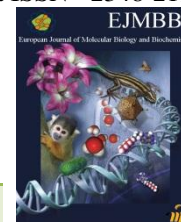




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ESTIMATION OF BIOCHEMICAL PARAMETERS AND THEIR IMPACT ON CRITICAL RESULTS OF PATIENTS IN A TERTIARY CARE HOSPITAL

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ABSTRACT

Introduction: From past many decades, historically also laboratory biochemical reports have played and are playing a crucial role in clinical decision making tasks by aiding the health care team on the anatomical and physiological condition of individual patients. Which works by using the biological specimens collected from the patient and also various scanning techniques which does not requires extraction of specimen from the individual. **Aims and Objectives:** To assess the errors present in the laboratory data forms of the in-patient department of the hospital. To assess the knowledge of health care team on the importance of completeness in laboratory data forms. **Materials and Methods:** All the materials and methods required for the study were collected from the inpatient department of the hospital after getting approval from the Institutional Ethics Committee of the hospital. The study was designed to be retrospective study and was carried out for a period of 2 months from February to April in the year of 2018. **Results and Discussion:** Physician contact number was missed in 745 forms with a percentage of 59.64%, provisional diagnosis of the patient was missed in 228 forms accounting to a percentage of 18.23%, specimen with respect to time of collection was missed in 189 forms with a percentage of 15.11%, specimen type collected from the patient was found to be missed in 145 patients with a percentage of 11.61%, physician's name who is attending the patient was missed in 102 forms with a percentage of 8.12%, gender of patient was missed in 8.52% of forms with a number of 107 forms, ward of the patient was missed in 114 forms with a percentage of 9.14%, date of birth of the patient was missed in 93 forms with a percentage of 7.41%, date on which the specimen has been collected from the patient was missed in 88 forms with a percentage of 6.99%, hospital identification number was missed in 71 forms with a percentage of 5.63%, patients name and surname was missed in 28 forms with a percentage of 2.19%. **Conclusion:** It was observed from the study that many important parameters have been missing in the forms with a certain percentages have been identified and reported. Thus, it is advisable to the hospital management from the study that interventions and measures should be taken for better management of patients.

INTRODUCTION

From past many decades, historically also

laboratory biochemical reports have played and are playing a crucial role in clinical decision making tasks by aiding the health care team on the anatomical and physiological condition of individual patients[1]. Which works by using the biological specimens collected from the patient and

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also various scanning techniques which does not requires clinician or the nurse authorized to request the laboratory test for diagnosis, hospitals identification number of the patient along with the patients name, particular ward or unit to which the patient belongs to are the few mandatory variants to be present in the laboratory forms.[4,5]. This represents the importance of accuracy and completeness in the laboratory data forms[6,7]. Based on all these aspects the present study was titled as assessment of completeness of laboratory data forms and their impact on critical results of patients in a tertiary care hospital which aims for analyzing the errors presents in the laboratory data forms of the hospital and the measures to be taken to overcome them[8,9].

AIMS AND OBJECTIVES:

- To assess the errors present in the laboratory data forms of the in-patient department of the hospital.

extraction of specimen from the individual[2,3]. Name of

- To assess the knowledge of health care team on the importance of completeness in laboratory data forms.
- To assess the frequency of errors and report on the same.
- To make interventions for better buildup of laboratory data forms reports.

MATERIALS AND METHODS:

All the materials and methods required for the study were collected from the inpatient department of the hospital after getting approval from the Institutional Ethics Committee of the hospital. The study was designed to be retrospective study. Inclusion criteria – all the patients admitted to various department of the hospital and undergone laboratory tests have been included into the study regardless of age and sex and clinical outcomes and diagnosis of the patients.

TABLE 1: Parameters that are identified to be absent/incomplete with respect to their frequency

Absent/incomplete parameters	Number (no.)	Percentage (%)
Therapy	995	79.60%
Physician contact number	745	59.64%
Diagnosis	228	18.23%
Specimen: time of collection	189	15.11%
Specimen: type	145	11.61%
Physician name	102	8.12%
Gender of patient	107	8.52%
Ward	114	9.14%
Date of birth	93	7.41%
Specimen: date of collection	88	6.99%
Hospital identification number	71	5.63%
Patients name and surname	28	2.19%

RESULTS AND DISCUSSION:

About 1250 laboratory data forms have been collected from individual case sheets of various patients in various departments and assessed for the various parameters that are missing in the forms. The study was carried out in Katuri Medical College and Hospital, Guntur, Andhra Pradesh, India. All the data collected and analysed are clearly mentioned in the TABLE 1.

In all the laboratory data forms evaluated for their absence/incompleteness of parameters, it was identified that therapeutic approach of the patients is missed in 995 forms with a percentage of 79.60%, Physician contact number was missed in 745 forms with a percentage of 59.64%, diagnosis of the patient was missed in 228 forms accounting to a percentage of 18.23%, specimen with respect to time of collection was missed in 189 forms with a percentage of 15.11%, specimen type collected from the patient was found to be missed in 145 patients with a percentage of 11.61%, physician's name who is attending

the patient was missed in 102 forms with a percentage of 8.12%, gender of patient was missed in 8.52% of forms with a number of 107 forms, ward of the patient was missed in 114 forms with a percentage of 9.14%, date of birth of the patient was missed in 93 forms with a percentage of 7.41%, date on which the specimen has been collected from the patient was missed in 88 forms with a percentage of 6.99%, hospital identification number was missed in 71 forms with a percentage of 5.63%, patients name and surname was missed in 28 forms with a percentage of 2.19%.

CONCLUSION:

It was observed from the study that many important parameters have been missing in the forms with a certain percentages have been identified and reported. Thus, it is advisable to the hospital management from the study that interventions and measures should be taken for better management of patients.

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