Journal of Indonesian Nursing Science
Available online at: https://journal.bspjournal.com/index.php/JoINS
Vol. 1. No. 1. April 2026, Page 18-22
E-ISSN: xxxx-xxxx

Overview of Anesthesia Report Documentation in The Central Surgical Installation

D.P. Eka Noviani[1], Ni luh Putu Inca Buntari Agustini[2*], Ni Luh Putu Lusiana Devi[1]

[1] Anasthesiology Diploma, Institute of Technology and Health Bali, Denpasar, Bali, Indonesia
[2] Master of Nursing, Institute of Technology and Health Bali, Denpasar, Bali, Indonesia

ARTICLE INFO

Article Type:
Research

Article History:
Received: 22 January 2026
Revised: 14 April 2026
Accepted: 16 April 2026

[*]***Corresponding author***
Email: incaagustini@gmail.com

ORIGINAL ARTICLE

ABSTRACT

Background: The completeness of the anesthesia report is very important as an indicator of patient safety. However, the anesthesia report was still found to be incomplete. Comprehensive anesthesia report recording at pre-, intra-, and post-anesthesia is required. This study aims to determine the description of documenting pre-anesthesia, intra-anesthesia, and post-anesthesia reports.

Methods: This research method used descriptive research with a cross-sectional approach. The sample consisted of 249 surgical case anesthesia report forms taken using a convenience sampling technique. The research instrument uses a check list to assess the completeness of anesthesia report documentation. The collected data was analyzed using univariate analysis.

Result: The results of this study showed that the majority of anesthesia reports were for elective surgery (69%), with general surgery as the dominant surgical category (31%). The majority of pre-anesthesia (71%), intra-anesthesia (98%), and post-anesthesia report documentation (97%) were included in the complete category. However, in the pre-anesthesia report, there were deficiencies in the assessment of laboratory results such as hemoglobin, hematocrit, platelets, urinalysis, electrolytes, others, and a list of problems and diagnoses. Overall, 70% of anesthesia reports were filled out completely.

Conclusion: The research conclusion is that the majority of pre, intra, and post anesthesia reports fall into the complete category. However, improvements are needed in the documentation of laboratory items. It is hoped that there will be regular socialization and monitoring to improve the quality of anesthesia report documentation.

Keywords: Anesthesia Report, Documentation, Central Surgical Installation.

INTRODUCTION

An anesthesia report is a document that contains perioperative care information about anesthesia risks during induction and evaluation, informed consent, intraoperative care, and post-anesthesia care (Sharma et al., 2021; Zemedkun et al., 2021). National standards for hospital accreditation (2017) emphasize the importance of anesthesia quality and safety programs, which involve monitoring and evaluating the implementation of anesthesia as well as recording anesthesia documents as an indicator of patient safety. However, in practice, incomplete anesthesia reports still occur. In clinical practice in several hospitals, it was found that pre-anesthesia, several items such as blood type, Rhesus (Rh), Visual Analog Scale (VAS), and Glasgow Coma Scale (GCS) were not filled in completely; during intra-anesthesia, there was no filling of fluid balance monitoring (fluid intake and fluid coming out); and after anesthesia, there was no Visual Analog Scale (VAS) assessment. Apart from that, the problem found was that the number of anesthetists was not evenly distributed throughout the hospital. This was conveyed by the chairman of the Central Executive Board of the Indonesian Association of Anesthetists (DPP IPAI).

The survey was conducted in six sample provinces in Indonesia. There are 22,000 anesthesia practitioners from 2,350 hospitals; the number is still very small, and the distribution is not evenly distributed throughout Indonesia (Putu, 2018). Globally, anesthesia reports are still found to be incomplete in several countries. Misganaw & Seyoum's (2022) study in Ethiopia found that the level of completeness of anesthesia records was still low, namely 63.88%. However, the results of a study conducted by Raju et al. (2020) in the United States found different results, namely that the overall average percentage of completeness of the mandatory disease reporting system was around 80%. Similar problems related to documenting anesthesia reports were also found in Indonesia. The results of a study conducted by Fitryasari et al. (2020) stated that the completeness of anesthesia record documents was recorded at 62%. In addition, not all patients recorded the time of start of induction or extubation, mallampati score, or type of intubation used.

However, the results of a study conducted by Simanjuntak (2022) in Medan on ob-gyn surgery found that the completeness of the documents was 77% and the minority was incomplete by as much as 23%. Incomplete anesthesia documentation can lead to uncertainty in patient care, an increased risk of medical errors, and difficulty in identifying previous patient health information. Therefore, research on documenting anesthesia reports at the Mangusada Regional Hospital is considered important. This research can provide new insights and relevant information for hospitals and anesthesia teams and help improve the quality of documenting anesthesia reports so that they can guarantee the quality of anesthesia services provided.

METHODS

This study employed a descriptive research design conducted from January to November 2022 at Mangusada General Hospital, Bali Province, aiming to describe the completeness of anesthesia report documentation. The study involved 249 anesthesia report forms from surgical cases, which were selected using a convenience sampling technique based on the availability of documents during the study period. This research utilized a documentation study approach, in which the researcher directly reviewed anesthesia report documents, checked their completeness, and recorded the findings. The completeness of the anesthesia reports was assessed by placing a check mark (√) on the observed documents. The data collection instrument used in this study was a checklist. A checklist is a tool that contains the names of subjects and other relevant identities being examined, providing objective control information (√) regarding the presence or absence of specific characteristics or factors (Hidayat, & Mohyi, 2020).

The checklist used consisted of 161 statement items, including 58 indicators for pre-anesthesia reports, 75 indicators for intra-anesthesia reports, and 28 indicators for post-anesthesia reports. The instructions for completion were to mark (√) if an item was completely filled in, while items that were not fully completed were categorized as incomplete. The researcher assessed the checklist items for pre-anesthesia, intra-anesthesia, and post-anesthesia reports based on the categories of complete and incomplete. Data analysis was conducted using descriptive analysis by classifying each item into complete and incomplete categories. The results were then summarized and presented in the form of frequencies and percentages to provide a comprehensive overview of the completeness of anesthesia report documentation across the pre-anesthesia, intra-anesthesia, and post-anesthesia phases.

RESULTS

Table 1. Distribution of Frequency and Percentage of Anesthesia Reports Based on Characteristics of Type of Surgery and Category of Surgery (n = 249).

Characteristics of Reports of Surgery	Frequency (f)	Percentage (%)
Type of Surgery		
Elective	171	69
Cito	78	31
Category of Surgery		
Pediatric Surgery	3	1
Urology Surgery	19	8
Digestive Surgery	12	5
Ear, Nose, and Throat Surgery	13	5

Characteristics of Reports of Surgery	Frequency (f)	Percentage (%)
Nerve Surgery	21	8
Plastic Surgery	11	5
General Surgery	77	31
Eye Surgery	2	1
Orthopedic Surgery	60	24
Obsgyn Surgery	31	12

Based on Table 1, it can be seen that of the 249 anesthesia reports, the majority were in the form of elective surgery, namely 171 anesthesia reports (69%), and the majority of anesthesia reports were in the surgical category, dominated by general surgery, around 77 (31%).

Table 2. Proportion of Anesthesia Report Documentation Completeness at Mangusada Regional Hospital (n = 249).

Type of Documentation	Complete		Incomplete	
	f	%	f	%
Pre-Anesthesia	177	71%	72	29%
Intra-Anesthesia	244	98%	5	2%
Post-Anesthesia	241	97%	8	3%
Overall Anesthesia Report	174	70%	75	30%

Table 2 shows that the completeness of anesthesia report documentation at the Central Surgical Installation of Mangusada Regional Hospital varies across different phases. In pre-anesthesia documentation, 177 reports (71%) were complete, while 72 reports (29%) were incomplete. Intra-anesthesia documentation demonstrated the highest level of completeness, with 244 reports (98%) completed and only 5 reports (2%) incomplete. Similarly, post-anesthesia documentation showed a high level of completeness, with 241 reports (97%) complete and 8 reports (3%) incomplete. Overall, the completeness of anesthesia report documentation reached 70% (174 reports), while 30% (75 reports) were still incomplete. These findings indicate that although intra- and post-anesthesia documentation are generally well completed, improvements are still needed, particularly in the pre-anesthesia phase and overall documentation consistency.

DISCUSSION

The findings of this study highlight important variations in the completeness of anesthesia report documentation across different phases of care at the Central Surgical Installation of Mangusada Regional Hospital. As presented in Table 2, intra-anesthesia and post-anesthesia documentation demonstrated high levels of completeness, whereas pre-anesthesia documentation showed comparatively lower completeness. Overall, although the majority of anesthesia reports were adequately completed, a considerable proportion remained incomplete. These results suggest that documentation practices are not yet fully consistent across all stages of anesthesia care, indicating the need for targeted improvements, particularly in the pre-anesthesia phase to ensure comprehensive and standardized documentation. This complete pre-anesthesia documentation helps anesthesia administrators understand the patient's health condition before the anesthesia procedure, improve the quality of health services, and determine appropriate anesthesia management strategies. The results of this study are in line with previous studies, which showed that preoperative anesthesia records were also documented completely and precisely (Curtis et al., 2018; Olateju et al., 2015). Different results Previous research conducted by Elhalawani et al. (2013) found incompleteness in preanesthesia records. In this study, there were several indicators that were not filled in completely in the pre-anesthesia report documentation at the Mangusada Regional Hospital, including date of birth, blood type, height, temperature, pain scale, supporting examinations, hemoglobin, hematocrit, platelets, urinalysis, electrolytes, others, and a list of problems or diagnoses. This incompleteness mainly occurs in laboratory tests, which are influenced by patient characteristics and clinical considerations. This finding is in accordance with research by Misganaw and Seyoum (2022), which found that other pre-anesthesia indicators, such as other examination systems, diagnosis/problem lists, and laboratory examinations, were not recorded in a satisfactory manner.

The indicators for incomplete anesthesia reports are fraction-inspired oxygen and tourniquets. This research shows that the majority of intra-anesthesia report documentation is complete. This finding is supported by research by Bolhan et al. (2020), which states that intraoperative anesthesia records generally have complete documentation. The results of this study are also in line with previous research, which showed an increased level of completeness of intraoperative documents (Parwaiz et al., 2017). The completeness of intraoperative documents increases because the anesthetist ensures the completeness of documentation during the intra-anesthesia phase including monitoring vital signs, the use of medications, and other assistive devices used during surgery. However, this study also found indicators that were not completely filled during anesthesia duration monitoring, namely the tourniquet and fraction-inspired oxygen. This shows that some anesthesia practitioners still neglect to record information regarding tourniquets and fraction-inspired oxygen, such as the pressure used or duration of use. The anesthesia provider's focus on other aspects during the anesthesia procedure, such as monitoring the patient's vital parameters and response to anesthesia, may result in less attention being paid to the tourniquet and fraction-inspired oxygen.

Indicators of incomplete post-anesthesia report documentation are the observation date and observation time. This research shows that the majority of post-anesthesia report documentation is complete. These findings are in line with previous research showing an increase in the completeness of postoperative documents after intervention (Adam et al., 2025). Increased completeness of post-operative documentation after intervention because the anesthetist ensures complete documentation during the post-anesthesia care period to reduce the risk of errors and inaccuracies in medical procedures for patients. Factors such as the experience level of the anesthetist and the duration of the operation influence the completeness of the post-anesthesia report documentation (Wong et al., 2018). However, this study also found incomplete documentation of post-anesthesia reports, especially the last post-anesthesia observation, namely the date of observation and time of observation. This is in accordance with the Regulation of the Minister of Health of the Republic of Indonesia No. 269/MENKES/PER/III/2008, which requires that every entry in the medical record be accompanied by the time and signature of the doctor or health worker providing direct services.

This completeness in anesthesia documentation is also due to the majority of anesthesia reports being included in the elective surgery category, so that in elective surgery, the anesthetist has sufficient time to carry out a pre-anesthesia evaluation on the day before surgery and repeat it again on the day of surgery.

CONCLUSION

This study concludes that the majority of anesthesia reports were derived from elective surgical procedures, with general surgery being the most dominant category. This pattern indicates that most procedures were planned, allowing sufficient time for preoperative preparation and documentation. In terms of documentation completeness, intra-anesthesia and post-anesthesia reports demonstrated a high level of completeness, reflecting strong compliance and the commitment of anesthesia providers to maintain patient safety during and after surgical procedures. However, pre-anesthesia documentation was comparatively less complete, contributing to inconsistencies in overall documentation quality. These findings suggest that although documentation practices are generally adequate, they are not yet fully standardized across all phases of care. Therefore, it is recommended that healthcare institutions strengthen supervision and regular evaluation of anesthesia documentation, particularly in the pre-anesthesia phase, enhance continuous training and education for healthcare professionals, and implement standardized documentation systems such as structured checklists and routine audits. Furthermore, future research should explore the factors contributing to incomplete documentation and assess effective strategies to improve the quality and consistency of anesthesia reporting in clinical practice.

REFERENCE

Adam, A. M., Alhadi, I. A. H., Ahmed, M. A. M. M. M., Abdelrahman, M., Alnaeem, M. Y. A., Ibrahim, R. A. A., ... & Ahmed Sr, M. H. A. (2025). Clinical audit of postoperative documentation in the Kassala Teaching Hospital, Sudan: compliance with Royal College of Surgeons of England guidelines. *Cureus,* 17(8), e90948. https://doi.org/10.7759/cureus.90948

Bolhan, H. A., Yahya, N., Izaham, A., Mat, W. R. W., Rahman, R. A., & Musthafa, Q. A. (2020). Assessing the completeness of perioperative anesthetic record documentation in a tertiary hospital. *Anaesthesia, Pain & Intensive Care*, 24(6), 635-644. https://doi.org/10.35975/apic.v24i6.1401

Curtis, W. B., Sethi, R., Visvanathan, T., & Sethi, S. (2018). Peri-operative anaesthetic documentation: A report of three sequential audits on the quality of outcomes, with an insight into surrounding legal issues. *Turkish Journal of Anaesthesiology and Reanimation, 46*(5), 354–361. https://doi.org/10.5152/TJAR.2018.40222

Elhalawani, I., Jenkins, S., & Newman, N. (2013). Perioperative anesthetic documentation: Adherence to current Australian guidelines. *Journal of anaesthesiology, clinical pharmacology,* 29(2), 211–215. https://doi.org/10.4103/0970-9185.111726

Fitryasari, R., Darmawan, E., & Setiati, S. (2020). Quality of anaesthesia record keeping in a tertiary hospital: A retrospective audit. *Journal of Young Pharmacists,* 12(3), 69–72.

Misganaw, A., & Seyoum, F. (2022). Assessment of manual perioperative anesthesia record-keeping practice: A multicenter descriptive cross-sectional study, Ethiopia, 2022. *International Journal of Surgery Open, 46*, 100526. https://doi.org/10.1016/j.ijso.2022.100526

Olateju, S., Adenekan, A., & Owojuyigbe, A. (2015). The effect of teaching on the completeness of the anesthesia record charts for obstetric patients.

Parwaiz, H., Perera, R., Creamer, J., Macdonald, H., & Hunter, I. (2017). Improving documentation in surgical operation notes. *British journal of hospital medicine (London, England : 2005),* 78(2), 104–107. https://doi.org/10.12968/hmed.2017.78.2.104

Putu, P. (2018, February 20). Kepri masih kurang tenaga penata anestesi. *Batam Pos*. https://batampos.co.id/2018/02/20/kepri-masih-kurang-tenaga-penata-anestesi/

Raju, D. M., Schaeffer, R. A., & Beckert, A. (2020). Evaluation of the completeness and timeliness of notifiable disease reporting: Illinois, 2013–2014. *Public Health Reports, 135*(2), 1–9.

Hidayat, W.R., & Mohyi, A. (2020). *Metodologi penelitian ekonomi* (Vol. 1). Universitas Muhammadiyah Malang.

Sharma, M., Karki, D., Dhungel, S., & Gautam, R. (2021). Manual anesthesia record keeping at a tertiary care center: A descriptive cross-sectional study. *Journal of the Nepal Medical Association, 59*(244), 1262–1266. https://doi.org/10.31729/jnma.7117

Simanjuntak, M. (2022). Tinjauan Kelengkapan Dokumen Berkas Rekam Medis Pasien Bedah OB-GYN di RSU. Imelda Pekerja Idonesia Medan Tahun 2021. *Jurnal Pendidikan dan Pengabdian Masyarakat,* 1(1)*,* 194-200.

Wong, D. L., Chen, C. L. E., Lim, S., & Tan, A. C. H. (2018). Factors affecting the completeness of documentation in the post-anesthesia care unit. *Journal of Clinical Monitoring and Computing, 32*(1), 91–98.

Zemedkun, A., Mulugeta, H., Getachew, H., Destaw, B., Mola, S., & Milkias, M. (2021). Assessment of manual intraoperative anesthesia record keeping practice at Dilla University Referral Hospital, Dilla, Ethiopia. *Open Access Surgery,* 14*,* 1–7. https://doi.org/10.2147/OAS.S298387