

A Questionnaire Based Study on Practice of Visits Related to Post-Operative Anesthesia

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ABSTRACT

Aims: To assess the frequency of anesthesiologists practicing post-op anesthesia visit and to determine the reasons of not regularly performing post-operative anesthesia visit.

Study design: Cross-sectional study.

Place and duration of study: Tertiary and Secondary care hospitals of Karachi from 7th November 2019 to 7th April 2020.

Methodology: One hundred and eighty four anesthesiologists were enrolled. The eligibility of the anesthesiologist was assessed based on the eligibility criteria. The PI or the study team member was met the anesthesiologist on the decided date and time and asked him/her to complete the questionnaire. The questionnaire would take 10-15 minutes. This questionnaire was used to assess post-op practice and reasons for not performing post-operative anesthesia visit.

Results: The average age of the participants was 30.94±2.98 years. 52.72% of the anesthesiologists do not practice PAVs and 47.28% reported that they perform PAVs. Furthermore, majority of the anesthesiologist who do not practice PAVs reported that lack of time the most common reason for not performing PAVs regularly (80.4%) followed by long distances to the patients to be covered (19.6%), patients already discharge (18.6%) extensive research (17.5%) and others (13.4%).

Conclusion: Most of the anesthesiologists do not practice PAVs. Considering the high appreciation of post-anesthesia visits by anesthesiologists, as well as the relevant incidence of postoperative complications detected during these visits, it seems desirable to consider organizational improvements for post-anesthesia care.

Keywords: Post-operative anesthesia visit, Surgeon satisfaction, Post-operative complications of anesthesia

INTRODUCTION

Within the recent decades there has been an increased advancement in anesthesiology resulting in better health services delivery and reduction in surgical complications¹. Preoperative measures increase the preparatory time of a patient and also reduces the risk of complexities which can result in poor surgical outcomes². Most clinical settings adapt the SOP of surgeon delivering post-operative care with obscuring the role of anesthetist in pre-operative care.¹ Patients satisfaction is the primary goal of an anesthetist³. There have been various researches elaborating the anesthesia application but none have described it from patient's satisfaction perspective^{4,5}.

Post-anesthesia visits initiated during early nineties. Literature supports that relationship between the patient and the anesthetist is highly important in better surgical outcomes wherein patient's perception about the surgery requires a great deal of attention^{6,7}. Anxiety management as well as quality support and care need to be pre-empted through patient's available record and should be provided pre-operatively. There are various challenges faced by anesthetist in providing satisfactory care to the patients. This is due unavailability of any standard guidelines. There are various scoring frameworks available including Iowa Satisfaction with Anesthesia Scale (ISAS) as well as other which suffers from constrains including social foundations, ethnicity, race, scholarly grades as well as monetary⁸⁻¹⁰.

There is evident literature which details the fact that patients receiving post anesthesia visits are significantly more satisfied than those who are not receiving and post anesthesia visits^{11,12}. A percentage as 22% anesthetist is reported for providing post anesthesia visits daily or weekly. The anesthetist who did not perform Post anesthesia visits justified non-provision due to time lack, patient dismissed, interest deprivation and lack of search. The hospitals providing Post anesthesia visits have higher patient number than those not providing this service⁹.

There are some available guidelines in the context of post anesthesia visits such as available from German Society of anesthesiology and extensive care medicine guidelines. The American Society of Anesthesiologist have also highlighted the importance of post-anesthesia visits for better patients recovery and mental satisfaction⁹.

Received on 12-09-2022

Accepted on 23-02-2023

MATERIALS AND METHODS

This cross-sectional study was conducted at Tertiary and Secondary Care Hospitals of Karachi from 7th November 2019 to 7th April 2020 and 184 anesthesiologists were enrolled after getting permission from Ethical Review Board. Consultants, Specialists, FCPS residents or MCPS residents of Anesthesiology working at a tertiary and secondary care hospital, those who agree to participate, either gender and age 23-75 years were included. Primary care hospitals and planned PAV in patient who developed complications during anesthesia and the anesthesiologist want to follow that patient post operatively were excluded.

After the permission, the list of Anesthesiologist targeted, was those who are currently practicing at Secondary and Tertiary Care Hospitals of Karachi (i.e. The Indus Hospital, Aga Khan University Hospital, Liaquat National Hospital, Civil Hospital, Ojha, JPMC, SIUT, PNS Shifa, DarulSehat and Abbasi Shaheed Hospital). The eligibility of the anesthesiologist was assessed based on the eligibility criteria. Individual anesthesiologists fitting into the inclusion criteria was met by the principle investigator(PI) or team member to explain the purpose of the research survey and to take verbal consent. Those consenting to participate, day and time were decided for filling of the questionnaire. The PI or the study team member was met the anesthesiologist on the decided date and time and asked him/her to complete the questionnaire. The questionnaire would take 10-15 minutes. This questionnaire was used to assess post-op practice and reasons for not performing post-op anesthesia visit. The anesthesiologist returned back the filled questionnaire to the PI or study team member on the same day. Data was analyzed using SPSS-22.

RESULTS

The average age of the participants was 30.94±2.98 years. Ninety nine (53.8%) were males and 85(46.2%) were females. Most of them were FCPS resident (57.6%) followed by FCPS and MCPS consultant. There were 58.7% anesthesiologist working in private sector and 41.3% working in government sector. Practice of PAVs among anesthesiologists were assessed and observed that 52.7% of the anesthesiologists do not practice PAVs, and 47.3% reported that they perform PAVs (Table 1). Responses of anesthesiologists regarding the practicing post anesthesia visit are shown in Table 2. Majority of the anesthesiologist who do not practice PAVs reported

that lack of time the most common reason for not performing PAVs regularly (80.4%) followed by long distances to the patients to be covered (19.6%), patients already discharged (18.6%) extensive search (17.5%) and others (13.4%) [Table 3].

Table 1: Demographic information of the patients (n=184)

Variable	No.	%
Age (years)		
26 – 30	106	57.6
31 – 35	63	34.3
36 – 40	15	8.1
Gender		
Male	99	53.8
Female	85	46.2
Degree		
FCPS	41	22.3
FCPS Resident	106	57.6
MCPS	33	17.9
MCPS Resident	4	2.2
Working Hospital		
Government	76	41.3
Private	108	58.7
Anesthesiologists practicing post-operative anesthesia visit		
Yes	87	47.3
No	97	52.7

Table 2: Responses of anesthesiologists who practicing post-op anesthesia visit (n=87)

Questions	Response	%
What information about the post anesthesia visit is recorded in the patient chart?		
Content	28	32.2
Documentation is not performed	19	21.8
Time	6	6.9
Time + Content	2	2.3
Time + Duration + Content	32	36.8
Estimate the percentage of the patients anesthetized by yourself in the last year that have received a post anesthesia visits by yourself		
<50	40	46.0
50 – 90%	37	42.5
91 – 100%	10	11.5
When do you perform post anesthesia visits		
Within regular working hours	21	24.1
After regular working hours	66	45.9
How often have you perform post anesthesia visit within the last year?		
Daily	25	28.7
Every 2-3 days	10	11.5
Every 4-5 days	2	2.3
Once a week	11	12.6
Only when member of post-anesthesia service	39	44.8
How long is your typical post-anesthesia visit per patient?		
< 5 minutes	30	34.5
5-10 minutes	55	63.2
> 10 minutes	2	2.3
When do you typically perform your post-anesthesia visits?		
On the day of surgery	34	37.9
On the first post-operative day	49	56.3
On the second post-operative day	4	4.6
What are the contents of post- anesthesia visit? (multiple answers allowed)		
Questions about the general post-operative condition	45	51.7
Open questions about post-operative problems and complications	47	54.0
Specific questions about post-operative problems and complications	29	33.3
Short physical examination	7	8.0
Evaluation of the patients chart	17	19.5
Have you ever detected anesthesia related complications during your post anesthesia visits?		
Infrequently	46	52.9
Intermittently	28	32.2
No never	13	14.9
Do you share the opinion that the regular performance of post anesthesia visits may improve the quality of your own work		
Yes	83	95.4
No	4	4.6
Do you share the opinion that the regular performance of post anesthesia visits may reduced the incidence of complications		
Yes	83	95.4
No	4	4.6
How important are post anesthesia visits to you?		
Important	45	51.7
Very important	41	47.1
Irrelevant	1	1.1

Table 3: Reasons of not performing post-operative anesthesia visit (n=97)

Reasons	No.	%
Lack of time	78	80.4
Lon distances to the patient to be covered	19	19.6
Patients already discharged	18	18.6
Extensive search for the patient necessary	17	17.5
Others	13	13.4
Not interested in post-anesthesia visits	-	-

DISCUSSION

Post-anesthesia visits are conducted in clinical settings and hospital post working hours of the anesthetist within a timeline of 5 minutes. Although the anesthetist agrees over the fact that these visit increases the identification of complications post operatively, yet this seems to be an overburden on their own schedules⁹.

American Society of anesthesiology has defined the act of post-operative visits by anesthesiologist as a great responsibility which needs to be addressed¹³. Royal College of Anesthetists also defines the responsibilities of anesthesiologist in their literature wherein emphasis have been given to planning of the visits within first 24 hours of an operative procedure¹⁴.

It has also elaborated that non-coordination between the surgeons and the anesthesiologist as the complications which are noticed by the anesthesiologist are not communicated with the surgeons. These complications are specifically related with the mental status and sensory deficiencies¹⁴. In the current study patient's average age was 30.94±2.98 years with majority being males and FCPS residents. Most of the anesthetists were from private sector hospitals. Fink et al⁹ reported the data with a very less number of FCPS residents to be involved in post-operative visits, rather there research elaborated 32.36% to be consultant anesthetist who was providing post-operative visits to patients.

The present study results have elaborated the fact that lack of time is the main reason for which most of the anesthesiologist avoids delivering post-operative visits to the patients. The same has also been reported in previous studies⁸⁻¹⁴. The results of current study emphasize on the fact that post-operative visits must be provided to the patients for their satisfaction and reduction in post-operative complications. There is also further requirement of anesthesiologist and surgeon coordination for timely identification and management of post-operative complications¹⁵⁻¹⁷.

CONCLUSION

Most of the anesthesiologists do not practice PAVs. Considering the high appreciation of post-anesthesia visits by anesthesiologists, as well as the relevant incidence of postoperative complications detected during these visits, it seems desirable to consider organizational improvements for post-anesthesia care.

Conflict of interest: Nil

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