Anesthetists' Skills Concerning the Ten Rights of Medications Administration: An Observational Study

Ali S Obeid
PhD Nursing, Instructor Doctor, Anaesthesia and Intensive Care Department, Al-Taff University College, Iraq

* Corresponding Author: **Ali S Obeid**

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Abstract
Background: Medication administration is one of the most common functions of the practice of nursing. With the growing number of patients with special health care needs, many health institutes found that the number of patients needing medications at hospitals is increasing. With extended release preparations, many schools are seeing a trend away from mid-day dosing. More non-oral medications are being administrated, adding to the complexity of the task of medication administration (NASNPS, 2023).
Objectives: The study aims to identify the anesthetists' skills concerning the ten rights of medications administration at Al-Imam Al-Hussein Medical City and Al-Hindiya Teaching Hospital in Holy Kerbala'a City.
Methodology: A Descriptive quantitative approach design is conducted to evaluate anesthetists' clinical knowledge concerning the ten rights of medications administration. The study has started on 1st of January, 2024 and ended on 25th of May, 2024. The study instrument consisted of two parts; part one deals with the characteristics of the sample which of age, gender, level of education, years of experience as an anesthetist, and participation in education course concerning the ten rights of medications administration. Part two deals with anesthetists' clinical knowledge concerning the ten rights of medications administration which was 10 items. The validity of instrument was obtained from 5 experts in specialty. The data analysis was done by using SPSS program version 23. the statistical methods which used in present study is descriptive and inferential statistics.
Results: the findings of present study about anesthetists' clinical knowledge concerning the ten rights of medications administration revealed that implement observations was 67.75%, while not implement observations was 32.25%.
Conclusions: the study showed that anesthetists' have good skill toward the ten rights of medications administration.
Recommendations: The researcher recommends ensure to apply the present study on all anesthetists in Holy Kerbala'a City Hospitals so as to achieve an evidence-based knowledge concerning the ten rights of medications administration.

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Keywords: Anesthetist, Skills, Rights, Medication Administration, Observational Study.

Introduction

Understanding the ten rights of medications administration can help prevent many medication errors. Anesthetists, for example as an important part of the health care givers who are primarily involved in the administration of medications, benefit from this simplified memory aid to help guide them to administer medications safely. As many tasks involve a degree of risk, medication

administration arguably carries the greatest risk. Research on medical administration errors (MAEs) showed that there is a 60% error rate mainly in the form of wrong time, rate, or dose (Vera, 2023) [2].

To safely administer medications, an anesthetist must know the answers to a range of potential questions about his or her patients and their medications: who, what, when, how, and why. Medication errors are no small matter in clinical practice. The Institute of Medicine's (IOM) first quality report noted that medication-related errors contribute to significant morbidity and mortality; errors accounted "for one out of every 131outpatient deaths and one out of every 854 inpatient deaths in the United States" (Hughes & Blegen, 2018) [5].

Methodology

Design of the Study: A descriptive quantitative approach is conducted to evaluate anesthetists' clinical knowledge concerning the ten rights of medications administration.

Ethical Consideration: The researcher obtained the approval of Al-Taff University College/ Anesthesia and Intensive Care Department, as well as the consent of the participants in the research.

Setting of the Study: Al-Imam Al-Hussein Medical City and Al-Hindiya Teaching Hospital in Holy Kerbala'a City, Iraq.

The Sample of the Study: A non-probability, purposive sample of (40) anesthetists who work at Al-Imam Al-Hussein Medical City and Al-Hindiya Teaching Hospital were selected based on the study criteria and after obtaining a consent from them.

Instrument: The study instrument consisted of two parts; part one deals with the characteristics of the sample which of age, gender, level of education, years of experience as an anesthetist, and participation in education course concerning the ten rights of medications administration. Part two deals with anesthetists' clinical knowledge concerning the ten rights of medications administration which was ***10*** items. constructed according to review of literature.

Validity of Instrument: the validity of instrument was obtained through 5 experts.

Statistical and Data Analysis: the researcher used Package of Social Sciences version 23, and used of descriptive and Inferential Statistical for data analysis.

Results

Table 1: The distribution of the study sample according to their socio- demographic characteristics (No. = 40)

No.	Characteristics		Freq.	%
1	Age/years	22-26	17	42.5
		27-31	11	27.5
		32-36	8	20.0
		37-40	4	10.0
		Total	40	100.0
2	Gender	Male	28	70.0
		Female	12	30.0
3	Anesthesia study level	Bachelor degree	15	37.5
		Diploma degree	25	62.5
4	Years of experience As an anesthetist	1-5	24	60.0
		6-10	7	17.5
		11-15	7	17.5
		16-20	2	5.0
		Total	40	100.0
5	Educating course	No	23	57.5
		Yes	17	42.5

No: Number, Freq.: Frequency, %: Percentage

The socio-demographic characteristics of the present study in table (1) revealed that the age of study sample was 42.5% at 22-26 years old. Two thirds of anesthetists who participated in the present study were males 70%. About two thirds of the study sample have diploma degree in anesthesia field which of 62.5%. Above a half of the study sample (60%) have 1-5 years of experience as an anesthetist. About (60%) of the sample participated in a educating course concerning medications administration.

Table 2: Anesthetists' Clinical Knowledge Concerning the ten rights of medications administration for the Study Sample

No.	Items		F.	%
1.	Right Medication: Giving the prescribed treatment and nothing else	Not implement	5	12.5
		Implement	35	87.5
2.	Right Dose: Give the appropriate and recommended dose	Not implement	7	17.5
		Implement	33	82.5
3.	Right Route: Give the treatment according to the recommended method	Not implement	10	25.0
		Implement	30	75.0
4.	Right Time: Give the dose at the specified time and do not delay it or give it before the specified time	Not implement	13	32.5
		Implement	27	67.5
5.	Right Patient: Giving the treatment to the same patient and not someone else, or suspecting that the dose was given to a non-patient	Not implement	1	2.5
		Implement	39	97.5
6.	Right Patient Education: Explaining the name of the treatment, its action, side effects, and its benefit to the patient before starting administration	Not implement	30	75.0
		Implement	10	25.0
7.	Right Documentation: Recording the administration information (time, date, dose, etc.) before the dose and not after it	Not implement	22	55.0
		Implement	18	45.0
8.	Right Refuse: Monitoring the rejection process and whether the anesthesia respected the patient's decision to refuse the dose	Not implement	17	42.5
		Implement	23	57.5
9.	Right Assessment: The patient's vital signs are checked before administering the medication	Not implement	5	12.5
		Implement	35	87.5
10.	Right Final Evaluation: Create a final evaluation plan for the desired results after administering the medication	Not implement	19	47.5
		Implement	21	52.5
	Total	Not implement		32.25%
	Total	implement		67.75%

No: Number, F.: frequency, %: percentage

Table (2) presented the anesthetists' skills concerning ten rights of medications administration. It was 67.75% for implement observations, while not implement observations was 32.25%.

Discussion

The high percent (about 43%) of the study group at age group 22-26 years old. Throughout the data analysis in chapter four, the majority of study sample were males (70%).

Hanson, *et al*., (2021) [4] conducted a study that was initiated to assess nurses' knowledge and practices regarding tracheostomy care among patients with tracheostomy tube working in the ICUs on 80 nurses in Rwanda. They stated that a half of respondents (43%) have a (1-5) years of experience in nursing work. High percentage of the study sample who has no participation in a specific education course concerning medication administration (about 58%).

Conclusions

In conclusion, the results of the current study the study concluded that anesthetists' have good skill toward the ten rights of medications administration. The study recommended to apply the present study on all anesthetists in operation rooms and intensive care units as could as possible. increase education courses concerning medications administration for anesthetists to avoid errors as could as possible to make staff aware for this vital subject for patients' safety who are undergoing anesthesia.

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References

1. National Association of School Nursing. Medication administration: position statement. In: Wisconsin School Nursing Handbook [Internet]. Chapter 3. Wisconsin Department of Public Instruction; 2023 [cited 2025 Oct 21]. Available from: https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/snhandbookch3.pdf
2. Vera M. The ten rights of drug administration [Internet]. Nurseslabs; 2023 [cited 2025 Oct 21]. Available from: https://nurseslabs.com/10-rs-rights-of-drug-administration/
3. Hopkins M, Girard T, Dalay S, Jenkins B. Malignant hyperthermia 2020: guideline from the Association of Anaesthetists. Anaesthesia. 2020;75(5):657-69.
4. Hanson A, Haddad LM. Nursing rights of medication administration. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 [updated 2020 Nov 20; cited 2025 Oct 21]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK560654/

5. Hughes RG, Blegen MA. Patient safety and quality: an evidence-based handbook for nurses. Rockville (MD): Agency for Healthcare Research and Quality; 2018.

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