Emergency Medical Evaluation of Psychiatric Patients

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Study objectives: To determine the completeness of documentation and accuracy of medical evaluation for a sample of emergency psychiatric patients.

Design: Descriptive, retrospective chart review.

Setting: Nine hundred-bed community teaching hospital with a voluntary psychiatric inpatient unit.

Type of participants: Two hundred ninety-eight emergency department patients with psychiatric chief complaints, all of whom were admitted to the voluntary psychiatric unit of the same community teaching hospital.

Interventions: None

Measurements and main results: There was failure to document mental status at triage in 56% of patients. The most frequent process deficiencies in the medical evaluation were in the neurological examination. Twelve patients (4%) required acute medical treatment within 24 hours of psychiatric admission, and the ED history and physical examination should have identified an acute condition in 83%. The chart was documented "medically clear" in 80% of patients in whom medical disease should have been identified. Patients less than 55 years old had a four times greater chance of a missed medical diagnosis.

Conclusion: Process deficiencies in the medical history and physical examination accounted for the vast majority of missed acute medical conditions. The statement "medically clear" is inaccurate and should be replaced by a thorough discharge note.

[Tintinalli JE, Peacock FW, Wright MA: Emergency medical evaluation of psychiatric patients. *Ann Emerg Med* April 1994;23:859-862.]

INTRODUCTION

Psychiatric patients who present to the emergency department commonly receive a medical evaluation before referral for psychiatric evaluation or transfer to a psychiatric facility. The concept of "medical clearance" of psychiatric patients has evolved from this practice.[1] Medical evaluation is important because the reported incidence of medical findings in psychiatric patients has ranged from 24% to 80%,[2,3] and upwards of 60% of patients with dementia are reported to have a treatable medical condition.[4]

The purpose of this study was to determine the completeness of documentation and accuracy of medical evaluation for a sample of ED patients with psychiatric chief complaints, all of whom were admitted to the voluntary psychiatric unit of the same community teaching hospital.

MATERIALS AND METHODS

Residents from all services, including emergency medicine, participated in patient care, but all cases were directly supervised by emergency medicine attending physicians. The ED was staffed with board certified emergency physicians. A psychiatrist or a psychiatric social worker (MSW) performed psychiatric evaluations from 8:00 AM to 1:00 AM Monday through Friday and from 8:00 AM to 8:00 PM Saturday through Sunday. Patients were admitted to the psychiatry service after emergency medicine evaluation. Consultation from medical or surgical services was not a prerequisite for psychiatric admission.

Guidelines for emergency medical evaluation of psychiatric patients had been developed previously and had been reviewed at least once a year at a staff meeting or didactic conference with emergency medicine attending physicians and residents. Guidelines included standards for recording of the history and physical examination, documenting alcohol or drug abuse, providing a discharge plan for patients with medical problems, and writing "medically clear" on the record prior to psychiatric admission or transfer.

ED and inpatient records of patients evaluated in the ED of a 900-bed community teaching hospital and voluntarily admitted to the psychiatric unit of the same hospital from January to June 1991, were reviewed retrospectively.

Triage and emergency nursing notes, the ED medical record, and the dictated ED record were reviewed for 42 variables, including triage history, medical evaluation, laboratory studies, and medical complications on the psychiatric service. If there was no documentation of the study variable, it was recorded as a deficiency. Hospital course and final diagnoses were abstracted from the inpatient record and the dictated hospital discharge summary. It was the practice of the psychiatric department to obtain internal medicine consultation on all patients admitted to their service within 72 hours of admission. Emergency consultation could be obtained at any time, however.

Frequencies of documentation were tabulated for all variables. The χ^2 test was used to compare proportions for categorical variables, and significant variables were tested in forward stepwise regression using SYSTAT.[5] $P < 0.05$ was considered significant. Patients were categorized into two age groups, less than 55 years old and 55 or more years old, in a single post-hoc analysis.

Table 1.
Triage deficiencies

Documentation	% Noncompliance
Mental status	56.0
Last menstrual period	48.0
Temperature	3.7
Respiratory rate	2.7
Allergies	2.4
Chief complaint	2.0
Medical history	2.0
Medications	1.3
Pulse rate	0.7
Blood pressure	0.7

RESULTS

Two hundred ninety-eight charts, or 96% of emergency voluntary psychiatric admissions between January through June 1991, were reviewed. Sixty-eight percent of patients were female. The mean age was 40 years (range, 12 to 87 years). The mean time spent in the ED was 10.6 ± 3.3 hours. The mean number of physicians who evaluated each patient was 1.1 ± 0.4 (range, one to five). Twenty-one patients (7%) were physically restrained, and 12 (4%) received major tranquilizers in the ED. Eighty-four percent received psychiatric consultation in the ED by a psychiatrist or psychiatric social worker.

Table 1 lists the frequencies of triage process deficiencies, none of which affected patient outcome. Failure to document mental status was the most common deficiency. Of 204 female patients, 143 were of child-bearing potential, but last menstrual period was recorded in only 52%. The least common but most basic deficiency was failure to record vital signs.

The most medical evaluation process deficiency was failure to document a neurologic examination (Table 2).

Variables reviewed for medical disposition included repeat vital signs; the statement "medically clear" documented on the record; need for acute medical treatment within 24 hours of psychiatric admission; and emergency transfer from the psychiatric service. Eighty percent of patients did not have repeat vital signs before transfer to the psychiatric unit, and, despite a policy to indicate the note "medically clear" on the ED record, 62% did not have that statement entered.

Twelve patients (4%) received acute medical treatment, and ten (3%) were transferred to another service within 24 hours. Missed diagnoses in 12 patients were as follows: fractured femur, HIV encephalopathy, multiple sclerosis, caustic burn to perineum, hypertension, gastrointestinal bleed with acute anemia, organic dementia, arsenic poisoning, polycythemia, cardiac ischemia, pneumonia, and staphylococcal septicemia.

For the 12 patients who required acute medical treatment, medical history or physical examination, or both should have identified the problem in ten (83%) because all patients had findings that were easily demonstrated on essential portions of the examination. Of the ten patients in whom medical disease should have been identified in the ED, eight (80%) were documented as "medically clear."

There was no statistically significant correlation between sex, psychiatric consultation, or psychiatric diagnosis and acute medical treatment or transfer ($P > .05$). There was, however, a statistically significant correlation between patient age and acute medical treatment or transfer. Younger patients (less than 55 years old) had a four times greater chance of a missed medical diagnosis than older patients (odds ratio, 4; 95% confidence interval, 3.78-4.22). When using forward stepwise linear regression to confirm the impact of age and diagnosis on acute medical treatment or transfer, only age less than 55 years was significantly correlated with acute medical treatment or transfer ($P = .023$).

DISCUSSION

Although this study was conducted on a select group of psychiatric patients (voluntarily admitted patients) in a community hospital, the deficiencies noted in the ED management of psychiatric patients could well be based on attitudes and practices that are widespread.

Process deficiencies for this group of psychiatric patients far exceeded the departmental average quality assurance deficiency frequency. A large number of process deficiencies could have been identified because nearly all charts were reviewed, and all were closely scrutinized.

However, emergency medicine health care professionals may prefer to direct attention toward patients with more tangible injuries or illnesses. Feelings of discomfort, dislike, or aggravation toward psychiatric patients, and the inability or refusal of psychiatric patients to respond to a rapid-fire battery of questions may result in incomplete evaluations. There may be a tendency to automatically attribute physical symptoms to the underlying psychiatric disorder.

Still, it is difficult to understand the multiple process deficiencies in the medical physical examination. The frequency of associated medical problems in the psychiatric population has been well documented, and the importance of differentiating organic from functional disease is also well known. The difficulties of examining and evaluating psychiatric patients may encourage the physician to take shortcuts in the medical examination.

The chief complaint is the cornerstone of emergency medicine practice, and psychiatric patients may have difficulty identifying a chief complaint. Psychiatric patients may have vague, diffuse, or psychosomatic chief complaints, leading the emergency physician to assume the complaint has a psychiatric basis and skim over the medical evaluation. It was interesting to note that in this study, the records of psychiatric patients with a clear medical chief complaint, such as drug overdose, disclosed no process deficiencies or missed medical diagnoses.

Finally, the time spent by the physician in evaluating the psychosocial setting and psychiatric history, obtaining information from reliable sources, and arranging disposition may be so extensive that the medical examination becomes an afterthought. This study did not identify the time spent in obtaining the psychiatric history and background, but, in the authors' experience, spending an hour

Table 2.
Medical examination deficiencies

Examination	% Noncompliance
Cranial nerves	45
Motor function	38
Extremities	27
Mental status	20
Head, ears, eyes, nose, throat	10
Chest	3
Heart	3
Abdomen	3

gathering background, current information, and arranging disposition would not be unusual.

In this study, the statement "medically clear" was inaccurate as 80% of patients in whom the medical problem should have been identified on history and physical examination did have the statement "medically clear" on the ED record. The term "medically clear" should be replaced by an ED discharge note that should include results of history and physical examination, including mental status and neurologic examination and laboratory results; a listing of concurrent medical diagnoses and recommendations for follow-up medical evaluation; documentation of follow-up plans while on the psychiatry service, including discharge instructions such as wound care; and time-limited listing of current medications along with their dosage and frequency.

The finding that patients less than 55 years old had a much greater chance of a missed medical diagnosis was surprising. A higher incidence of coexistent medical disease is to be expected for the elderly, and this may lead the physician to assume that younger psychiatric patients are medically healthy. Clearly, this is a dangerous assumption.

This study did not review process and outcome deficiencies for psychiatric patients involuntarily committed to state hospitals. Assuming that involuntarily committed patients have more serious psychiatric disease and less ability to communicate appropriately with physicians and nurses, the possibility of a missed medical condition may be greater than in the study population, and a thorough history and physical examination are even more important.

Evaluating the medical condition of psychiatric patients continues to be difficult. Process and outcome audits specifically for psychiatric patients should be conducted. Behavioral and educational sessions for nurses and physicians should be implemented based on audit results.

CONCLUSION

Process deficiencies in the history and physical examination of psychiatric patients accounted for the vast majority of missed acute medical conditions. The statement "medically clear" is inaccurate and should be replaced by a thorough discharge note.

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