

# Quality of Documentation of Delivery Notes by Midwives in Benghazi Medical Center

**Dr. Fatma Abdulla Emtawel**

Assistant Lecturer, Department of Obstetrics and Gynecology, Faculty of Medicine,  
University of Benghazi, Libya  
Fatma.emtawel@uob.edu.ly

**ZMA Sulayman Alhasy**

Department of Anatomy and Embryology, Faculty of Medicine, Omar Almoktar University,  
Libya

Zakiaalhasy01@gmail.com

## Abstract

**Introduction:** Midwives play a significant role as health professionals in the labor ward. It is crucial that all delivery information is documented and accurate. The aim of this audit was to evaluate the accuracy and completeness of the newborn and delivery notes recorded by the midwives in the labor room at Benghazi Medical Center (BMC).

**Method:** A retrospective audit of 189 newborn and delivery notes of women delivered vaginally at BMC were randomly chosen during a nine month period in 2015. Data was described statistically by the use of percentages. For medico-legal purposes the standard was set at 100%.

**Result:** The highest documentation rate was for vitamin K dispensed to the newborn, gender, birth weight, date of delivery, newborn status, time of delivery, and perineum status (100%, 96%, 95%, 94%, 92%, 90%, 87% respectively). Zero recording rate for the Apgar score, congenital malformations, any resuscitations of newborns by the neonatologist, gestational age, the duration of all stages of labor, and tear stitch notes.

**Conclusion:** Compared to the set standard, numerous sections from both newborn and delivery note were inefficiently completed or omitted. Balance all points mentioned in both recommendation and action plan is suggested.

**Key words:** midwives, delivery notes, newborn notes, documentation

## Introduction

Qualified staffing is the key to improving safety in maternity services. Midwives play a significant role as health professionals in the labor ward. The quantity and quality of midwives should be evaluated periodically to determine areas in need of increase and/or educational advancement.

It is crucial that the information provided in the delivery and newborn notes are documented and accurate.<sup>1</sup> The health care records allow the health care team; moving forward; to provide adequate care, evaluate progress, deliver appropriate outcomes of care and retain the integrity of health information of both mother and child. A health care record may be admitted into evidence, if relevant, in legal proceedings. It must be a comprehensive, accurate, high quality document.

**Aim:** The aim of this audit was to evaluate the accuracy and completeness of the newborn and delivery notes recorded by the midwives in the labor room at BMC, Benghazi, Libya.

**Gold Standard:** The assumed gold standard for this audit was: For safety and legal issues, the newborn and delivery note must be reported in all cases with 100% completeness and accuracy. Therefore, the standard was set at 100%.

**Method:** the Royal College of Obstetrics and Gynecology (RCOG) guidelines<sup>2</sup>, a retrospective audit of 189 neonatal and delivery notes of women delivered vaginally at BMC were randomly chosen during a nine month period in 2015.

The medical records were analyzed by two Obstetrics and Gynecology consultants and a resident. Information collected from the newborn note was the documentation of newborn status (alive, macerated, still birth), gender (male or female), birth weight, date and time of delivery, was the newborn handed to the mother or to the neonatology department, Apgar score, congenital malformation, was vitamin K dispensed to the newborn and if a resuscitation was performed by a neonatologist. Furthermore, the delivery note was assessed for the recording of the perineum status (intact, presence of tear or/and episiotomy), stitch note, use of oxytocin after delivery, vital signs measured after delivery, was placenta and membrane expelled (totally or partially) and the duration of 3 stages of labor. Data was analyzed using The Statistical Package for Social Science (SPSS) version 18. Data was described statistically by the use of percentages and compared with the gold standard (100%).

**Results:** In this study of 189 cases, all data of delivery and newborn notes were documented by non-Libyan midwives. The highest documentation rate was for vitamin K dispensed to the newborn, gender, birth weight, date of delivery, newborn status, time of delivery, and perineum status (100%, 96%, 95%, 94%, 92%, 90%, 87% respectively) (Table1). Zero recording rate for the Apgar score; congenital malformations, resuscitations of newborns by the neonatologist, the duration of all stages of labor and tear stitch notes. Other criteria such as use of oxytocin, vital signs, name of the doctor who stitched the perineum, placenta and membrane expulsion and newborn placed to the mother had a (49%, 47%, 41%, 21%, 20%) record rate respectively. In addition, the documentation accuracy by midwives was 94%.

**Table 1:** Recording rate of standard criteria required to be documented in the labor room medical records, N=189.

Criteria	Documentation (%)	Standard (100%)
Vitamin K dispensed to newborn	100%	100%
Newborn gender	96%	100%
Birth weight	95%	100%
Date of delivery	94%	100%
Newborn status	92%	100%
Time of delivery	90%	100%
Perineum status	87%	100%
Use of Oxytocin	49%	100%
Vital signs	47%	100%
Name of the doctor who stitched the perineum	41%	100%

Placenta and membrane expulsion	21%	100%
Was the newborn placed with the mother?	20%	100%
Resuscitation of newborn by neonatology	0%	100%
Tear stitch note	0%	100%
Apgar score	0%	100%
Congenital malformation	0%	100%
Duration of stages of labor	0%	100%

### Discussion:

The results show a dramatic drop in the percentages of the information required in the delivery and newborn notes. This information is pertinent to the time period of birth and later for both mother and child. At Benghazi Medical Center (BMC), there are numerous reasons for the unavailability of accurate records. Not having access to electronic medical records greatly increases room for error. Reading and writing in various languages guarantees mistakes and omissions. The limited education and training of the midwives and recruiting ordinary nurses to work as midwives because of the absorbent amount of work due to the closing of the Gomhoria hospital as a result of the war in Benghazi. This significantly affected the inclusion of considerable medico-legal information and the quality of the documentation in general.

**Conclusion:** Compared to the set standard, numerous sections from both newborn and delivery note were inefficiently completed or omitted. Therefore, periodic auditing is essential for the continued progress in patient care. In addition, balance all the points mentioned in both recommendation and action plan.

### Recommendations:

- Contact local software engineers to develop a time sensitive electronic documentation system in the Obstetrics and Gynecology department. This would consist of a fingerprint match or personal password access and signing out of the document, to account for the correct time of each contact. Creating a checklist of all information that must be documented would eliminate the need for writing. Using this type of system would not only greatly reduce errors and increase accuracy but it would most importantly safeguard patient privacy. Having all documentation available on a system will help dramatically in the case of research, as it is accurate, concise and readily available. A paper copy should be filed and stored for a determined amount of time in case of any problems with the system.
- Hire maternity care assistance for support as needed.
- Increase the quantity of qualified midwives as needed. Entice the next generation of students to seek education in midwifery by increasing the salary of this position.
- Provide the opportunity for post graduate degrees for the midwives to reach a consultant midwife degree.
- Encourage the gathering of the obstetricians to open a school of midwifery at Benghazi University. This would enable students to receive a bachelor degree and provide opportunities for higher education.

- Make available courses for English as a second language to overcome the language barrier.

### **Action Plan:**

Present this audit by Dr. Fatma Emtawel to the obstetric department in the presence of a translator for non-Arabic and non-English speakers to

- :Acknowledge the problem.
- Consider the action plan.
- Communicate with personnel to discuss additional solutions for documentation issues.

Print out and use the new newborn and delivery note (Appendix 1) that are in the department. These notes were originated for those unable to write in English and a precise listing of every option of information necessary.

Educate the midwives and nurses on the medico-legal importance and how to fill out these new notes. The training may be presented by a senior resident.

Schedule the training every 2 months to ensure a constant compliance with the documentation process and training of new midwives. Add an Arabic translation to the form, if feasible.

Training by a consultant or senior resident on conditions that need immediate contact with an obstetrician or the neonatologist. Such as cases of low Apgar score, Post-partum hemorrhage, abnormal vital signs and etc.... Re-audit after a 6 months period of consistent education and the use of the new notes.

### **References:**

- [1] Record keeping guidance. <https://www.nmc.org.uk/standards/code/record-keeping/>.
- [2] Safer Childbirth: Minimum Standards for the Organisation and Delivery of Care in Labour. Royal College of Obstetricians & Gynaecologists. <https://www.rcog.org.uk/en/guidelines-research-services/guidelines/safer-childbirth-minimum-standards-for-the-organisation-and-delivery-of-care-in-labour/>.