DOI: https://doi.org/10.53350/pjmhs2023174173

ORIGINAL ARTICLE

Barriers Face by Nurses Regarding Proper Nursing Documentation at Teaching Hospitals Peshawar Pakistan - A Qualitative Study

AFROOZ BIBI[1], NAJMA NAZ[2], SARDAR ALI[3], BARKATULLAH[4], MUHAMMAD NAEEM AWAN[5], AMIR SULTAN[6]
[1]*Lecturer , Northwest College of Nursing Peshawar Pakistan*
[2,3]*Assistant Professor – Institute of Nursing Science Khyber Medical University Peshawar Pakistan*
[4]*Principal– Northwest College of nursing Peshawar Pakistan*
[5]*Administration: Saidu group of teaching hospital swat KPK*
[6]*NursingDdepartment – Saidu Group Of Teaching Hospital Swat Khyber Pukhtankhwa Pakistan*
Correspondence to Amir Sultan, Email: amirsultan204@gmail.com

ABSTRACT

Aim: To explore the barriers faced by nursing staff in proper nursing documentation at the tertiary care hospital of Peshawar Pakistan.
Methodology: A qualitative case-study design was used, having a 12 sample size as a result of data saturation, while the data was collected using purposive sampling technique in the two tertiary care hospital of Peshawar. The data was collected in the November 2022. A semi-structure interview was conducted with each participant using a topic guide where the interview lasts for 60 to 90 minutes. The data was translated from Urdu to English, while the thematic analysis based on Braun and Clarke six steps used for analysis. The study was approved by the advance studies and research board and ethical review board of Khyber medical university Peshawar.
Results: Four themes were emerged that was individual issues, incompetence's in documentation, technical issues and organizational issues.
Conclusion: The study indicates that documentation is vital component of quality care that are affected by shortage of staff, lack of training, heavy workload, managerial issues like verbal commands, ambiguous writing, individual issues like lack of motivation, coordination, time and knowledge, and software and hardware issues create challenges for nurses in their documentation.
Keywords: Nursing documentation, nursing practice, barriers, nursing staff

INTRODUCTION

Quality health care consists of an efficient, cost-effective, safe, patient-centered, and accessible environment with the promise of ongoing efforts for improvement[1]. Nurses play a vital role in maintaining and promoting quality care, while documentation is the evidence that displays the nurse's performance. To achieve set goals regarding patient safety, it is pivotal to keep the clinical record of the patient to understand the patient's overall profile of delivered and intended care and provide the best possible care to improve patient safety through proper and accurate documentation[2].

ND means to record what services were provided to the patient and when they occurred, it may be written on paper or electronically[3]. Furthermore, nursing documentation is important for safe, ethical, and effective nursing practice[4]. Despite the fact that it may appear to be time-consuming, documentation is an essential part of the work that nurses do in all roles and settings. ND is a requirement for nursing practice, serves as evidence of care, provides firsthand accurate data, and reflects the action nurses have taken for the patients[5]. Moreover, it verifies that the nurse has completed their professional duty of care. Appropriate documentation is not only a channel of communication but also provides important information about the patient, his changes in health status, and also evaluates the nurses' ability to provide excellent care[6].

The code of professional conduct endorses good records for nurses to communicate with other health care professionals [7]. Studies show that documentation is associated with patient morality[8]. A lot of research studies have shown that nurses all over the world do not properly document their work, despite it being one of their key responsibilities[9]. In practice, healthcare professionals typically use two methods to record nursing documentation (ND) data, in both handwriting and electronic records, depending on the kind of clinical setting and the systems used to keep patient records. According to reports, nursing records are frequently insufficient, inaccurate, and of poor quality[10].

Received on 10-12-2022
Accepted on 05-04-2023

In a developing country like Pakistan, documentation is an important element of nursing practice. There are also many hospitals where the process of documentation is affected by certain factors like; inadequate knowledge regarding documentation, lack of training, lack of time, patient work load, and insufficient record materials[11]. The documentation of patient care takes up about 15% to 25% of each shift, according to estimates[12]. These data depend on the structure of the health care system. In developed countries, the number of assigned patients in wards is approximately 8 to 10, but in developing countries like Pakistan, the number of assigned patients is closer to 20 to 30, especially in public sector hospitals. In those circumstances, nurses found it difficult to administer medication or record documentation. ND is considered a vital instrument to determine the overall quality of services, therefore the health regulatory authorities' emphasis on documentation.

Nursing care is likely to break up and become primarily established on organizational routines and schedules if no modified care plan is carefully monitored[13].The provision of ND is a tool that includes providing legal proof of care: the efficacy and efficiency of patient care provide facts for a variety of purposes such as determining an organization's economic status, maintaining standards and quality, and collecting and analyzing data. Furthermore, it also provides a catalogue for the enhancement of understanding and awareness in clinical and nursing education[14].

The aim of this research was to investigate the ND and its barriers in a tertiary care hospital in Peshawar, Pakistan.

METHODOLOGY

The design used for the study was a qualitative case study. Case studies may make it easier to describe, comprehend, and explain a research issue or circumstance, and they also give the researcher the chance to acquire a comprehensive understanding of the issue at hand[15].

Study population, setting and Sample size: This study's population consists of nurses who work and document data on a daily basis for each shift. The study setting was two hospitals in Peshawar, Pakistan: Hayatabad Medical Complex and Khyber

Teaching Hospitals. Both hospitals have the status of government hospitals but are now operating under the status of medical teaching hospitals (MTI) through a shared governance management style. Both tertiary care hospitals have introduced hospital management information systems (HMIS) for documentation.The sample size of 12 was selected through data saturation. Data saturation occurs when there is enough data to duplicate the study, new data cannot be collected, or additional coding is no longer possible[16].

Sampling technique: A purposeful sampling technique will be used for the sample collection and data collection**.** To make the most of scarce resources in qualitative research, deliberate sampling is a frequent technique for identifying and selecting samples with lots of information[17].

Study duration, inclusion and exclusion criteria: The duration of the study was completed in a months after approval from the graduated committee (GC), the advance research board (ASRB), and the ethical review board (ERB).

The criteria for this study were:

- Registered nurses (RN), who are actively involved in patients' care
- Nurses who have at least 1 year of experience giving care to patients.
- While the exclusion criteria were:
- Nurses who refuse to participate in the study
- Nurses who are absent or on long leave.

Data collection Procedure: Permission was obtained from the graduated committee (GC), the advance studies research board (ASRB), and the hospital director.To consecutively inform the participants about the various aspects of this study, a face-to-face semi-structured interview was conducted. A few open-ended questions from the participants were allowed with the help of the topic guide for in-depth information and to communicate their experience and perception.The interview lasts from a 60 to 90 minutes. Nurses were questioned to define their work day at the beginning of each interview, then the process of documentation was how you record the nursing documentation (ND), the answers were recorded and translated to English word by word. The recorded words were entered and compared with previous recordings to determine which to remove in order to improve precision and give the researcher more control over the received data.At the end of each interview, the collected data was readied word for word many times for understanding of the content and division of text into meaning.The data was categorized primary in codes then into subcategorizes based on similarities and differences[18].

All participants' consent has been obtained, and their interview documents have been kept confidential in order to uphold ethical standards in the research.

Data Analysis procedures: The transcription of the data, it was read and reread to form the primary concept in order to ensure a thorough understanding of the collected data. The categories were used to create the themes, and participant quotes were used to confirm them.Thematic analysis of the data was carried out through Braun and Clarke's six phases.

Ethical Consideration: The study was approved by the advance research board and the ethical committee of Khyber Medical University, and then permission was obtained for data collection from the director of the Institute of Nursing Sciences at Khyber Medical University. Furthermore, permission was obtained from the hospital administration of Khyber Teaching Hospital and Hayatabad Medical Complex for data collection from nursing staff. The study's objective and purpose were explained to each participant, and then consent was obtained from each member of the nursing staff, stating that their participation was voluntary, they would not receive any direct profit from the study, and they had the right to leave the study at any time, and that their data would only be used for data analysis and would not be shared within the study to maintain confidentiality.

Trustworthiness: The quality, authenticity, and truthfulness of qualitative research findings are referred to as "trustworthiness. It has to do with how confident readers are in the outcomes. The four dimensions of credibility—dependability, conformability, and transferability—are the foundation of the current study's validity and reliability[19]. Trustworthiness is an indicator, regarding the quality of the study, that the researcher has conducted the study correctly.In this study, continuous engagement with the participants and research data were established to maintain credibility.In this study, information about the questions was shared with other nurses who were not involved in the research, and then their experiences were matched for transferability.To evaluate the conformability of this study, everything that was done was accurately recorded, including the stages of the work and how the data were gathered.The data was integrated to select multiple samples and different opinions from which to draw conclusions based on the evaluation of coordination among the results to promote dependability.

RESULTS

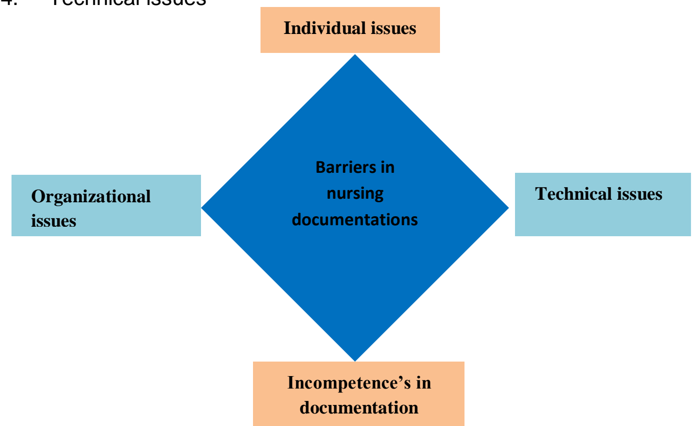
The number of female nurses (66.6%) in the total of 12 participants was in the majority at n= 8, compared to the number of male participants 4(33.3%). In the category of education, the majority of the participants were 2 year post-RN staff 9(75%) and 4 year BSN degree nurses 3(25%) (Table 1).

Table 1: demographic data of the participants

Characteristics		Frequency	Percentage
Gender	Male	4	33.3
	Female	8	66.6
Age	< 25 years	2	16.6
	26 to 35 years	9	75
	> 36 years	1	8.3
Education	BSN	3	25
	Post-Rn	9	75
	MSN	0	0
Experience	Less than 5 years	8	66.6
	5 – 10 years	2	16.6
	11 and above	1	8.3
Facility	HMC	7	58.3
	KTH	5	41.6

Result description: Through thematic analysis from the data collected from the patient through interviews were analyzed and were coded. Initially 185 codes were generated, which was categorized in 13 categorizes and 4 themes were generated. Four main themes were generated from the data

1. Individual issues
2. In-competencies in documentation
3. Organizational challenges
4. Technical issues



Final Themes and its subthemes of this study

Table 2: Major themes and subthemes

Major Theme	Subtheme	Codes
Individual barriers	Lack of motivation	No motivation from management
	Lack of coordination	Lack of coordination among staff and management
	Lack of time	Lack of time
	Lack of knowledge	Lack of knowledge
In-competencies in documentation	Managerial issues	Lack of monitoring Lack of control
	Unclear format	Low Typing speed Ambiguous writing Spelling mistakes
	Verbal order waste more time	Verbal orders take more time
Technical issues	Software issues	Link down Software updates
	Hardware issues	Lack of technical facility Power break down System deficiency
	Data issues	Data lost
Organizational challenges	Resources scarcity	Staff shortage Heavy workload
	Lack of training	Lack of training
	Dual documentation	Documentation burden

Theme One: Individual Issues: This theme emerged in the study as a result of participant assessments of the challenges nurses encounter when documenting their work. In this theme, limitations to motivation, coordination, and time were noted.

Lack of Motivation: According to nurses, hospital management did not encourage personnel to document well. Management and workers are not coordinated enough.

Some of the participants expressed their concern over the lack of motivation from the management side regarding the documentation process. The hospital management did not encourage staff members to document patient data in a proper way.

The hospital administration doesn't motivate those staff who document well, so demotivation also became a barrier to documentation. If the administration decides and announces that each nurse's documentation will be monitored over a period of time, and the best performers will be rewarded with an appreciation certificate or have it added to their performance appraisal (P.2).

Many of our staff practice is very good, and they also take it seriously, but some of the staff with whom I work don't take it seriously and only maintain records relevant to patients, or sometimes they skip it and no one warns or advises them. (P 5)

Lack of Coordination: Teamwork is always effective in making difficult decisions, especially in work load management, but coordination is required among them. Without coordination, teamwork did not build to achieve the desired outcome. Coordination among team members is essential for effectively dealing with overcrowded situations, but lack of coordination creates challenges in the documentation process. Increased patient flow makes work burdensome for nurses, and the hospital administration even did not acknowledge the efforts of staff members to document each and every event. They needed to be appreciated in terms of different aspects, but a lack of appreciation is also a big challenge for nurses and could create hurdles in the documentation process in such conditions.

The flow of patients is also a huge barrier. Sometimes teamwork is better, but a lack of coordination among the staff also creates barriers. (P.3)

In my previous experience, I recognized that when a patient's burden increased, working as a team with other staff was required so that they could handle this difficult situation, but here I saw a lack of coordination among nurses and with their administration (P. 4).

Lack of time

Keeping records of everything a nurse does for a patient takes time, and professional nurses have found that keeping good records is difficult due to time constraints. There are numerous forms that must be filled out manually, which presents a problem for nurses because they frequently forget to do so, leading to incomplete recording. As a result, good documentation took time, which kept nurses away from their patients or caused them to spend less time with them.

When new patients are received in the ward, assessing them for their admission, preparing their file, and entering their receiving notes take a lot of time. Attending a new patient for care and medication is difficult compared to an admitted patient due to intravenous cannulation for administering the medication or fluids and lab investigations. Due to a lack of time, performing the care of the already admitted patients and adding several new patients made it difficult for us to document properly (P.7).

Documentation is difficult; we don't have it, and it consumes so much time that it is challenging to write everything (P12).

Lack of knowledge: The nurses are trained during their academic program and internship about documentation and medical terminologies so that they can improve their competencies.

As I observe, many of our new staff don't know how to document or write in an electronic system or don't understand the terminology, so they skip or wait for some other staff to complete the documentation (P3).

Theme 2: In-competencies in documentation

In this theme, numerous challenges were identified based on the participant's statement related to documentation inadequacies. Managerial issues, verbal commands, and unclear formats were the common flaws raised in this theme.

Managerial issues: The belief that one can influence events or situations is a general explanation for perceived control, while the monitoring of a supervisor or team leader that the nurses assign in their ward is documenting everything without forgetting some events, vitals, or medication. In the majority of wards, this practice was neglected, but some nurses experienced it and considered it useful for documentation in a timely manner.

I believe that a lack of monitoring in the documentation prevented both positive and negative efforts to improve the documentation in this collection from being observed (P.2).

As I observed, control is available in some units that I experienced as being very effective over documentation, but the issue is discontinuation that leads to inconsistency in quality documentation (P. 5).

Unclear format: A health information system is designed to enter patient data, manage it, and analyses it appropriately, but personnel skills are essential to running this system effectively. Typing speed is one of the most prominently identified best uses of the system, especially in work burden management. These skills are developed by introducing training programs before and after the installation of the health information system. Staff who are still unfamiliar with the system have slow typing speeds, which could make documentation difficult for them.Paperwork needs to be clear and concise for better communication. Inappropriate handwriting and spelling mistakes make it difficult for the reader to understand and could cause some serious damage.

Electronic medical records require typing practice so staff unfamiliar with computers faces difficulties. (P.3)

The poor spelling and rough writing of the doctors made it difficult for us to obey the prescription. (P.4)

Spelling mistakes and inappropriate writing are also barriers in our documentation. (P.5)

Verbal orders take more time: Most of the participants stated that following verbal orders in emergency conditions and waiting for a long time to enter the prescription was because verbal orders are not routinely followed in our hospital. As a result, it wastes the majority of our time and occasionally fails to document after proceeding, making our work difficult.

Verbal orders are also a barrier to documentation; sometimes we perform and enter the orders given by the doctor, and then we wait for his documentation. We don't always obey verbal orders, so

waiting for written orders before proceeding with a procedure or taking medication takes a long time. (P.7)
Verbal orders are a barrier to documentation; they occur when doctors forget to enter their prescription or when there are too many patients. (P.12)
Sometime during the round or in front of the patient attendant, the duty doctor orders verbally for the satisfaction of the patient "that I told the nurse," but in fact it is just a verbal order. (P8)

Theme 3: Technical Issues: In this theme, the study participants showed deep concern over technical issues faced in documentation. Software, hardware, and lost data are the main challenges explored in technical barriers.

Software issues: The health information system is software that needs to be connected with all concerned departments to maintain the flow of information between them. Every hospital with an electronic system has an information technology department that works 24 hours a day to ensure that any problems with the server are resolved. One participant explained:
In electronic records, the server occasionally goes down, preventing us from entering new documentation. (P.1)
As I have experienced many times, the system became updated without notifying us, which increased the burden of documentation and wasted extra time (P 11).

Hardware issues: The hospital's health information system is responsible for both hardware maintenance and software updates. They also provide training to new staff regarding documentation.
Another main barrier is putting too many responsibilities on nurses and having a lack of technical facilities for our staff. (P.4)
In electronic documentation, power is their basic requirement, so if the power goes out, all the hospitals have their backup systems to ensure that all the biomedical machines, monitor, and computer remain off and save data from loss. One participant mentions in the interview:
Electricity becomes a problem when systems are shut down and we wait for backup to enter the data we performed. (P.12).
The nurses also mentioned that the lack of a computer system or laptop is a barrier.
We didn't document any details because the computer system department is insufficient for every staff member, so waiting for one staff member to complete and leave the system takes too much time from us.(P.9)

Data Issues: The health information system department should receive suggestions from the end users about what challenges they face, because computerized documentation is a purpose that is implemented by every hospital, but when issues like this arise, its usefulness becomes ineffective:
As I've noticed, we occasionally enter vital signs or intake output that was missed and can't find an old record that we entered the day before.(P.6)

Theme 4: Organizational Challenges
In this theme the challenges faced by nurses in proper documentation regarding organization is documented.

Resources scarcity: This theme is explored on the basis of participant statements regarding challenges faced in documentation. This theme focused on the lack of resources, the fact that verbal orders waste time, and the need for double documentation.
Resources are basic components for any operation to run appropriately. Documentation needed proper resources in terms of human, computer, and other technical facilities. Nurses faced difficulties in the documentation process due to a scarcity of resources. Standard nurse-to-patient communication is essential to maintain documentation and provide better patient care. A staff shortage could increase the workload and have an impact on documentation.
The barriers we face are the shortage of staff, which makes complete recording challenging, particularly if we are admitting a lot of patients. (P.2)
The nurse-to-patient ratio is set by the international regulatory authorities according to each department. If hospitals kept the exact ratio, the quality of documentation would be effective, but in many hospitals, nurses work more than their requirements, so their documentation remains incomplete or brief.
We want to practice quality documentation, but in my ward, I deal beyond my capacity, so it's difficult not only to document but also to talk with patients (P3).
Barriers occur when there is a shortage of staff; new nurses also face problems with documentation, so we train them. (P.7)
A sufficient number of computers needed to be installed in each unit. It will benefit not only nurses but also other health care workers in their rounds or guidance.If nurses have access to computers in their respective stations, they will document each step of their patient's care.In an interview, one of the participants explains that:
We didn't document any details because the computer system department is insufficient for every staff member, so waiting for one staff member to complete and leave the system takes too much time from us.(P.3)
When the number of patients increased, it not only affected the quality of documentation but also the satisfaction level of the patients.
As I've discovered with an increasing number of patients, entering each data item meticulously into the computer takes too much time and will undoubtedly affect the quality of the documentation (P 4).
Inmost of the surgical wards, patients are admitted for surgeries. A large number of new patients are admitted, so their receiving notes, investigations, and medication documentation is difficult.
When a patient is admitted to our ward, it becomes difficult for us to document each and every thing because of the blood investigation, radiological process, receiving notes and initial lines, and medication, so it becomes difficult to document the patient's care. (P.12)
Our hospital provides state-of-the art care in Khyber Pukhtankhwa; therefore, the number of patients is increasing from one month to the next. Our documentation is affected by a large number of patients. (P.6)

Lack of training: The provision of training is also important for nurses to learn how to document according to the policy of that hospital.
The first barrier I consider is a lack of training for staff. System update is another barrier that sometimes occurs when we enter vital signs or intake output that may be missed and increase the burden of documentation on us.Sometimes we can't find an old record that we entered the day before. (P.2)

Dual documentation: The hospital should adopt a one-way documentation policy that the staff will determine how they will document. In most hospitals, documentation is made through written records in charts or patient files, while a limited number of hospitals are paperless. Both staff and patients face challenges in hospital settings that practice written and computerized documentation, as participants in this study explain:
The burden of a two-way system is that we enter information through an electronic record and also handwritten documents, which take a lot of time. (P.5)
As the number of patients on our ward increased or any patient became seriously ill, spending the majority of our time on critical patients became a barrier to our documentation. (P.7)

DISCUSSION

Individual issues: In the first section, the individual issues are highlighted in the form of lack of motivation, lack of coordination, lack of time, and insufficient knowledge. The first sub-theme explores that most nurses skip or document limited tasks due to a lack of motivation from the seniors or administration.

In this study, the participants explain that there is a lack of coordination among nursing staff and administration. The findings are similar to those of a study conducted in 2022 by Thapa DR et al., which found that teamwork was viewed as an important component of the working environment and health of nurses.Regularly, nurses in their work view cooperation as a team among the co-workers as not only

important but the basis of success[20]. The results of our study reveal two sub-themes of individual issues: a lack of motivation and a lack of knowledge. Similarly, the study conducted by Bjerkan J et al in 2021 found that the challenges faced by nurses during ND were lack of motivation, perception of incompetency, uncertainty, and ignorance of proper ND[21]. Another study finding reveals that it is possible to increase the nursing staff's motivation to follow the established procedures and guidelines for task documentation by designing systems that provide them with better support[22]. Similarly, the findings of a study show that, as per the participants, after seven years of promotions, there were no complaints from the ward, and my doctors' and my own evaluations were also positive[20].

The fourth sub-theme of the study was lack of time, which was explored as a barrier during data collection. Similarly, the findings of another study show that nurses understand that everything they do is important and should be documented, but doing so on a daily basis is boring and wastes a lot of time; thus, time has become a barrier to proper nursing care. In some hospitals, records are kept in various ways, such as handwriting on files or charts, which in some cases go undocumented because nurses believe it is unnecessary[23]. In another study, Mahony et al. (2014) show that time is one of the limitations of recordkeeping, as there is insufficient time to complete all ND after all clinical actions have been completed. This study found that too much time is required for ND, leaving less time for patient care. Furthermore, nurses cite insufficient time for ND all care delivery as a significant barrier[24]. Similarly, in a study conducted in Uganda by Okaisu et al. (2014), incomplete files and charts were observed, but the majority of participants considered that too much writing was a barrier to proper ND[25]. According to Kamau (2015), the quality of nursing and their performance of care could be improved by using advanced computers and laptops, which will reduce waste of time, and training for enhancing typing speed with limited numbers of patients[26]. The study conducted by Banakhar MA et al. (2017) shows that time constraints prevented nurses from reporting incidents within hospital units, which negatively affected patient care. The lack of study time is a result of the heavy workload caused by the nursing staff shortage, particularly on the general care wards[27].

In-competencies in documentation: In the in-competencies theme, there were three sub-themes: managerial issues, unclear format (spelling mistakes, rough writing), and verbal orders waste more time. Two open codes in managerial issues were investigated in this study: lack of control and lack of monitoring.A study's findings show that nurses perceive that they require support and guidance from their administration because there is no support from the seniors to complete regular tasks. The nurses were responsible for administrative and care-related tasks independently.

Furthermore that nurses felt under supported when handling administrative duties such as organizing shift changes and finding replacements when they were scheduled for leave.The absence of managerial support led to frustration and an increase in work[20]. In another study, findings show that the focus on comprehensive, specific, and continuous control is one of the factors cited by contributors to this study as a significant contributor to the failure to document nursing services. Control, according to contributors, is the step of reducing nurses' motivation to progress ND in a systematic research environment, rather than the reward and punishment system.Unquestionably, one of the responsibilities of executive managers at various levels and chief executives is to monitor and control organizational performance and processes. In the second sub-theme of in-competencies documentation, the unclear format, which means that nurses don't document clearly, became a barrier in this study, which is similar to a study that shows that nurses face difficulty with orders that are not clear and have spelling mistakes; therefore, the study recommends that the writing be cleared for easy understanding[18].

The third theme, "verbal orders take longer," was mentioned in the study's sub-themes.It is also mentioned in a study that there are flaws in every healthcare system, so they only verbalized it, not mentioning it on file or in computer, thus restating and informing the doctor who orders for certain conditions, making it difficult for nurses to document a medication or procedure that lacks physical evidence[20]. The finding of another study was similar to ours: EMR implementation should be governed by a timeline and project management schedules to prevent it from taking longer than anticipated[28].

Technical issues: The third team has three sub-themes: software issues, hardware issues, and data issues. A study's results show that there were an insufficient number of computers at their workstation. A limited number of computers lost time while waiting for your line to get a computer and document their report[29].

In a study, the findings revealed that the majority of the participants faced issues while logging in to their computer systems, and the process took five minutes each time to connect to the main server of the EPR (electronic patient record). Therefore, the staff hesitated each time to enter their identification number and password for log-on, while sometimes they left it to log-on to not waste time on further documentation. In these hospitals, nurses seek help from each other to document on their behalf to save time for patient care. All of the nurses know that keeping the computer logged on in their absence and writing for others is against professional standards and ethics[20]. A study conducted for the assessment of barriers regarding documentation found technological issues like lack of technical assistance, unstable system access, poor EPR usability, and subpar user interfaces did not meet their needs for nursing practice. The respondents found it difficult to record and obtain the information they needed to provide daily care[28]. While the findings of this study elaborate on technological barriers, we have at least a dozen systems, but very few of them are connected. There is no connection between the computers and other systems in the hospital for administering drugs. Despite the positive conversations, the choice of systems is still up to the pharmacist or medical practitioner[30].

In our study, according to the study participants, computer hardware or networking hardware was also an issue for nurses working in both tertiary care hospitals. The findings are similar to those of a study that shows that networks and computers frequently experience maintenance issues. There is no hardware or software maintenance or technical assistance. The study further elaborates that, first of all, we have to confirm that the required hardware and the internet are working properly, which will ensure that the software will work successfully[30].

The third and last theme of technological issues was data. Participants in the study explain that we use both handwritten and EPR. The participants explain in detail how, when we enter vital signs or intake output charts into EPR, they sometimes disappear when we search for them. EMR (electronic medical records) systems also have some limitations, and when they are reached, they stop functioning, which causes issues for many doctors[31]. The less customizable nature of EMRS software is another technical factor, so vendors should make an effort to improve it. Software for EMRs is less reliable since systems can fail[32]. Another technical impediment is the absence of EMRS hardware devices. Therefore, in the EMRS system, the unavailability of hardware is also a barrier.

Organizational barriers: The organizational barriers are the last theme interpreted from the collected data. Organizational barriers are divided into 3 subthemes: resource scarcity, lack of training, and dual format documentation.

The scarcity of resources in this study was divided into three categories: staff shortage, system shortage, and increasing patient numbers. The participant in the interview explains and elaborates that there is a shortage of staff and that it will automatically affect the nurse's practice and documentation. Similarly, in another study, the findings show that staff shortages, very unfavorable patient-to-nurse ratios, and a lack of essential tools for patient care and self-protection were all reported by nurses[20]. In likely research conducted in Nepali hospitals by Baral and Subedi, it was found that poor logistics, heavy workloads, a lack of staff, and difficult health conditions had a negative impact on nurses' work-related health[33]. In another study, the main hindrance to the quality of EHR data was determined to be a heavy workload due to a shortage of staff. In China, hospitals received over 1.56 billion patient visits in the first half of 2016[34]. Furthermore, another study also reveals that they are overworked because of the volume of patient care-related work they must complete, which results in poor documentation in the patient file. Participants also mention that a lack of staff and a high patient intake are factors contributing to the increasing burden[23]. While another study uncovered issues such as nurse shortages and patient burden in writing patient notes, a platform that identifies and resolves these issues will be highly regarded by nurses[29].

In this study, the findings show that there is a shortage of systems provided by the hospital. The findings are similar to those of a study that shows that "There are very few computers available here for personnel to use, and this scarcity causes problems because you have to wait in line to get to write your report, and the waiting takes up a

major percentage of time," said another participant while describing her experience with the lack of computers[29]. Furthermore, other research underlines the requirement for appropriate facilities and resources for the advancement and usage of technology[35].

The second sub-theme of organizational behavior demonstrates that, as mentioned by the majority of participants, one of the most significant barriers in documentation is a lack of training. In a study, the findings show that the system's acceptance can be raised by holding training sessions and giving each nurse their own username and password[36]. In another study, findings show that employee training programmes can guarantee the resolution of employee issues and reduce the need for qualified staff in the future[37]. Similarly, other study results show that participants noted that for enhancing the quality of data in healthcare settings, it requires organized ND, while the quality could be developed through training and learning, especially in the use of EPR[28].

The third and last sub-theme was dual documentation; therefore, the staff considers it a barrier and burden during duty. The published literature documents that in a hospital setting one form of format is being used, while the findings of the study indicate dual documentation in the form of written and electronic materials is becoming a barrier itself

CONCLUSION

Nursing documentation is an important part of nursing education and practice. The documentation is a chain of communication not only among nurses but also with other health workers. The documentation is also evidence of the care provided by nurses to patients. The study concluded that dual documentation—handwritten in charts and files and electronically became a burden on nurses. The study also discovered that hospitals that used electronic documentation had trouble maintaining software, hardware, and data.Furthermore, the study identified organizational issues such as a lack of staff, a lack of training, and a heavy workload as barriers, as well as individual in-competencies such as managerial issues, verbal commands, and ambiguous writing.The administration always plays a vital role in overcoming individual barriers like lack of cooperation, time, and knowledge that can be enhanced through professional development and motivation.

The study identifies individual barriers, technical barriers, incompatibilities, and organizational barriers. The purpose was to enhance the quality of documentation, and patient outcomes by recognizing the barriers faced by nurses during documentation.

Limitation: Because the study was conducted in Peshawar's two tertiary care hospitals, the findings are limited to the number of hospitals and staff. Purposive sampling was used to collect the data, which limits the scope and generalizability of the findings due to the exclusion of several secondary and tertiary care hospitals.

REFERENCES

1. Salmond SW, Echevarria M. Healthcare transformation and changing roles for nursing. Orthopedic nursing. 2017 Jan;36(1):12.
2. Simamora RH, Fathi A. The Influence of Training Handover based SBAR Communication for Improving Patients Safety. Indian journal of public health research & development. 2019 Sep 1;10(9).
3. Burgin A, O'Rourke R, Tully MP. Learning to work with electronic patient records and prescription charts: experiences and perceptions of hospital pharmacists. Research in Social and Administrative Pharmacy. 2014 Sep 1;10(5):741-55.
4. Hariyati RT, Hamid AY, Eryando T, Hasibuan ZA. Usability and satisfaction of using electronic nursing documentation, lesson-learned from new system implementation at a hospital in Indonesia. International Journal of Healthcare Management. 2018 Jul 31.
5. Grove SK, Gray JR. Understanding nursing research e-book: Building an evidence-based practice. Elsevier Health Sciences; 2018 Jul 15.
6. Hockenberry MJ, Wilson D. Wong's nursing care of infants and children-E-book. Elsevier Health Sciences; 2018 Oct 1.
7. Johnstone MJ. Bioethics: a nursing perspective. Elsevier Health Sciences; 2022 Oct 30.
8. Collins SA, et al. Relationship between nursing documentation and patients' mortality. Am J Crit Care. 2013;22(4):306–13.
9. Lindo J, et al. An audit of nursing documentation at three public hospitals in Jamaica. J NursScholarsh. 2016;48(5):499–507.
10. Bani-issa W, Al Yateem N, Al Makhzoomy IK, Ibrahim A. Satisfaction of health-care providers with electronic health records and perceived barriers to its implementation in the United Arab Emirates. International journal of nursing practice. 2016 Aug;22(4):408-16.
11. Tasew H, Mariye T, Teklay G. Nursing documentation practice and associated factors among nurses in public hospitals, Tigray, Ethiopia. BMC research notes. 2019 Dec;12(1):1-6.
12. Wang N, Hailey D, Yu P. Quality of nursing documentation and approaches to its evaluation: a mixed-method systematic review. Journal of advanced nursing. 2011 Sep;67(9):1858-75.
13. Nigam A, Huising R, Golden B. Explaining the selection of routines for change during organizational search. Administrative Science Quarterly. 2016 Dec;61(4):551-83.
14. Sjöberg M, Edberg AK, Rasmussen BH, Beck I. Documentation of older people's end-of-life care in the context of specialised palliative care: a retrospective review of patient records. BMC Palliative Care. 2021 Dec;20(1):1-2.
15. Hancock DR, Algozzine B, Lim JH. Doing case study research: A practical guide for beginning researchers.
16. Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, Burroughs H, Jinks C. Saturation in qualitative research: exploring its conceptualization and operationalization. Quality & quantity. 2018 Jul;52(4):1893-907.
17. Etikan I, Musa SA, Alkassim RS. Comparison of convenience sampling and purposive sampling. American journal of theoretical and applied statistics. 2016 Jan 5;5(1):1-4.
18. Vafaei SM, Manzari ZS, Heydari A, Froutan R, Farahani LA. Nurses' perception of nursing services documentation barriers: A qualitative approach. Electronic Journal of General Medicine. 2018;15(3).
19. RezapourNasrabad R. Criteria of validity and reliability in qualitative research. Journal of qualitative research in health sciences. 2018 Jan 1;7(4):493-9.
20. Thapa DR, Subedi M, Ekström-Bergström A, AreskougJosefsson K, Krettek A. Facilitators for and barriers to nurses' work-related health-a qualitative study. BMC nursing. 2022 Dec;21(1):1-3.
21. Bjerkan J, Valderaune V, Olsen RM. Patient Safety Through Nursing Documentation: Barriers Identified by Healthcare Professionals and Students. Frontiers in Computer Science. 2021 Jun 1;3:624555.
22. Stevenson, J. E., Nilsson, G. C., Petersson, G. I., and Johansson, P. E. (2010). Nurses' Experience of Using Electronic Patient Records in Everyday Practice in Acute/inpatient ward Settings: A Literature Review. *Health Inform. J* 16, 63–72. doi:10.1111/j.1365-2648.2011.05786.x10.1177/1460458209345901.
23. Mutshatshi TE, Mothiba TM, Mamogobo PM, Mbombi MO. Record-keeping: Challenges experienced by nurses in selected public hospitals. Curationis. 2018 Jan 30;41(1):1-6.
24. Mahony D, Wright G, Yogeswaran P, Govere F. Knowledge and attitudes of nurses in community health centres about electronic medical record. Curationis. 2014;37(1):1150.
25. Okaisu EM, Kalikwani F, Wanyana G, Coetzee M. Improving the quality of nursing documentation: An action research project. curationis. 2014 Jan 1;37(2):1-1
26. Kamau, N. "Electronic Health Documentation and Its Impact on Nurses Routine Practices." (2015).
27. Banakhar MA, Tambosi AI, Asiri SA, Banjar YB, Essa YA. Barriers of reporting errors among nurses in a tertiary hospital. Int J NursClinPract. 2017;4(1):1-7.
28. Ni K, Chu H, Zeng L, Li N, Zhao Y. Barriers and facilitators to data quality of electronic health records used for clinical research in China: a qualitative study. BMJ open. 2019 Jul 1;9(7):e029314.
29. Heidarizadeh K, Rassouli M, Manoochehri H, Tafreshi MZ, Ghorbanpour RK. Nurses' perception of challenges in the use of an electronic nursing documentation system. CIN: Computers, Informatics, Nursing. 2017 Nov 1;35(11):599-605.
30. Khalifa M. Barriers to health information systems and electronic medical records implementation. A field study of Saudi Arabian hospitals. Procedia Computer Science. 2013 Jan 1;21:335-42.
31. Lee WW, Alkureishi MA, Ukabiala O, Venable LR, Ngooi SS, Staisiunas DD, Wroblewski KE, Arora VM. Patient perceptions of electronic medical record use by faculty and resident physicians: a mixed methods study. Journal of general internal medicine. 2016 Nov;31(11):1315-22.
32. Middleton B, Bloomrosen M, Dente MA, Hashmat B, Koppel R, Overhage JM, Payne TH, Rosenbloom ST, Weaver C, Zhang J. Enhancing patient safety and quality of care by improving the usability of electronic health record systems: recommendations from AMIA. Journal of the American Medical Informatics Association. 2013 Jun 1;20(e1):e2-8.
33. Baral S, Subedi S. Stress: How is it affecting service delivery and health of nurses? A qualitative study from Pokhara metropolitan, Nepal. J Health All Sci. 2021;11(1):24–9.
34. Li P, Xie C, Pollard T, Johnson AE, Cao D, Kang H, Liang H, Zhang Y, Liu X, Fan Y, Zhang Y. Promoting secondary analysis of electronic medical records in China: summary of the PLAGH-MIT critical data conference and health datathon. JMIR Medical Informatics. 2017 Nov 14;5(4):e7380.
35. Kahouei M, Baba Mohammadi H, AskariMajdabadi H, et al. Nurses' perceptions of usefulness of nursing information system: module of electronic medical record for patient care in two university hospitals of Iran. Mater Sociomed. 2014;26(1): 30–34.
36. Weber E, Ward J, Walsh T. Nurse leader competencies: A toolkit for success. Nursing Management. 2015 Dec 1;46(12):47-50.
37. Zhou F HY, Guo H, Liu H. Attitude, Knowledge, and Practice on Evidence-Based Nursing among Registered Nurses in Traditional Chinese Medicine Hospitals: A Multiple Center Cross-Sectional Survey in China. . J Evid Based Complementary Altern Med. 2016. https://doi.org/10.1155/2016/5478086 PMid:27528882 PMCid:PMC4978845.