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ORIGINAL ARTICLE

Evaluation of Post-OP Complications using Risk Assessment Tool; Attitude of Surgeons

HAFIZ MUHAMMAD ALI HASNAIN[1], MUHAMMAD HAMZA[2], MUHAMMAD FAISAL JAVAID[3], AMINA TARIQ[4]
[1]*Demonstrator, Niazi Medical and Dental College Sargodha*
[2]*Medical officer, DHQ Teaching hospital Sargodha*
[3]*Assistant Professor, Niazi Medical and Dental College Sargodha*
[4]*Research Coordinator, Research Cell, University College of Medicine & Dentistry, University of Lahore.*
Corresponding author: Amina Tariq, Email: aminatariq8@gmail.com

ABSTRACT

Objective: Current study was designed to assess the attitude of surgeons towards the use of surgical risk assessment tools in Sargodha.

Method: This study was of descriptive crossectional nature. It was a survey based study conducted in a 4 tertiary care hospitals of Sargodha. Data of 30 surgeons was collected using a questionnaire. Frequencies and percentages were calculated to interpret results.

Results: The usage of online risk calculator was never used by majority of surgeons (83.33%). Risk assessment is always based on prior experience (76.67%). Evaluation of risk assessment based on existing literature is always practiced by 53.33% surgeons.

Conclusion: majority of surgeons are not using risk assessment calculator in surgical settings. They are focusing on prior experience based assessment of post-op complications. The briefing time given by surgeon to the patients while communicating their risk assessment is very less which should be maintained by the hospital management.

Keywords: Risk Assessment, Post-op Complications, Surgeons, Infections

INTRODUCTION

For a surgeon, the most significant task is the accuracy of preoperative evaluation of patient in terms of postoperative risk assessment.[1,2] Even though, there are many risk assessment tools available which can predict the level of risk or complications after surgery but unfortunately, there use is not so common.[3,4] Among high risk patients, it is difficult for the surgeons to predict postop complications as compared to the low risk patients evaluation.[2,5] Such scenarios are quite challenging as patients with high risk of having postop complication are required to get advantages from pre-op counselling, discussions related to informed consent, and efforts of mitigating potential risk factors. Employment of a proper pre-op assessment of risks can enhance the understanding of negative risks followed by surgery by patients as well as the team of surgeons.[3,4] using such tools helps in making the patient as well as the surgeon to be on same pace in terms of decision making prior to surgery.[6-9] Personalized evaluation of risk enhances the understanding of patients with regards to the suggested surgery and also enhances the level of conveying thoughts related to informed consent and personalized risks of patients.[10] This procedure enhances the comfort level and satisfaction of patient while lowering the level of anxiety.

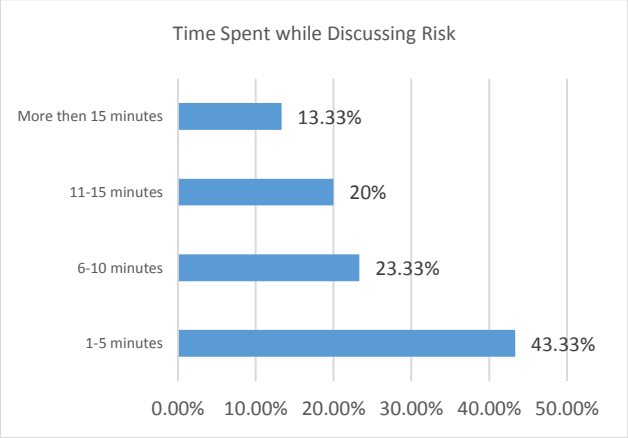
More precise decision could be made by surgeons by using such tools before surgery.[11,12] the objectivity of pre-op assessment has found to be increased using such tools as it helps in the process of decision making which lowers the post-op complications by devising a better way out.[13] So, there was a need felt to assess the used of surgical risk assessment tool in Sargodha. Current study was designed to assess the attitude of surgeons towards the use of surgical risk assessment tools in Sargodha.

METHODOLOGY

This study was of descriptive crossectional nature. It was a survey based study conducted in a 4 tertiary care hospitals of Sargodha. Data of 30 surgeons was collected using a questionnaire. Questionnaire was consisted of 4 questions having sub-questions. After the IRB approval, permission was taken from the Medical superintendent and head of Department of the general surgery department to collect data from surgeons. Collected data was entered in SPSS version 25. Frequencies and percentages were calculated to interpret results.

RESULTS

Among entire data 30% were females and 70% were males. The majority of participants reported that maximum time spent by the surgeons to discuss risk analysis with patients was 1 to 5 minutes (43.33%). 23.33% participants reported they normally spend 6 to 10 minutes to discuss risk factors after surgery. 20% participants reported that they normally spend 11 to 15 minutes to discuss risk factors after surgery whereas only 13.33% participants reported that they normally spend more than 15minutes to discuss risk factors after surgery.



Graph 1: Number of minutes spend to discuss post-op risks

The usage of online risk calculator was never used by majority of surgeons (83.33%). Risk assessment is always based on prior experience (76.67%). Evaluation of risk assessment based on existing literature is always practiced by 53.33% surgeons.

Only 10% surgeons communicate risk in pre-anesthesia clinic whereas 33.33% surgeons rarely communicate post op risk in pre-anesthesia clinic. Majority of surgeons (30%) often use direct communication method. 86.67% surgeons do not prefer phone call to discuss post-op risk with patients. 60% surgeons do not rely on their residents in case of communicating risk factors. 53.33% surgeons do not communicate post-op risk factors with the referring providers.

Table 1: Post-op risk assessment among surgeons

	Never	Rarely	Sometimes	Often	Always
Source of Risk Estimates					
Online Risk Calculator	25 (83.33%)	3 (10%)	2 (6.67%)	0 (0.0%)	0 (0.0%)
Prior Experience	0 (0.0%)	0 (0.0%)	2 (6.67%)	5 (16.67%)	23 (76.67%)
Evaluation of existing literature	0(0.0%)	0(0.0%)	6(20%)	8(26.67%)	16(53.33%)
Ways of Risk Communication to patients					
Pre-anesthesia Clinic	8(26.67%)	10(33.33%)	4(13.33%)	5(16.67%)	3(10%)
Direct communication	2(6.67%)	4(13.33%)	7(23.33%)	9(30%)	8(26.67%)
Phone Call	26(86.67%)	3(10%)	1(3.33%)	0(0.0%)	0(0.0%)
Rely on residents	18(60%)	2(6.67%)	3(10%)	5(16.67%)	2(6.67%)
Communication of risk to referring providers	16(53.33%)	5(16.67%)	5(16.67%)	2(6.67%)	2(6.67%)

DISCUSSION

The findings of current study found that 6.67% surgeons' use online risk assessment calculator which is very low as compared to the result of a similar study in which the reported percentage of surgeons was 20.8%.[14] Majority of surgeons reported that they do post-op risk assessment on the bases of their prior experience and existing literature.

The use of risk calculators produce the successful results in the prediction of major complication after surgery as well infections.

It was found in a previous study which was conducted on postgraduate residents that they rely more on risk assessment calculators[14] which is different in surgeons as explored by the current study. This gap is due to the gap in being friendly with the technology. [2,3]

Literature has evidence that risk assessment tools are though very much used by postgraduate residents but they are actually underutilized, due to the lack of health records of patients that's why traditional model has better way out.[15] Language barrier is also a limitation of using the risk assessment calculators. Handouts availability for operating risk assessment calculators are not readily available in native languages.[11]

To conclude, majority of surgeons are not using risk assessment calculator in surgical settings. They are focusing on prior experience based assessment of post-op complications. The briefing time given by surgeon to the patients while communicating their risk assessment is very less which should be maintained by the hospital management.

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