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Research Article

**A RETROSPECTIVE RESEARCH STUDY ON THE POSITIVE  
IMPACTS OF MORBIDITY AND MORTALITY (M&M)  
FORUMS ON THE OVERALL MEDICAL PROFESSION AND  
PATIENT CARE****Dr. Laiq, Dr. Rameez Ahmed, Dr. Sebghat Ullah**  
Al- Tibri Medical College, Isra University**Abstract:**

**Objectives:** The objective of this research was the reviewing the mortality and morbidity utility forum in the General Surgery at a tertiary health care hospital of Lahore, Pakistan.

**Methods:** Design of the research was retrospective and it was carried out in Ganga Ram Hospital, Lahore for the morbidity review through the data which was gathered in the hospital from February – April, 2017. Case notes were reviewed about all the patients in the specified timeframe for identification and review of the hospital morbidities.

**Results:** A total of 340 cases were reviewed in the research period, it was identified through the study of the case notes that 61 patients (17.94%) had morbidities; 35 males (57.37%) & 26 females (42.62%). It was identified through the record of the morbidity in 32 patients (52.5%); whereas, 29 patients (47.5%) missed the morbidities. In total cases of the morbidities, 32 patients (52.5%) were under treatment in the general ward and 29 cases (47.5%) were in the areas of high dependency. General ward was observed with 9 cases (28%) of morbidities and 23 patients (79%) were observed in the area of higher dependency. Morbidities associated to the cavity of the abdomen were observed as the most repeated observed in 22 cases (36%). Seventeen cases were wound-related (28%) and 8 cardio-pulmonary cases (13%), which were second most repeated complications.

**Conclusions:** Morbidities of the abdominal cavity were observed as the common most among the incidence of morbidities, next most common was the wound-related & cardio-pulmonary abnormalities. The mortality and morbidity forum are among the awareness activity which stands against the that time test and also acts as the corner-stone of post-graduate education. This activity is to be focused as the major and primary to train the programs of the postgraduates.

**Keywords:** Morbidity, Postgraduate, Mortality, Training and Medical Education.

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**INTRODUCTION:**

In the modern surgical and medical care, the treatment outcomes have improved in most of the illnesses. However, in the view of this laudable development has persevered an unwanted companion; which is the incidence of the adverse events and complications associated with the intervention or treatment. These events incidences vary over specific range depending on few of the variables such as disease severity, disease pattern, health quality, allied facilities and healthcare facilitators. In the early 20<sup>th</sup> century only surgeons were able to recognize and identify the importance of documentation and review of the records in the light of aroused complications of the healthcare procedures. The prime objective was to learn from the committed mistakes and improvement through reflective practice in the field of medical science and professionalism.

The conferences on the mortality and morbidity has become the tested and tried process which improves the overall standard of the practical and academic aspects of the healthcare facilities and facilitators.

This research was actually a retrospective review which was aimed at the identification of the total morbidities of the patients observed through case notes, these case notes were prepared by the surgical teams and also compared with the official record of the morbidity for onward presentation in the monthly forum that discusses the Mortality and Morbidity.

**MATERIALS AND METHODS:**

Design of the research was retrospective and it was carried out in Ganga Ram Hospital, Lahore for the morbidity review through the data which was gathered in the hospital from February – April, 2017. Case notes were reviewed about all the patients in the specified timeframe for identification and review of the hospital morbidities. An arbitrarily timeframe was selected on the grounds of a handsome number of patients. We compared two information sources. All the medical and case records of the hospitalized patients were retrieved and reviewed to extrapolate all the information linked with the morbidity and aroused because of any surgical disease or hospitalization. Patient's principle diagnosis,

demographics, admission mode and morbidity location were also observed and documented. M&M coordinator helped in obtaining the records which were month-wise. Every case of morbidity occurred in the first thirty days of surgical service admission, without any discrimination of the opted intervention were centrally gathered and sent to M&M coordinator. All mortalities were discussed and presented in the M&M forum formally.

**RESULTS:**

A total of 340 cases were reviewed in the research period, it was identified through the study of the case notes that 61 patients (17.94%) had morbidities; 35 males (57.37%) & 26 females (42.62%). It was identified through the record of the morbidity in 32 patients (52.5%); whereas, 29 patients (47.5%) missed the morbidities. In total cases of the morbidities, 32 patients (52.5%) were under treatment in the general ward and 29 cases (47.5%) were in the areas of high dependency. General ward was observed with 9 cases (28%) of morbidities and 23 patients (79%) were observed in the area of higher dependency. Morbidities associated to the cavity of the abdomen were observed as the most repeated observed in 22 cases (36%). Seventeen cases were wound-related (28%) and 8 cardio-pulmonary cases (13%), which were second most repeated complications. Every case was reviewed; 61 cases (17.94%) were observed with multiple morbidity in the time of hospital stay. Morbidity record have been shown in Table – I. Identification of the morbidity through case notes has been reflected in Table – II.

In the total morbidities which were identifiable, 39 cases (64%) were of elective hospitalization; 19 cases (31%) were of emergencies and remaining 3 cases (5%) were urgent admissions. Male and female were respectively 35 males (57%) & 26 females (43%). Besides, 32 cases were general ward cases (52%) & 29 cases (48%) were from the areas of higher dependency. General ward morbidities were observed in 9 cases (28%) in the total of 32 cases of morbidities and 23 cases were identified in the higher areas of dependency (79%) during the M&M forum discussion.

Table – I: Morbidities presented in M&amp;M Forum (number = 32\*).

Morbidities	Number	Percentage	
Wound Complications:	Infection	1	3
	Dehiscence	1	3
Intra-abdominal complications	Anastomotic leak	8	25
	High output stoma	1	3
	Adhesive bowel Obstruction	2	6
	Intra-abdominal collection/residual abscess	3	9
	Hemorrhage	1	3
	Splenic injury	1	3
Pulmonary complication	Pneumonia	2	6
	Pulmonary Edema	2	6
	Lung collapse	1	3
Vascular complication	Graft thrombosis	2	6
	Flap necrosis	2	6
	Limb ischemia	1	3
	Stroke	2	6
Miscellaneous	Encephalopathy	1	3
	Diarrohea	1	3
	Non-ST elevation MI	1	3
	Electrolyte imbalance	1	3
	Scrotal swelling	1	3
	Brachial plexopathy	1	3
	Acinetobacter infection	1	3

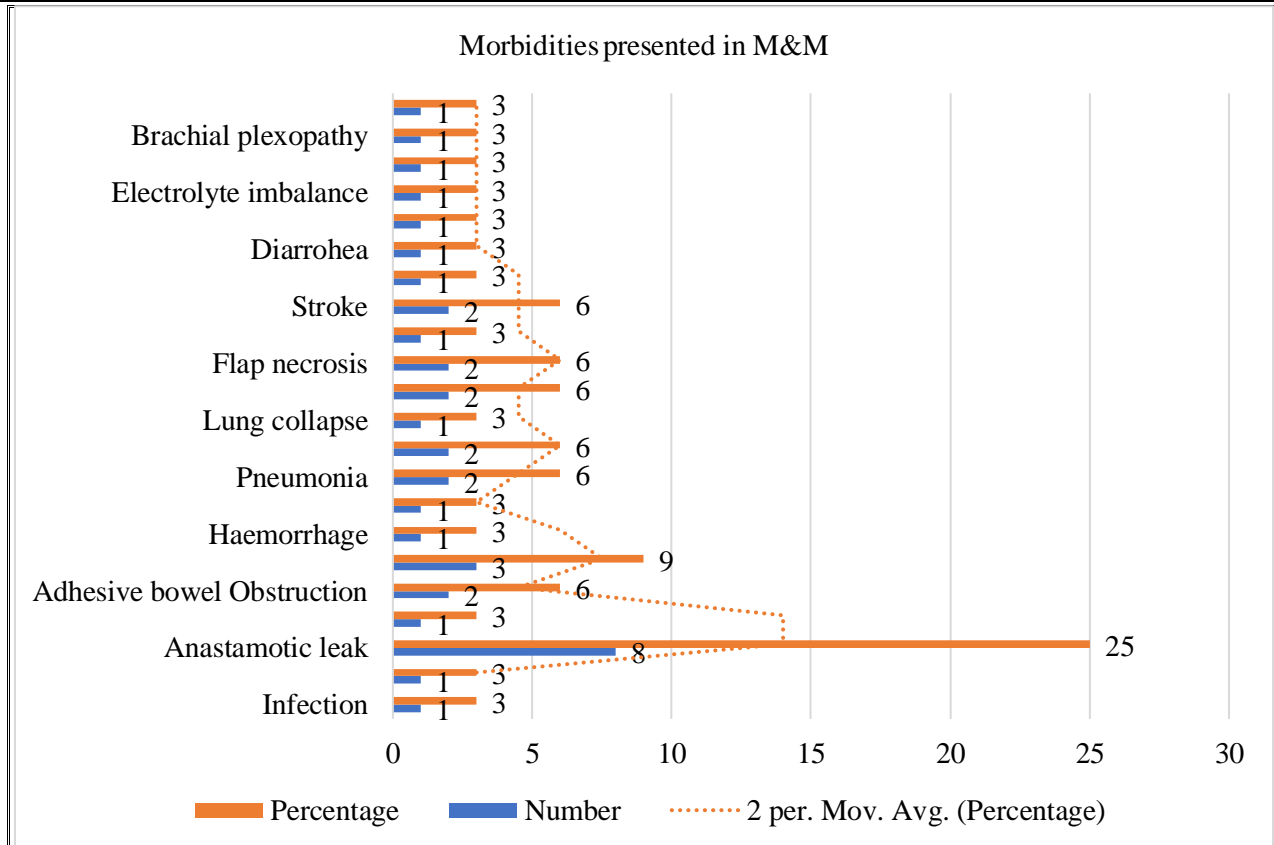
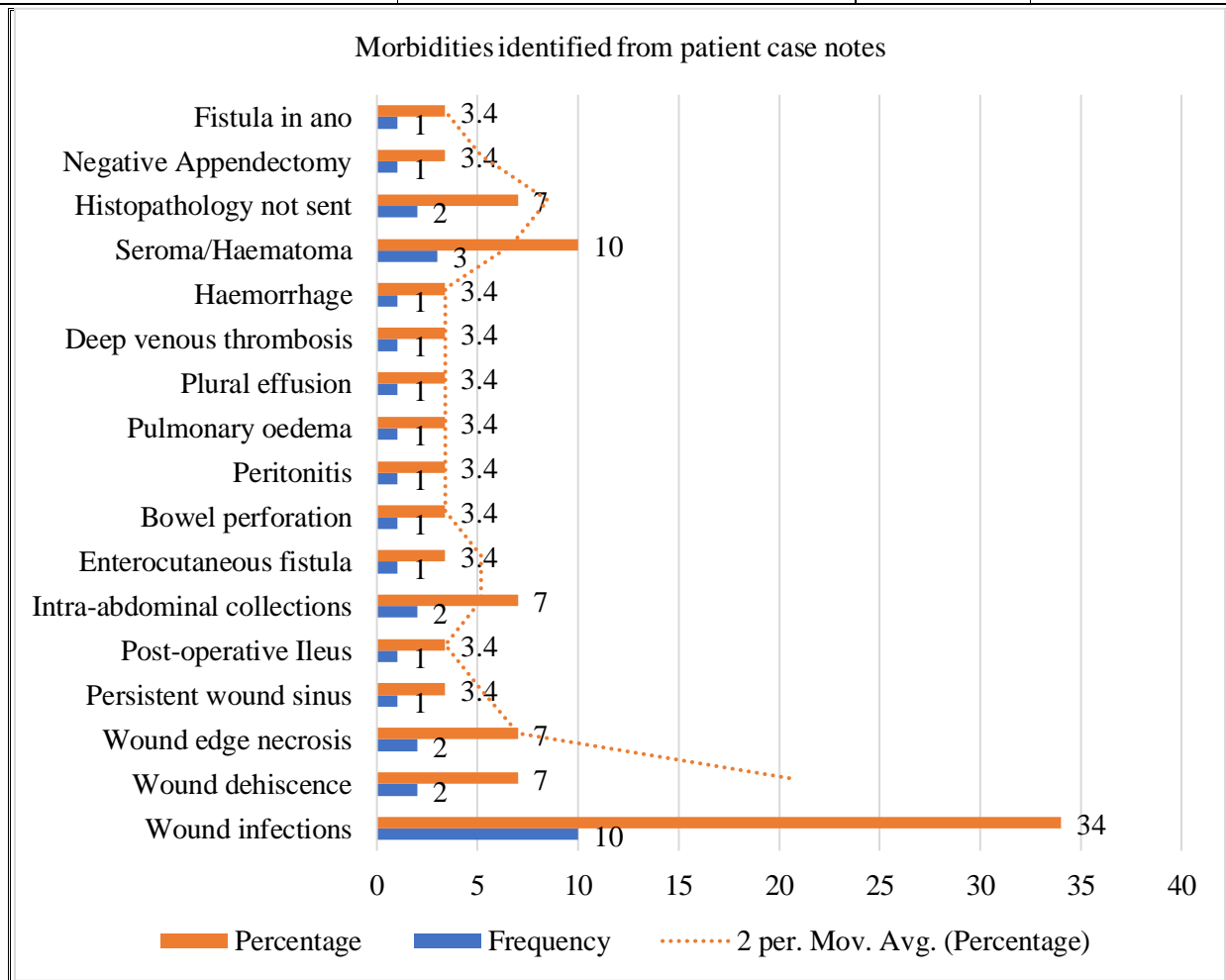


Table – II: Morbidities identified from patient case notes (n=29\*).

Morbidities	Frequency	Percentage	
Wound Complications	Wound infections	10	34
	Wound dehiscence	2	7
	Wound edge necrosis	2	7
	Persistent wound sinus	1	3.4
Intra-abdominal Complications	Post-operative Ileus	1	3.4
	Intra-abdominal collections	2	7
	Enterocutaneous fistula	1	3.4
	Bowel perforation	1	3.4
	Peritonitis	1	3.4
Pulmonary Complications	Pulmonary edema	1	3.4
	Plural effusion	1	3.4
Vascular Complications	Deep venous thrombosis	1	3.4
Miscellaneous	Hemorrhage	1	3.4
	Seroma/Hematoma	3	10
	Histopathology not sent	2	7
	Negative Appendectomy	1	3.4
	Fistula in ano	1	3.4



**DISCUSSION:**

All the medical professionals learn a lot from the mortality and morbidity forums about the patient care. For the achievement of the full potential of the M&M forum an establishment of blame free and honest environment is essential. Most of the participants do consider these gatherings a blame and score settling opportunity but the jest of the meeting lies in the learning and improving the practices [1]. It is learnt through literature reviews that departments hide the actual morbidity rate in their reviews [2, 3].

Official records just carry half of the actual figures, in another close analysis it was revealed that a number morbidity occurred in the area of higher dependency which were subsequently presented in the M&M meetings. Similarly, significant morbidities such as anastomotic leaks were also made a part of the presentation in the M&M review. In certain situations, the general ward morbidities were taken as common or expected such as infection of the wound after a contaminated surgery were observed repeatedly and these were not included in the departmental records.

Biasness was another cause behind the removal of morbidities from the departmental records. To address this issue effectively real time record keeping is encouraged [4]. Other noteworthy reasons include non-significant morbidities (less common) also known as missed morbidity which was a common practice. Patients having any terminal disease, switching services or managed through non-surgical facility are also missed through the primary technique of recalling. Considerable heterogeneity amount is also involved in the morbidity definition among attending and resident's physicians. General notion is that minor morbidities reporting will bring a bad name for the physicians [1, 5]. Finally, for the audience interest uncommon things are highlighted and focused and the major issue is covered under these discussions.

An oldest reporting forum is considered as the General Surgery, which is eldest and best among others for the identification of the mortality and morbidity in our department. In this process senior residents identify the final list of the morbidity records for onward presentation in the M&M forum. The process of selecting these morbidity list involves recalling from memory, on month end, at the time of printing of the final list. Few of the individuals do prepare their own records, but this is not a common practice. In few of the institutions an online facility for updating records of the morbidities are also

actively involved and updated time to time. Unfortunately, it is not that much active as it was at the initial stage. Now a day a resident is responsible for the presentation and it revolves around the patient's clinical course as observed in the hospital.

Presenter usually presents his understanding about the adversity of the situation in the M&M forum; whereas management detail and follow-up in to be described about the morbidity. Case summary is also presented in the review meetings. A review meeting is an opportunity and open forum that discusses the aroused queries and also suggest the process of decision making, technical aspects and support or an overall management about surgical procedures. Issues are also clarified in detail by the residents. Discussion and questioning is also encouraged in the residents.

Critical thinking also blossoms in these sessions and skills of presentation and power of expression in the residents also improves through rhetoric and didactic approach. Audience fear is removed and residents are trained to be calm even in the aggressive audience.

**CONCLUSION:**

Morbidities of the abdominal cavity were observed as the common most among the incidence of morbidities, next most common was the wound-related & cardio-pulmonary abnormalities. The mortality and morbidity forum are among the awareness activity which stands against the that time test and also acts as the corner-stone of post-graduate education. This activity is to be focused as the major and primary to train the programs of the postgraduates.

**REFERENCES:**

1. Hutter MM, Rowell KS, Devaney LA, Sokal SM, Warshaw AL, Abbott WM, et al. Identification of surgical complications and deaths: an assessment of the traditional surgical morbidity and mortality conference compared with the American College of Surgeons-National Surgical Quality Improvement Program. *J Am Coll Surg* 2006; 203: 618-24.
2. Sakowska M, Connor S. The value of voluntary morbidity and mortality meetings at a New Zealand metropolitan hospital. *N Z Med J* 2008; 121: 57-65.
3. Wanzel KR, Jamieson CG, Bohnen JM. Complications on a general surgery service: incidence and reporting. *Can J Surg* 2000; 43: 113-7.

4. Hamby LS, Birkmeyer JD, Birkmeyer C, Alksnitis JA, Ryder L, Dow R. Using prospective outcomes data to improve morbidity and mortality conferences. *Curr Surg* 2000; 57:384-8.
5. Orlander JD, Barber TW, Fincke BG. The morbidity and mortality conference: the delicate nature of learning from error. *Acad Med* 2002; 77: 1001-6.
6. ACGME Program Requirements for Graduate Medical Education in Surgery. Chicago, IL: Accreditation Council for Graduate Medical Education; 2008. (Online) (Cited 2008 June). Available from [URL:http://www.acgme.org/acWebsite/downloads/RRC\\_progReq/440\\_general\\_surgery\\_01012008.pdf](http://www.acgme.org/acWebsite/downloads/RRC_progReq/440_general_surgery_01012008.pdf).
7. Harbison SP, Regehr G. Faculty and resident opinions regarding the role of morbidity and mortality conference. *AmJ Surg* 1999; 177: 136-9.
8. Flexner A. Medical education in the United States and Canada: From the Carnegie Foundation for the Advancement of Teaching, Bulletin Number Four, 1910. *Bull World Health Organ* 2002; 80: 594-602.
9. Proceedings of conference on hospital standardization. Joint session of committee on standards. *Bull Am Coll Surg* 1917; 3: 1.
10. Aboumatar HJ, Blackledge CG Jr, Dickson C, Heitmiller E, Freischlag J, Pronovost PJ. A descriptive study of morbidity and mortality conferences and their conformity to medical incident analysis models: results of the morbidity and mortality conference improvement study, phase 1. *Am J Med Qual* 2007; 22: 232-8.