

Original Research Paper

Anesthesiology

ROLE OF ANAESTHETIST IN POST ANAESTHESIA VISIT - QUESTIONNAIRE STUDY AMONG ANAESTHESIOLOGISTS

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ABSTRACT

Background The role of anaesthetist has increased tremendously from just being in the operative team to the recovery of the patient in the post-operative period. The recovery without any complication requires multidisciplinary team which should be embedded in a clinical care pathway with focus on enhancing patient recovery. Objectives: To evaluate the need for post anaesthesia visit, among Anaesthesiologists to improve the post-operative and post anaesthesia quality care. Methodology: This was a cross sectional study conducted among 275 anaesthesiologists by an online survey using a validated pretested questionnaire Results: Majority of the study participants were males. 92.4 % had regular post-anaesthesia service available in their hospitals. More than 70% of the patients had post-operative visits. Majority of the post-operative visit was on the day of surgery and on the first post-operative day. Conclusion: It is the responsibility of the anaesthesiologist to guarantee that patients have completely recovered from the given anaesthesia and to detect and treat any probable anaesthetic-related complications. Hence, a post-operative care team involving the surgeons and anaesthetist can alleviate the complications, shorten the duration of hospital stay and improved recovery.

KEYWORDS: Anaesthesia, Complications, Post-operative visit.

Introduction:

Globally, nearly 320 million population are undergoing surgeries every year. Anaesthesia associated deaths are lesser than one per 1 lakh anaesthetics, in spite of the increase in the surgery complexity and co-morbidity of the patients. The advancement in technology and training has improved the outcomes of the surgeries. Postoperative recovery begins when surgery and delivery of anaesthesia stops and is followed by care in the recovery room or in Intensive care Unit. Full recovery can take much longer. Recovery can be a fragile and complex process with physical, social, emotional and habitual characteristics. ²The recovery from surgeries include various phases, pre-recovery which includes pre-operative evaluation and preparation, early recovery when the patient emerge out of the anaesthesia, Intermediate recovery involving the care of the patients in the hospital, Late recovery when the patient is discharged from the hospital with continuing care and finally the long-term recovery which takes around 3 to 6 months depending upon the complexity of the surgeries.3

The anaesthetist role in the post-operative care has grown tremendously from being a part of anaesthesia care during the surgeries to perioperative care with varied medical specialities. The peri-operative care involves seamless transition of the patient from informed medical optimization of the patient before the surgery, through the surgery and to the recovery. The recovery without any complication requires multidisciplinary trained and team-based care which should be embedded in a clinical care pathway with focus on enhancing patient recovery. Thus, the anaesthetist being in charge only during the intraoperative and early postoperative phases, and the surgeon being in charge for medical treatments before and afterwards, is now evolving into a continuum of care throughout all the phases of the surgery.

Studies to assess the practice and attitude of post-operative visit by anaesthesiologist is scarce. With this background the present study was conducted with an objective to evaluate the need for post anaesthesia visit among Anaesthesiologists to improve the post-operative and post anaesthesia quality care.

Methodology: Study type

The study was a cross-sectional study conducted among angesthesiologist.

Study duration

The duration of the study was 1 month after the ethical committee approval.

Sample size determination

With the prevalence of $7.8\%^5$ and allowable error of 5%, the sample size calculated was calculated using the formula $4pq/L^2$. The sample size arrived was 275.

Sampling method

The convenience sampling method used to derive the samples.

Study instrument and data collection

A standardized pretested validated semi-structured questionnaire was administered as the study instrument. The data collection was done through online survey after registration.

Statistical analysis

The collected data were checked for completeness before entering it into the Microsoft excel spreadsheet. The validation of the data was checked at regular intervals. Data analysis was performed using Statistical Package for Social Sciences (SPSS IBM) 21. The quantitative data were expressed in frequency and percentages.

Ethical consideration and confidentiality

All participants were informed regarding the purpose of study, benefits, procedure, and confidentiality of the research study. The study was undertaken after getting informed consent from the participants using the pretested, validated semi-structured questionnaire.

Results:

Majority of the study participants were males (52%). 92.4% had regular post-anaesthesia service available in their hospitals. (Table 1)

Table 1: Percentage Of Patients Anaesthetized With Postoperative Visit In Last Year

S no	Variable	Frequency	Percentage
1	Patients with post-operative visit		
	last year (%)		
	70	65	23.6
	80	66	24

	90	73	26.5
	100	71	25.8
2	Patients received Post-operative		
	visit to the patient anaesthetized		
	by colleague		
	70	74	26.9
	80	62	22.5
	90	75	27.3
	100	64	23.3
3	Patients received Post-operative		
	visit to the patient anaesthetized		
	by yourself		
	70	70	25.5
	80	69	25.1
	90	71	25.8
	100	65	23.6

51.6% and 48.4% of the regular and complicated cases had post-operative visit respectively.

Majority of study participants had their post anaesthesia visit during their working hours. (Table 2)

Table 2: Time And Duration Of Post-operative Visit

S no	Variable	Frequency	Percentage
1	Post Anaesthesia visit		
	Within working hours	241	87.6
	After working hours	34	12.4
2	Frequency of post anaesthesia visit		
	Daily	71	25.8
	Every 2-3 days	66	24
	Every 4-5 days	67	24.4
	Less than a week	71	25.8
3	Duration of post anaesthesia visit		
	(minutes)		
	<5	85	30.9
	5- 10	93	33.8
	>10	97	35.3
4	Post-operative visit related to the day		
	of surgery		
	On day of surgery	65	23.6
	1 st POD	74	26.9
	2 nd POD	69	25.1
	3 rd POD	67	24.4

Major post operative visit documentation was about the general post operative condition. (Table 3).

Table 3: Documentation During Post-operative Visit

S no	Variable	Frequency	Percentage
1	Information recorded*		
	Time	156	56.7
	Content	138	50.2
	Duration	141	51.3
2	Content		
	About General Post-op condition	71	25.8
	Open questions about Post-op		
	problem and complications	68	24.7
	Specific problems about post-op		
	problem and complications	67	24.4
	Short physical examination	69	25.1
3	Detection of complication during		
	the visit		
	Regularly	76	27.6
	Infrequently	75	27.3
	Intermittently	70	25.5
	Never	54	19.6

Major of the study participants admitted that post operative visits helps them in identifying the complication and intervene at fast. (Table 4)

Table 4: Attitude Of Anaesthesiologist About The Postoperative Visit

S no	Variable	Frequency	Percentage
1	Post-operative visit help in		
	Quality improvement	133	48.4

	Reducing the complication	142	51.6
2	Importance of Post-operative visi	t	
	Very important	70	25.5
	Important	55	20
	Irrelevant	85	30.9
	Completely irrelevant	65	23.6

Table 5: Reason For Not Receiving Post-operative Visit

S no	Variable	Frequency	Percentage
1	Lack of time	67	24.4
2	Extensive search for patients	65	23.6
3	Long distance to the patient to be covered	65	23.6
4	Patient already dismissed to home	78	28.4

Reason for not doing post operative visit given by anesthesiologists were that patient already dismissed to home. (Table 5)

The questionnaire that was used in the survey (Table 6)

Table 6- Role Of Anaesthetist In Post Anaesthesia Visit - Questionnaire Study Among Anaesthesiologists.

- 1) Estimate the percentage of patients anesthetized in your hospital in last year that are visited post-operatively by an anesthesiologist
- 0-10-20-30-40-50-60-70-80-90-100
- 2) Is there a regular post-anaesthesia service available in your hospital
- i) Yes ii) No
- 3) Which information about post-anaesthesia visit is recorded
- i) Time ii) Contents iii) Duration iv) Documentation not performed
- 4) Estimate the percentage of patients anaesthetized by yourself in last year that have received post anaesthesia visit i) By yourself 0 10 20 30 40 50 60 70 80 90 100
- ii) By a collegue 0 10 20 30 40 50 60 70 80 90 100
- 5) When do you perform post anesthesia visit
- i) Within regular working hours ii) After working hours
- 6) How often have you performed post anaesthesia visit within last year
- i) Daily $\,$ ii) Every 2-3 days $\,$ iii) Every 4-5 days $\,$ iv) Less than a week $\,$
- 7) Which type of cases do you follow up
- i) All regular cases ii) only complicated cases
- 8) How long is your typical post anaesthesia visit per patient i) Less than 5 minutes ii) 5-10 minutes iii) more than 10 minutes
- 9) When do you perform your post anaesthesia visit?
- i) On day of surgery ii) on first post op day iii) on second post op day iv) on third post op day
- 10) Which contents does your post anaesthesia visit have?
- i) Questions about general post op condition
- ii) Open questions about post op problems and complications
- iii) Specific problems about post op problems and complications
- iv) Short physical examination
- 11) Have you detected anesthesia related complications during your post anaesthesia visit
- I) Yes regularly
- II) Yes infrequently
- III) Yes intermittently
- IV) No never
- 12) Do you think post anaesthesia visit may I) Improve quality of own work yes / no

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- II) Reduce incidence of complications yes / no
- 13) How important are post anaesthesia visit to you
- I) Very important
- II) Important
- III) Irrelevant
- IV) Completely irrelevant
- 14) Why do not all your patients receive post anaesthesia visit
- I) Lack of time
- II)Extensive search for patients
- III) Long distance to the patient to be covered
- IV) Patients already dismissed to home
- V) I am not interested
- 15) Please answer the following question
- I) Sex-male/female
- II) Designation -

DISCUSSION:

The present study has shown that 92.4 % had regular postanaesthesia service available in their hospitals. More than 70% of the patients had post-operative visits. Majority of the post-operative visit was on the day of surgery and on the first post-operative day.

Post-operative visits by anaesthesiologist have become an inevitability in modern-day practice. The post-op anaesthesia visits can be extremely useful in identifying the complications early and reducing the mortality. Studies have shown that in hospitals with a pre-designed post-operative service, quantity of patients visit is significantly higher. Beecher and Todd in 1954, emphasized the "inseparability of anaesthesia from the total care of the surgical patient" and "the compelling reason why surgeon and anaesthetist, engaged as they are in a common task, cannot with profit pursue separate goals" ⁶. Anaesthesiologist in recent time have extended their role into the broader multidisciplinary field of peri-operative medicine ⁷

Literature have shown that satisfaction of the patients can be increased significantly by the post-operative visits. Sapuzzo M et al established that more than two post-operative visits by anaesthesiologists may significantly increase the patient satisfaction level. Yet, other literature have shown that with the increase in the number of visits may not necessarily upsurge the patient satisfaction. Yet, the quality of such visits may be more imperative than the frequency of such visits.

Though the recent advances have improved the outcome of even the complex surgeries, it has been emphasised that multidisciplinary and multimodal approach with a team of surgeons, anaesthetists and paramedical staff can minimise complications further and reduce the hospital stay.¹¹

CONCLUSION

Considerate to the increased appreciation and significance of post-operative visit, it is imperative to implement a post-operative care guideline. Anaesthesiologist and Surgeons have harmonizing qualities that can be amalgamated to make a significant difference in the most vital stages of perioperative and the postoperative phases.

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