modern University for Technology and Information, Egypt

*Corresponding Author Email: faf01@fayoum.edu.eg

ABSTRACT

Background: The importance of accurate timely documentation for mothers' who are very ill can significantly reduce the risk of misinterpretation related to poor communication. There is no means to confirm the provided care without complete documentation. For this trained nurses can properly understand the methods of documentation. Focus charting considers one of the models that improve the quality of nursing care. **Aim:** Study aimed to (1) Identify the most common nursing documentation errors. (2) Assess the effectiveness of applying the DAR model. (3) Determine the factors that hinder nurses for better documentation skills. **Design:** A quasi-experimental research design. **Setting:** The study was carried out at El-Fayoum Maternity unit in three hospitals. **Sample:** Convenience sample technique was used. The total numbers was 88 nurses; three patients' records were audited for each nurse. **Tool:** Three data collection tool were used. **Results:** there was a high statistical significant difference $p < 0.0001$ in the mean scores during the different periods of the study. Lack of information and practice about important aspect of documentation skills and performing non-nursing activities was the most important determining factors. **Conclusion:** Nurses' documentation skills were improved after program implementation. **Recommendation:** On-job training and follow up strategy should be implemented.

Keywords: *Nursing documentation, Documentation skills, Training program*

INTRODUCTION

All members of the health care team require accurate information about clients to ensure the development of an organized comprehensive care plan. The risk of inaccurate or incomplete documentation leads to care that is fragmented, ambiguous. Sometimes the comments in the chart may be funny which may lead to misinterpretation and may harm the patient. Although there is no clear evidence that comprehensive and clear clinical records improve care, it is clear that poor clinical records contribute to errors and substandard care (Perry & Potter, 2012; Care nurse, 2011).

Nursing documentation is defined as anything written or electronically generated client information obtained through the nursing process that describes the status of a client or the care and services given to that

client (ARNNL, 2010). Alternatively, the commonly used term for documentation is 'record-keeping'. A written record should be comprehensive description of the patient's health status and needs, as well as the services provided for the individual's care. Good documentation reflects not only quality for care but also evidence of each health care member's accountability in giving that care (College of Registered Nurses of British Columbia, 2007). In addition to poor documentation standards provoke the failure to detect patients who were clinically deteriorating (Hullin *et al.*, 2008; Oroviogicochea *et al.*, 2008; Prideaux, 2014).

The benefits of medical records are numerous. However, an accurate mothers' record improves the quality of care by enhancing effective communication across the continuum of care, assist patients to make future care decisions. Accordingly, it leads to protection

of the mothers from potential harm (Thoroddsen & Margareta, 2007). But failure to maintain the medical record according to the establishment standards may harness legal risk for the nurse if the records are reviewed by any legal or regulatory body. Written communication creates a permanent record that should be legible, clear, concise, concrete, and complete (Urquhart *et al.*, 2009).

In that context maternity nurses now a day are increasingly being made aware of the role of medical records in healthcare settings, and being urged to ensure their notes are also “meticulous”; from a legal perspective: “if it wasn't documented then it wasn't done” (Gaspar, 2011).

Regardless of the method used in nursing documentation, nurses are responsible and accountable for documenting mothers' assessments, interventions carried out, and the impact of the interventions on mothers' outcomes. Due to the high risk nature of maternity services being similar and overlapping in its diagnosis and symptoms, it is emergent to have well trained and qualified nurses capable of using an effective and easiest method to document the pertinent information specific to an individual/client/mothers within the boundaries health record (Ngxongo & Sibiya, 2013).

Focus charting (DAR) is one of those methods; it is a written note to provide documentation related to a specific focus. The focus might be a nursing diagnosis, patient problem, sign or symptom, change in patient's condition, or any significant event. The progress note is written in DAR format which stands for Data-Action-Response. Data: Subjective and/or objective. Action: Planned nursing interventions. Response: Description of the patient's response to nursing or medical care and progress in achieving outcomes/goals (Tranter, 2014).

According to Johnson, Jefferies, & Langdon, (2010) the quality of nursing documentation should meet a variety of criteria, one of them is patient-centered approach. This is reflected from implementing the nursing clinical judgment to improve the quality of care provision. Thus, using focus- charting will enhance nursing abilities.

Significance of the study:

Nursing records are considered as one of the

cardinal legal documents, which should embrace certain requirements. Planning of care with accurateness and completeness of documentation are essential components in determining problems and patient's progress as nurses track changes in a patient's condition, make decisions about needs, and ensure continuity of care. Application of focus charting (DAR) model in nursing care provision can contribute to improving nursing outcomes, and thereby help to address patients' complaints regarding the quality of nursing care. This study will assist in identifying the knowledge and practice deficits among nursing staff, and barriers that hinder the smoothness of care provided in selected Maternity hospital in rural areas which are characterized by substandard services.

Aim of the study is to:

Apply the DAR model for improving the nursing staff's documentation skills through:

1. Identify the most common maternity nursing documentation errors.
2. Application of DAR model and assess its effect on the quality of nurses' documentation skills.
3. Determine the factors that hinder nurses for better documentation skills.

Subjects and Methods:

Research Design:

A quasi-experimental research design was utilized in this study.

Research hypothesis:

- Application of DAR (Focus/problem-oriented) charting model will improve nursing documentation skills at Maternity Hospitals.

Research settings:

The study was carried out at El-Fayoum in-patient units Maternity hospitals (University, Senores, and General hospital). The reason for selecting those settings was the pre-assessment results; which indicated the extreme nurses' need to improve their performance especially related to the documentation skills. Moreover, these hospitals were chosen through the collaboration program which was conducted by Nursing Syndicate and Faculty of Nursing; Fayoum University for enhancing nurses' performance in the year 2015-2016.

MATERIAL AND METHODS

Sample:

1. Nurses sample:

Convenience sample technique was used for all maternity nurses in the three mentioned hospital. The total numbers of nurses were 88.

2. Patient documentation charts sample:

- A retrospective auditing for 100 patient's medical records was randomly selected before the application of the training program to assess common nursing documentation errors.
- A total of 264 records, three patient's medical records were audited for each nurse to ensure the quality of documentation skills post applications of the model.

Tools for data collection:

Three tools were used for data collection in the present study:

1. The First Tool:

Demographic Characteristics:

This tool was developed by the researchers to assess nurses' characteristics.

2. The Second Tool:

DAR Charting Observation Format (Audit Form):

This tool is adopted from Lisa Newton (2010) and was used by the researchers to assess the quality of nursing documentation. It consisted of three parts: The first part which is (D) data: contained 6 items; (A) action: 5 items and (R) response: 5 items.

Scoring System:

All the 16 items were reviewed and evaluated using three point Likert scale indicating (Completely done = 3 score, partially done = 2, and not-done = 1). The nurse was considered having satisfactory documentation skills level if her percent score was 70% or more and unsatisfactory documentation skills if her -score was less than 70% which scores (33.6) out of (48) degrees.

3. The Third Tool:

Factors Affecting Quality of Documentation Skills:

It was developed by the researchers to test the

factors that hinder the nurses to perform the required quality of nursing documentation.

Scoring system:

All the 10 items were reviewed and evaluated using two points scale indicating (agree = 1 score, disagree = 2 score).

Tools Content Validity and Reliability:

Internal consistency reliability was performed using Cronbach's Alpha analysis. It shows there is a very good internal consistency reliability ranged between 0.85 and 0.80.

Pilot Study

A pilot study was carried out on 10% of the study sample. No modifications were made on tools and program contents were made accordingly. Hence, pilot study sample was included.

Field Work/Procedure:

Official letter was issued to the hospital directors to get the permission for the data collection after explaining the nature and the purpose of the study. Data collection spent six months started from August, 2015 to January 2016. The current study was implemented on three phases (preparatory, implementation and evaluation phases):

First Phase: The Preparatory Phase: This Phase Included:

Retrospective auditing was conducted for the patients' documentation record to identify common documentation errors among nurses.

Second Phase: The Implementation Phase: This Phase Include:

Explanation of the DAR model for a period of two months, participants of this study were divided into 4 groups in the three hospitals, each group consists of about 7 nurses, and they attended one theoretical day and four days clinical training, conducted in their hospitals. The following different methods line lectures, group discussion, situational analysis were used along with teaching aids adding educational video entitled "DAR charting". Nurses were taught the method of charting in the DAR model with examples.

Third Phase: The Evaluation Phase:

a. Evaluation of the improvement of nurses' documentation skills and actual practice in applying DAR model. This took one month.

b. Then each nurse was evaluated after 2 month (follow up) using tool II and tool III. This took one month.

Statistical Analysis:

Statistical analysis was fulfilled using the statistical package for social sciences (SPSS) version 20. Data were presented using descriptive statistics in the form of frequencies and percentages. Parametric inferential statistics were used as mean score and standard deviation, analytical statistics were conducted

Ethical Consideration:

An official permission was obtained from the hospital director as well as acceptance of the nurses to participate in the study. They were assured that their answers were confidential and will have no effect on their appraisal with clear explanation of the activities required from them to share in the program.

Limitation of the Study:

Unavailability of some formats, the space left for writing the nursing and medical prescription were not enough and maternity diagnosis and condition by its nature were changeable and sequential.

RESULTS

Table 1: Frequency Distribution of Nurses According to their Demographic Data (N=88)

Nurses	No	%
Job position:		
- Staff nurse	76	86.4
- Unit manager	12	13.6
Age:		
- 18<21	60	68.2
- 21<25	10	11.7
- 25<29	3	3.4
- 29<33	6	6.8
- 33<37	5	5.7
- >37	4	6.5
Educational level:		
- Technical Nursing school	66	75
- Nursing diploma + specialization	4	4.5
- Technical nursing associate diploma	14	20.4
- Bachelor nursing	4	4.5
Years of experience:		
- < 1 year	4	4.5
- 1-<5year	10	11.3
- 5-<10 year	28	31.8
- 10>	46	52.2
Previous training:		
- No	88	100
- Yes	0	0.0

Table 1 illustrate the demographic data of the studied nurses, it showed that 86.4% are staff nurses, 68.2% aged between 18-20 years. Regarding level of education 75% were from technical nursing school, as regard years of experience 52.2% were less than 10 years. While, all of them 100% didn't attend previous training related to nursing documentation.

Table 2: Frequency Distribution of Nurse's Response about the Availability of Documentation Formats (N=88)

Types of Nursing Formats	Available and in use		Available and not used		Not available	
	No	%	No	%	No	%
1. Vital signs chart	88	100	0	0	0	0
2. Medication administration	88	100	0	0	0	0
3. Fluid balance chart	70	79.5	4	4.5	14	15.9
4. Shift report sheet	88	100	0	0	0	0
5. Insulin administration sheet	84	95.4	0	0	4	4.5
6. Heparin administration sheet	22	25	0	0	66	75
7. Initial assessment sheet	0	0	0	0	88	100
8. Nursing care plan	0	0	0	0	88	100
9. Discharge plan	0	0	0	0	88	100
10. Changing position sheet	34	38.6	0	0	54	61.4
11. Risk for fall assessment sheet	0	0	0	0	88	100
12. Incident report form	0	0	0	0	88	100

Table 2 elaborate nurses' response about the availability of documentation formats, all of the studied group 100% assemble that vital signs chart, medication administration and shift report sheet were available and in use. Meanwhile, initial assessment sheet, nursing care plan, discharge plan, risk for fall assessment sheet and incident report form were not available for the same percentage of the nurses.

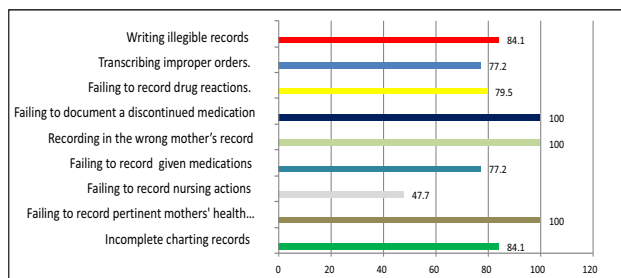


Figure 1: Frequency Distribution of Common Charting Error Regarding Standard of Nursing Documentation (n=100) Common Charting Errors

Figure 1 showed that common charting errors related to nursing documentation, retrospective analysis was done for auditing medical charting records. It showed that failing to record pertinent health or drug information, recording in the wrong mother's medical record, failing to document a discontinued medication was the common errors in nurses documentation chart by all nurses (100%), while, failing to record nursing actions had the least 47.7%.

Table 3: Frequency distribution of the quality of Nurses' Documentation Skills BEFORE implementation of the program (N=88)

DAR Charting Items	Completely Done = 3		Partially Done = 2		Not Done =1	
	No	%	No	%	No	%
(D) Data:						
1. Document any significant physical assessment findings. It must be clear, concise and comprehensive data regarding mother's problems.	4	4.5	8	9.1	76	86.4
2. Select pertinent objective data in assessments as identified in expected outcome in care plan.	0	0.0	48	54.5	40	45.5
3. Use of subjective data from mother and it must be optional pertinent selection from the nurses' perspectives.	0	0.0	48	54.5	40	45.5
4. Documentation of mother's response toward intervention including abnormal reaction and follow up actions taken.	0	0.0	16	18.2	72	81.8
5. Documentation of the observation only to avoid uncertain data.	0	0.0	12	13.6	76	86.4
6. Verify what was actually taught to mother/relative on medical record.	0	0.0	4	4.5	84	95.5
(A) Action:						
7. Record patient's condition based on the nurses' assessment and evaluation.	0	0.0	4	4.5	84	95.5
8. Ensure that the specific action were based on individual mothers' needs.	0	0.0	12	13.6	76	86.4
9. Write down date and time of the care plan and future interventions.	0	0.0	4	4.5	84	95.5
10. Identify who provide the care in case of additional/change/discontinuation protocol.	0	0.0	8	9.1	80	90.9
11. Use different patients' file sheets correctly and completely according to each mother diagnosis.	0	0.0	88	100.0	0	0.0
(R) Response:						
12. Nurses' documentation must exhibit and reflect mothers' current status.	0	0.0	12	13.6	76	86.4
13. Give a summary of mothers' progress and response to therapy	0	0.0	8	9.1	80	90.9
14. Ensure that nursing documentation is legible and non-erasable.	0	0.0	48	54.5	40	45.5
15. Assist others from health team in formulating an effective nursing care plan through accurate nursing documentation.	0	0.0	12	13.6	76	86.4
16. Writing signatures or initials and professional designation.	0	0.0	88	100.0	0	0.0

Table 3 showed that 95.5% among studied nurses didn't document items related to verify what was actually taught to the mother/relative on medical record. The nurses did not records patient's condition based on their assessment and evaluation and they were not writing down the date and time of care plan and the future interventions. About 90.9% did not document the items identifying the individual providing the care in case of additional/change/discontinuation protocol, giving summary of mothers' progress and response to therapy and others like items related to exhibit that nurses' documentation reflect mothers' current status.

All nurses (100%) partially use different patients' file sheets correctly and completely according to each mother diagnosis, indicated by signatures or initials and professional designation. Approximately 54.5% of the nurses were partially selected pertinent objective data in assessments as identified in expected outcome in care plan. They used subjective data from mother and optional pertinent selection from the nurses' perspectives. Only 77.3% of the nurses completely assist others from health team in formulating an effective nursing care plan through accurate nursing documentation.

Table 4: Frequency distribution of nurses according to the quality of documentation skills IMMEDIATELY AFTER implementation of the program (N=88)

DAR Charting Items	Completely Done=3		Partially Done=2		Not Done =1	
	No	%	No	%	No	%
(D) Data:						
1. Document any significant physical assessment findings and must be clear, concise and comprehensive data regarding mother problems.	76	86.4	12	13.6	0	0.0
2. Select pertinent objective data in assessments as identified in expected outcome in care plan.	8	9.1	80	90.9	0	0.0
3. Use subjective data from mother and must be optional pertinent selection from the nurses' perspectives.	76	86.4	12	13.6	0	0.0
4. Document mother response toward intervention including abnormal reaction and follow up actions taken.	76	86.4	12	13.6	0	0.0
5. Document what was observed to avoid uncertain data.	76	86.4	12	13.6	0	0.0
6. Verify what was actually taught to the mother/relative on medical record.	60	68.2	28	31.8	0	0.0
(A) Action:						
7. Record patient's condition based on the nurses' assessment and evaluation.	72	81.8	16	18.2	0	0.0
8. Ensure that the specific action based on individual mothers' needs.	68	77.3	20	22.7	0	0.0
9. Write down date and time of the care plan and future interventions.	76	86.4	12	13.6	0	0.0
10. Identify who provide the care in case of additional/change/discontinuation protocol.	56	63.6	32	36.4	0	0.0
11. Use different patients' file sheets correctly and completely according to each mother diagnosis.	88	100.0	0	0.0	0	0.0
(R) Response:						
12. Exhibit that nurses' documentation reflect mothers' current status	20	22.7	68	77.3	0	0.0
13. Give a summary of mothers' progress and response to therapy.	44	50.0	44	50.0	0	0.0
14. Ensure that nursing documentation is legible and non-erasable.	76	86.4	12	13.6	0	0.0
15. Assist others from health team in formulating an effective nursing care plan through accurate nursing documentation.	80	90.9	8	9.1	0	0.0
16. Writing signatures or initials and professional designation.	56	63.6	32	36.4	0	0.0

Table 4 showed that, all nurses applied items related to using different patients' file sheets correctly and completely according to each mother diagnosis. About 90.9% of the nurses assist others from health team in formulating an effective nursing care plan through accurate nursing documentation, 86.4% of the nurses completely document clear and significant physical assessment findings, which are concise and comprehensive data regarding mother

problems. The nurses use subjective data from mother with optional pertinent selection from the nurses' perspectives, document mother response toward intervention including abnormal reaction and follow up actions taken, document what was observed to avoid uncertain data. About 90.9% partially followed items related to selecting pertinent objective data in assessments as identified in expected outcome in care plan.

Table 5: Frequency distribution of nurses' according to the quality of documentation skills three months after implementation of the program (N=88)

DAR Charting Items	Completely Done=3		Partially Done=2		Not Done =1	
	No	%	No	%	No	%
(D) Data:						
1. Document any significant physical assessment findings which must be clear, concise and comprehensive data regarding mother problems.	64	72.7	24	27.3	0	0.0
2. Select pertinent objective data in assessments as identified in expected outcome in care plan.	64	72.7	24	27.3	0	0.0
3. Use subjective data from mother and be optional pertinent selection from the nurses' perspectives.	16	18.2	72	81.8	0	0.0
4. Document mother response toward intervention including abnormal reaction and follow up actions taken.	64	72.7	24	27.3	0	0.0
5. Document what was observed avoiding uncertain data.	20	22.7	68	77.3	0	0.0
6. Verify what was actually taught for mother/relative on medical record.	16	18.2	68	77.3	4	4.5
(A) Action:						
7. Record patient's condition based on the nurses' assessment and evaluation.	44	50.0	44	50.0	0	0.0
8. Ensure that the specific action based on individual mothers' needs.	0	0.0	68	77.3	20	22.7
9. Write down date and time of the care plan and future interventions.	40	45.5	28	31.8	20	22.7
10. Identify who provide the care in case of additional/change/discontinuation protocol.	16	18.2	68	77.3	4	4.5
11. Use different patients' file sheets correctly and completely according to each mother diagnosis.	84	95.5	4	4.5	0	0.0
(R) Response:						
12. Exhibit nurses' documentation to reflect mothers' current status.	16	18.2	72	81.8	0	0.0
13. Give a summary of mothers' progress and response to therapy	44	50.0	44	50.0	0	0.0
14. Ensure that nursing documentation is legible and non-erasable.	64	72.7	24	27.3	0	0.0
15. Assist others from health team in formulating an effective nursing care plan through accurate nursing documentation.	68	77.3	20	22.7	0	0.0
16. Writing signatures or initials and professional designation.	52	59.1	36	40.9	0	0.0

Table 5 illustrated that 77.3% completely assist others from health team in formulating an effective nursing care plan through accurate nursing documentation, and 72.7% of the nurses document any significant physical assessment findings regarding mother health, select pertinent objective data in assessments as identified in expected outcome in care plan, document mother response toward intervention including abnormal reaction and follow up actions taken to ensure that nursing documentation is legible and non-

erasable. Meanwhile, use subjective data from mother and this data should be relevant from the nurses' perspectives and exhibit that nurses' documentation reflects mothers' current status. This was partially done by 81.8% of the nurses. In addition to the items related to document observed and avoiding uncertain data, verification must be made regarding what was actually taught to mother/relative on medical record to ensure that the specific action based on individual mothers' needs. About 77.3% among studied nurses followed this.

Table 6: Analysis of variance in the mean scores of the quality of nurses' documentation skills during the different periods (N= 88)

Items	Before	Immediately After	Three months after	Freedman Test	P Value
	M±SD	M±SD	M±SD		
Total mean score	29.7±1.4	71.2±3.6	49.2 ± 3.6	54.7	**0.0001

Table 6 illustrated that there was a high statistical significant difference $p < 0.0001$ in the mean scores of the study nurses' documentation skills during the different periods of auditing. The highest mean score 71.2 ± 3.6 was shown immediately after program implementation, while the mean score decline three months after implementation of the program 49.2 ± 3.6 . The least mean score pre-program reflect inadequate documentation skills 29.7 ± 1.4 .

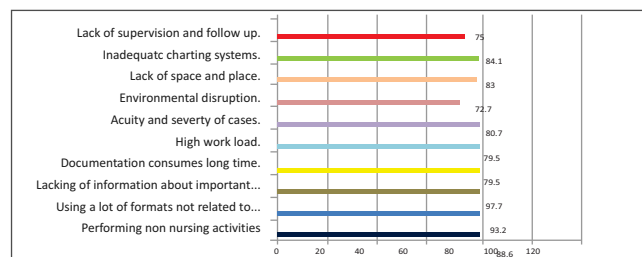


Figure 2: Frequency Distribution of Most common Factors Influence Quality of Nursing Documentation from Nurses View (N=88) Factors Influence Quality of Nursing Documentation

Figure 2 revealed that 97.7% of nurses agree that lacking of information about important aspect of documentation was the most factors influence quality of nursing documentation followed by using a lot of formats not related to nursing documentation 93.2%, performing non-nursing activities 88.6%, while, the least was 72.7% environmental disruptions among the studied group.

DISCUSSION

There is a dramatic growth and challenges in healthcare expenditures due to the acuity levels and diversity of maternal cases. While the healthcare organization continuing to improve the quality of team members services, still some serious areas need an intense efforts. One of those areas is the issues related to nursing documentation that need to be urgently addressed. Different nursing documentation methods such as DAR are used to provide frameworks that guide nursing documentation.

As regards to demographic data, the findings revealed that more than half of the studied group was aged between 18<21, more than three fourth of the

nurses were staff nurses, two third of them were technical nursing diploma student. The result of current study may reflect the important determinant of lower skill level of nurses' education, more than half of them were less than 10 years experience in the nursing field. This may illustrate nurses' custom and use of daily nursing documentation without referring to standards and regulation, and all of them didn't receive any training program related to nursing documentation. In this regards, researchers viewed that the majority of the study sample use their limited experiences in documentation without any supervision or nurse manager's direction. This can lead to great mistakes and document ambiguity. Whittaker *et al.*, (2009), in similar study noted that nursing documentation is inefficient due to unqualified nursing staff with only basic training. Therefore the documentation is characterized by incomplete handwriting and illegible information that make them hard to read and interpret.

Concerning frequency distribution of nurse's response about the availability of documentation formats, the present study showed that all nurses agree about the absence of some important charts as initial assessment sheet and nursing care plan, which reflect nurse's perception about the importance of nursing record in facilitating nurses' handover, communication among health team members and the continuity of care. This is in agreement with the study of Prideaux, (2014) who mentioned that proper nursing documentation with right record address with quality of care is considered as part of medico-legal requirement, research and quality assurance purposes.

In relation to common charting errors, the study emphasizes on the importance of auditing as part of the quality control process. It was disclosed that all the nurses failed to record pertinent information and sometime recorded wrong mother's medical information in addition to their failure to document discontinued medication which may lead to complication of extra medication administration. This might be due to lack of system/policy, inadequate time and place to document, high workload and environmental disruption. This is in correspondence with the work of Wan *et al.*, (2011), who mentioned that in several studies nursing documentation records were insufficient due to various reasons regarding provision of nursing care.

Regarding nurses' documentation skills, before implementation of the program, this study points out that the majority of the nurses miss the literalism of most items of the nursing documentation. More than three fourth of nurses didn't document any significant physical assessment findings, didn't record what was observed based on mothers' needs, inaccurate documentation that didn't reflect mothers' current status, and their documentation couldn't assist others in formulating an effective nursing care plan. This might be due to lack of training regarding proper documentation and also failure of consensus among nurses and health team on the method of documentation as perceived by nurses. This finding is in congruence with Rocha and Trevizan, (2009), who revealed that lack of training and qualification about nursing documentation skill at maternity units did not permit the achievement of nurses' goals, which in turn does not allow effective communication among team members, nor ethical-legal support.

Related to the quality of nursing documentation immediately/three months after implementation of the program, study proved that there is a marked improvement in nurses' skills as the nurses' results were fluctuated between completely and partially done. This may be due using symbols (DAR) which organize nurses' critical thinking toward effective nursing documentation and lead the nurse to integrate the writing progress notes taking into consideration of the mother care plan in identifying the problems, corresponding to their actions and evaluating their progress in timely focused manner based on incidental notes. This is in accordance with Blair (2012) who stated that the focus charting (DAR) identified specific problems during assessment; actions, and responses which in turn allow information to be easily located within the progress note.

Concerning analysis of variance in the mean scores during the different periods of the study, finding indicated that there was a high statistical significant difference $p < 0.0001$ in the mean score of the nurses' skills. This reflects the nursing staff convenience about the importance of education and follows up. The results can appear post training with the increase of the mean score three month later. This is in congruent with the work of Spencer and Lunsford, (2010) who mentioned that using well designed training program for focus charting method

can provide a clear framework that fits well with the needed requirements.

Regarding factors influencing the quality of nursing documentation from nurses' perspectives, study mentioned that about all of the nurses agreed that lack of information about important aspect of documentation; performing non-nursing activities and using different formats are the main causes for not complying with nursing documentation. In researchers' point of view, shortage of nurses in the Egyptian culture and the intensity of work in maternity hospital (nurses perform their duties and non nursing activities) lead nurses to decrease her value and fail to use proper and efficient documentation. This is in accordance with Jane, (2011), who stated that nurses encounter major barriers to documentation including time constraints, mismatches between staffing resources and work load, lack of clear guidelines for completing documentation, ambivalence towards documentation, and the bureaucratic systems and institutional policies are associated with nurses' failure to maintain accurate documentation.

CONCLUSION

The study concluded that some defects in nursing documentation skills are found, deficiencies in what and how to document is clear, ignorance to use proper method to facilitate the way of communication is somewhat little. Thus the present study confirms the need for training program implementation and follow up strategy to improve nurses' knowledge and practice toward proper and effective nursing documentation skills.

RECOMMENDATIONS

The study recommended that:

1. Written policies related to nursing documentation should be available and must be activated all over the maternity hospitals' unit.
2. Managers should equip maternity hospitals with different kinds of documentation format that facilitate communication and continuity of care.
3. Nursing documentation should be covered widely and in-depth with nursing curriculum in all the nursing schools.
4. On-job training and follow up strategy should be implemented for increasing awareness about

REFERENCES

- ARNNL-Association of Registered Nurses of Newfoundland and Labrador (2010). *Documentation standards for registered nurses*. St. John's, NL.
- Blair, W. & Smith, B. (2012). Nursing documentation: frameworks and barriers. *Contemporary Nurse*, 41(2), pp160-168.
- Carenurse (2011). Did I say that? Retrieved from: <http://www.carenurse.com/humor/bloopers.html>
- College of Registered Nurses of British Columbia (CRNBC) (2007). Nursing Documentation. Glossary. Retrieved from: <https://www.crNBC.ca/glossary/Pages/Default.aspx>
- Gasper, A. (2011). Improving record-keeping: important lessons for nurses. *British Journal of Nursing*, 20(14), pp 886-7.
- Hullin, C., Monaghan, V., Searle, C. & Gogler, J. (2008). The Chaos in Primary Nursing Data: Good Information Reduces Risk [online]. In: Grain, Heather (Editor). HIC Conference: Australias Health Informatics Conference; The Person in the Centre, Melbourne Convention Centre. Brunswick East, Vic.: Health Informatics Society of Australia, pp109-113. Retrieved from: <http://search.informit.com.au/documentSummary;dn=385155869901283;res=IELHEA>
- Jane, T. (2011). An Analysis of Nursing Documentation as a Reflection of Actual Nurse Work, Life and Health Library, CBS Interactive.
- Johnson, M., Jefferies, D. & Langdon, R. (2010). The Nursing and Midwifery Content Audit Tool (NMCAT): a short nursing documentation audit tool. *Journal of Nursing Management*, 18(7), pp 832-845.
- Newton, L. (2010). Hospital for Special Care: Dar Charting Guidelines. Retrieved from: http://hfsc.org/sites/default/files/student_orientation/DAR_Charting_Guidelines.pdf
- Ngxongo, T. S. P. & Sibiyi, M. N. (2013). Factors influencing successful implementation of basic ante natal care in eThekweni Municipality. *Curationis*, 36(1), pp 7.
- Oroviogicoechea, C., Elliott, B. & Watson, S. (2008). Review: evaluating information systems in nursing. *Journal of Clinical Nursing*, 17(5), pp 567-575.
- Perry, A. G. & Potter, P.A. (2012). *Canadian fundamentals of nursing*. Toronto, ON: Elsevier Canada.
- Prideaux, A. (2014). Issues in nursing documentation and record-keeping practice. *British Journal of Nursing*, 20(22), pp 1450-1454.
- Rocha, E. S. B. & Trevizan M. A. (2009). Quality management at a hospital's nursing service. *Revista Latinoam Enferm*. 17(2), pp 240-5.
- Spencer, J. A. & Lunsford, V. (2010). Electronic documentation and the caring nurse-patient relationship. *International Journal for Human Caring*, 14(2), pp30-35.
- Thoroddsen, A. & Margareta, E. (2007). Putting policy into practice: pre- and posttests of implementing standardized languages for nursing documentation. *Journal of Clinical Nursing*, 16(10), 1826Y1838.
- Tranter, S. (2009). A hospital wide nursing documentation project. *Australian Nursing Journal*, 17(5), pp 34-36.
- Urquhart, C., Currell, R., Grant, M. J. & Hardiker, N. R. (2009). Nursing record systems: effects on nursing practice and healthcare outcomes. *The Cochrane Database of Systematic Reviews*, 21(1), CD002099.
- Wan, N., Yu, P., David, Hailey, D. & Oxlade D. (2011). Developing Measurements of the Quality of Electronic versus Paper-based Nursing Documentation in Aged Care Homes. *Journal of Health Informatics*, 6(1), pp 1-6.
- Whittaker, A. A., Aufdenkamp, M. & Tinley, S. (2009). Barriers and facilitators to electronic documentation in a rural hospital. *Journal of Nursing School*, 41(3), pp 293-300.