Risk stratification of psychiatric patients in the Emergency Department: the psychiatry physician perspective

Authors: B. Chakravarthy MD MPH, T. Portillo MD, W. Deng MD PhD, J. Maguire MD, J. Shapiro PhD

Abstract

Objective: To investigate the perspectives of psychiatrics on the management and disposition of psychiatric patients in the Emergency Department.

Method: Qualitative study involving 9 consulting psychiatry faculty and residents associated with the UC Irvine Department of psychiatry. All participants underwent a semi-structured interview and the answers were audiotaped and transcribed **Results:** Psychiatrists discussed limitations in emergency physicians' assessments and treatments of psychiatric patients, which include incomplete work-up, inadequate acquisition of information, and suboptimal medical stabilization. Psychiatrists reported that the majority of disposition challenges were structural and had little to do with emergency physician disposition decision- making.

Conclusion: The results may help to better target education efforts in emergency residency training.

The burden of care for mental illness weighs heavily on the Emergency Department (ED) with approximately 12 million ED visits related to mental health and/or substance abuse in 2007 [1]. The number of psychiatric related visits to the ED is rapidly increasing and the average length of ED stay of psychiatric patients is 42% longer than that of medical patients [2]. In many EDs a psychiatry consultation is required for the determination of final disposition for patients with behavioral emergencies. This protocol ensures the involvement of psychiatrists in the evaluation and disposition-decision making of behavioral emergencies, however, it frequently increases wait times and exacerbates ED overcrowding.

Considering the increase in ED wait times for psychiatric patients, streamlining the management and disposition of psychiatric patients in the ED without compromising quality care is a priority for health care systems. Implementing strategies that enhance the coordination between psychiatrics and ED physician through targeted training in mental health assessment and treatment is imperative for ED physicians. This is particularly important for EDs that do not have emergency psychiatric consultation available. Little education is offered in the core Emergency Medicine (EM) curricula for psychiatric chief complaints and only 24% of EM residents receive formal training in the evaluation and management of psychiatric emergencies [3]. The

deficiencies in psychiatric training during EM residency are reflected in the limited involvement of emergency physicians in the management of psychiatric symptoms and challenging disposition decision-making for patients presenting to the ED with behavioral emergencies [4, 5].

This purpose of this study was to identify critical differences in a psychiatrist's approach to ED psychiatric patients from that of the emergency physician's approach. Through interviews with psychiatric physicians we aimed to ascertain key areas for future improvement in the assessment and management of the psychiatric patient by ED physicians.

METHODS

Design

This was a qualitative case study. The study was approved by the University of California, Irvine's institutional review board. Verbal consent was obtained from all participants.

Study Setting and Population

The study was performed at the U.C. Irvine Medical Center, an urban, university teaching hospital with an annual census of 46,000 ED visits. Consulting psychiatry faculty and residents at U.C Irvine's Department of Psychiatry were asked to participate in semi-structured interviews. Study subjects were recruited by email and in-person at weekly didactic seminars. The

sample size was based on the theoretical concept of data saturation--that is, subjects were recruited until no new concepts emerged in successive interviews--not a statistical calculation [6]. The saturation of data was determined by three investigators who received [had?] formal training in qualitative research methods.

Data Collection

Interviews for this study were conducted between June and August 2012. The interviews were conducted by one of the co-investigators who had formal training in qualitative approaches. Questions on the interview guide were developed based on the relevant literature and previous research. A copy of the interview guide is listed in the Appendix. All interviews were audiotaped. The answers were transcribed and the final analysis and conclusions were approved by the psychiatrist on our research team, as well as other team members.

Data Analysis

We used interpretive analysis based on grounded theory [7]. Data analysis involved at least two of the researchers reading through all the transcripts and identifying main concepts relating to the management and disposition of psychiatric patients in the ED. Differences of opinion were resolved through discussion. Descriptions of these themes were then developed

using verbatim quotes. The two groups of subjects were compared for similarities and differences among themes.

RESULTS

A total of 9 interviews were conducted with participants (5 faculty and 4 residents). Psychiatrists' views on the management and disposition of psychiatric patients in the ED are presented below.

From the perspective of the psychiatry physicians interviewed, three major areas for improvement in ED physicians' assessment and treatment of psychiatric patients emerged. One of the areas of concern was the incomplete initial works-up for psychiatric patients in the ED. Per these psychiatrists, patients often [?] are admitted to the psychiatric ward without complete blood work and diagnostic tests. It was felt that these tests would be helpful in the treatment of the patient and to rule-out organic causes or complications.

The second concern of psychiatrists was obtaining collateral information and recognizing grave disability. Both collateral information and grave disability are key components often missing from emergency physicians' assessments. One attending said, *"You wouldn't want to discharge a patient until you collect collateral information."* Per one resident, *"A lot of times when we go to see our patients in the ED there isn't even a phone number to call."* Collateral information provides essential depth and perspective that often cannot be obtained directly from the patient.

Proper risk assessment also entails screening for grave disability. Respondents stressed that emergency physicians need to assess how impaired a patient is by his/her delusions, whether the patient is rational enough to form a plan for self-care, and if the patient is having difficulty performing any of the activities of daily living. It was also noted that ED physicians were failing to ask about substance abuse routinely. Psychiatrists were concerned that EM residents could miss nuances influencing disposition decisions and emphasized the importance of additional history. At the same time, they recognized the time constraints of emergency physicians.

Psychiatrists also emphasized the importance of adequate medical interventions for achieving and maintaining medical stabilization of psychiatric patients. Residents reported gaps in medical clearance and medical intervention. For instance, some patients have been admitted with uncontrolled hypertension. According to one resident, a patient went into Delirium Tremens from alcohol withdrawal only a couple of hours after being admitted to the psychiatric unit. Another [or this?] resident argued, *"You wouldn't send an unstable cardiac patient to the floor."* Similarly, a patient flagging a code gray as soon he/she is admitted to the psychiatric floor is not an uncommon occurrence. According to one resident, *"We are worse prepared, the ER is the best place for a code because they are the most equipped."* The overall sentiment among faculty and residents is that *"emergency physicians should be able to intervene acutely and stabilize*

prior to sending to the floor." Failure of emergency physicians to stabilize psychiatric patients lengthens their ED wait times as well as hospital stay.

After identifying the deficiencies in the assessment and management of psychiatric patients, we also investigated possible sources of tension between the psychiatry and emergency departments. Most of psychiatrists attributed the tension to structural issues of the current medical care system. In our hospital unfunded psychiatric patients that require in-patient admission are typically transferred to a county psychiatric facility. If the county facility is full and four hours have passed after medical clearance of the psychiatric patient then per hospital protocol the patient is admitted to our psychiatric ward. This "four hour rule" is a source of tension for residents and faculty in the psychiatric unit. According to one resident "*... there is the 4 hour rule, 4 hours pass, we have to admit the patient but an hour later we are getting ready to send the patient away for county placement. We've invested time in this patient so it doesn't make a lot of sense. And also if you keep transferring these patients it is also not comfortable for the patient especially in depressed or psychotic patients. They have to relive their stories multiple times."* Some respondents also mentioned that inadequate communication between the two services and the "mindset of emergency physicians" were possible sources of tension as well. One faculty voiced, *"Why should psychiatric patients be given second level care in the ED when a gallbladder patient doesn't ...there should be the same standard of care for*

psychiatric patients." Similarly another faculty made a comment about the need for EM physicians to listen more carefully and express more interest in the psychiatric patient.

In agreement with the recent study published by our group [4], disposition-decision making was not identified as an area of concern. Per one faculty, *"I don't remember this year an instance where the ED wanted to discharge and we recommended hospitalization. If it does happen it's usually the other way around."* Most dispositional challenges arise from structural issues involving unfunded patients over which emergency physicians have little control. The level of disagreement on disposition decisions between the psychiatry and emergency physicians is not raising red flags about emergency resident training.

In order to better resolve existing problematic issues, we assessed the feasibility of several potentially effective solutions from psychiatrists' perspectives. In terms of whether more formal psychiatric training could improve the levels of sensitivity and specificity of ED physicians comparable to those of psychiatrists, the majority of respondents rejected this as a goal. These individuals argued that *"Emergency physicians don't have the time to do what we do. Consults should take 40 minutes or longer depending on the complexity of the case"* and *"This is something we do all day every day."* One attending further explained that *"With more training they can become better at what they need to do, which is to acutely intervene."* Another attending refuted this argument: "*No,*

because they really have no requirements in residency training, unless we create a fellowship in emergency psychiatry."

The second proposed solution was that for definite admissions, EM physicians directly admit patients to a psychiatric bed in order to shorten ED wait times. Both faculty and residents agreed that all admissions from the ED require confirmatory psychiatry evaluation. Psychiatry faculty and residents alike were not in favor of foregoing confirmatory psychiatry evaluation primarily because the admission to the psychiatry unit is complex. According to one resident, *"There are more steps involved in the process such as determining the appropriateness of the patient in the various psychiatric units and also determining if the patient is suitable for our psychiatric unit in the first place. The third thing we need to establish is whether the patient needs a one-to-one sitter. And four, does the patient need psychiatric meds before coming on to our unit? Sometimes we rather do this in the ED where there is heightened security."* Similarly, one attending asserted, "*We need to begin our evaluation in the Emergency Department."* Based on the response to this question, deferring consultation on definite admits is not an option for reducing ED wait times for psychiatric patients.

Another possible solution discussed was revising the current protocol to "reduce unnecessary psychiatric consults". With respect to the impact of the current management protocol in the ED - consisting of an initial evaluation by the

ED physician and subsequent psychiatric consult - participants had varied responses on how it effected the Psychiatry Department. In general, residents reported that the protocol was challenging because at any given time there are only 1-2 residents on consult services for the entire hospital. From the resident perspective, providing consult services for most of the psychiatric patients that present in the ED can be laborious and time consuming. A few of the residents advocated for deferring consultation in the ED on cases of anxiety and mild to moderate depression as a solution. The consensus among faculty was that despite the practicality of reducing the number of consults it might negatively affect psychiatry resident training. One attending stated, *"We are a teaching institution and it is helpful for psychiatric residents to gain that experience in emergency psychiatry."* Based on the responses, revising the current psychiatry consult protocol to reduce unnecessary consults is not an option for reducing wait times for psychiatric patients in the ED.

DISCUSSION

In this paper we have described psychiatry consultants' perspectives on the management and disposition of psychiatric patients in the ED. This paper identifies areas for future improvement in the emergency physicians' assessment and management of behavioral emergencies and discusses the feasibility of possible solutions. To our knowledge this is the first qualitative study exploring the views and experiences of psychiatric consultants in the ED.

In our study we identified 3 priority areas for improvement in ED physicians' assessment and treatment of psychiatric patients. Firstly, it was felt that ED physicians have the tendency to not perform thorough work-ups of psychiatric patients. Secondly, ED physicians are less likely to seek collateral information, screen for grave disability, and ask about substance use. Thirdly, ED physicians have the tendency to not intervene medically and achieve clinical stability in psychiatric patients.

The routine evaluations of psychiatric patients in the ED include medical and psychiatric history-taking, physical examination, and necessary laboratory testing for medical clearance. As shown in a study that compared the laboratory tests ordered by psychiatrics and EM physicians, the routine laboratory tests requested by the two groups of physicians were different but the testing for the evaluation of the psychiatric patients in the ED were similar [8], therefore it is highly desirable for EM physicians to obtain complete initial work-ups to facilitate the evaluation of psychiatrists. The deficiencies in the EM physician's history-taking and information gathering identified in our study are delineated by other researchers. In a recent study, Nieuwenhuizen et al. identified problems with knowledge and information gathering as well as clinicians' attitudes toward people with mental illness to be among the factors responsible for the suboptimal evaluation of psychiatric patients performed by emergency physicians [9]. Equally as important as evaluation is the clinical stabilization of the psychiatric

patients. A study examining reasons for delay in the ED care of psychiatric patients found that the need to achieve clinical stability and need for additional history were associated with an increased time for psychiatric evaluation [10]. The need to clinically stabilize a patient was also associated with an increase in the overall ED length of stay [11]. Developing a more compassionate patient-centered approach towards psychiatric patients was a common theme in our interviews.

Contrary to previous research that reported substantial disagreement between emergency physicians and psychiatrists on disposition decisions for psychiatric patients [5, 12, 13], the psychiatrists we interviewed did not report the level of disagreement to be significant, which was consistent with our recent study [14]. A reason for disagreement between psychiatrists and emergency medicine doctors may be the consideration of additional factors that vary from one psychiatrist to another. For example, in our study some psychiatrists had different admission thresholds for suicidal ideation and accidental overdoses. Social and situational issues influenced admission decisions for some psychiatrists. We found that the concerns about disposition that did exist were overwhelmingly structural in nature, for which improvements in residency training would do little.

It has been shown that targeted education for emergency physicians

evidently improved their comfort level in treating psychiatric patients and may facilitate the care of patients who await inpatient psychiatric treatment [15].

The findings of this study indicate that future resident training needs to address methods for achieving complete initial work-up, optimal history-taking and clinical stability in the most efficacious and timely manner possible. The majority of respondents did not agree that EM residents spending a month in the psychiatric wards would sufficiently improve emergency physicians' skills to enable them to conduct independent disposition of psychiatric patients. In general, psychiatric physicians who participated in our study did not feel emergency physicians were qualified to make unilateral disposition decisions. Their view was that the limited time the emergency physician has available to spend per patient in the ED makes it virtually impossible for them to assess psychiatric patients with the accuracy of psychiatry consultants. Further, they felt that emergency physicians' relative lack of experience with psychiatric illness constrains their recognition of important nuances relating to disposition.

In addition to targeted training for ED physicians, we also explored the feasibility of other solutions for the prolonged ED wait times of psychiatric patients, which included forgoing psychiatric consultation for definite psychiatric admissions and avoiding unnecessary consultation for less serious behavioral emergencies. The major concern of the participants who were not in favor of foregoing confirmatory psychiatry evaluation was the necessity of doing

psychiatric consultation in the ED, given the complexity of the psychiatric admissions. Up to now, no large scale clinical studies have yet compared the outcomes of psychiatric patients who had psychiatric consultation in the ED versus outside the ED, therefore it is unknown if conducting psychiatric consultation in the ED is beneficial. Moreover, for a lot of community hospitals that do not have 24-hour psychiatric services available, it may not be practical to conduct all the psychiatric consultations for behavioral emergencies in the ED.

Reducing unnecessary psychiatric consultation was advocated by Douglass et al. as a potential strategy for shortening wait times in the ED [5]. After identifying patients with less serious behavioral emergencies who do not need psychiatric consultation in the ED, ED physicians could refer these patients to outpatient mental health services, where they might be better served [5] . The respondents in our study did not perceive the deferment of disposition of less serious behavioral emergencies as a viable option at academic hospitals where psychiatry residents need the exposure to emergent psychiatric presentations obtained in the ED. However, psychiatry physicians did emphasize that emergency physicians can contribute to disposition by conducting proper work-up and medically stabilizing psychiatric patients in the ED.

Considering the increasing psychiatric-related ED visits and prolonged wait times for psychiatric patients in the ED, approaches for improving care is an important area of research. Based on the findings of this qualitative study, we are

planning to conduct a retrospective quantitative study assessing the current performance of our residents in the three areas of deficiencies that were identified in this study. We believe these studies will help us target psychiatric training for EM residents and better prepare them for future practice.

Limitations

Our results from an Emergency Department in a university urban teaching hospital may not be generalizable to community hospitals, where emergency physicians do not have 24 hour access to psychiatry consultants. The number of psychiatry consultants that participated in the study was small but nonetheless adequate given the theoretical saturation of the data on all major themes [16]. Another limitation is the qualitative design, which relies on interpretation rather than statistical analysis. To address this limitation, we took steps to ensure the authenticity of the data and trustworthiness of analysis [16]. For example, the interview guide was reviewed by a third party psychiatrist. All transcripts were reviewed by two team members and the final analysis and conclusions were approved by the psychiatry physician on our research team.

Conclusions

The first step in finding a strategy to improve emergency medicine residency training is to understand the perspectives of psychiatry consultants regarding the management of psychiatric patients in the Emergency Department. In taking this step, this study found that psychiatric physicians identify

deficiencies in the emergency physicians' assessments and managements of psychiatric patients.

ACKNOWLEDGEMENTS

This research was supported by the University of California, Irvine Alumni Association through the Starlight Fund.

Reference List

[1] Owens PL, Mutter R, Stocks C. Mental Health and Substance Abuse-Related Emergency Department Visits among Adults, 2007: Statistical Brief #92. 2006.

[2] Slade EP, Dixon LB, Semmel S. Trends in the duration of emergency department visits, 2001-2006. Psychiatr Serv 2010;61:878-84.

[3] Santucci KA, Sather J, Baker MD. Emergency medicine training programs' educational requirements in the management of psychiatric emergencies: current perspective. Pediatr Emerg Care 2003;19:154-6.

[4] Chakravarthy B, Menchine M, Thompson DE, Rajeev S, Santos BJ. Psychiatric patient disposition agreement between the emergency physician and the psychiatry consultant. Crisis 2013;34:354-62.

[5] Douglass AM, Luo J, Baraff LJ. Emergency medicine and psychiatry agreement on diagnosis and disposition of emergency department patients with behavioral emergencies. Acad Emerg Med 2011;18:368-73.

[6] Sullivan GM, Sargeant J. Qualities of qualitative research: part I. J Grad Med Educ 2011;3:449-52.

[7] Ponterotto JG. Qualitative research in multicultural psychology: philosophical underpinnings, popular approaches, and ethical considerations. Cultur Divers Ethnic Minor Psychol 2010;16:581-9.

[8] Zun LS, Hernandez R, Thompson R, Downey L. Comparison of EPs' and psychiatrists' laboratory assessment of psychiatric patients. Am J Emerg Med 2004;22:175-80.

[9] van NA, Henderson C, Kassam A, Graham T, Murray J, Howard LM et al. Emergency department staff views and experiences on diagnostic overshadowing related to people with mental illness. Epidemiol Psychiatr Sci 2013;22:255-62.

[10] Chang G, Weiss AP, Orav EJ, Smallwood JA, Gonzalez S, Kosowsky JM et al. Bottlenecks in the emergency department: the psychiatric clinicians' perspective. Gen Hosp Psychiatry 2012;34:403-9.

[11] Gerdtz MF, Weiland TJ, Jelinek GA, Mackinlay C, Hill N. Perspectives of emergency department staff on the triage of mental health-related presentations: Implications for education, policy and practice. Emerg Med Australas 2012;24:492-500.

[12] Garbrick L, Levitt MA, Barrett M, Graham L. Agreement between emergency physicians and psychiatrists regarding admission decisions. Acad Emerg Med 1996;3:1027-30.

[13] Tse SK, Wong TW, Lau CC, Yeung WS, Tang WN. How good are accident and emergency doctors in the evaluation of psychiatric patients? Eur J Emerg Med 1999;6:297-300.

[14] Chakravarthy B, Menchine M, Thompson DE, Rajeev S, Santos BJ. Psychiatric patient disposition agreement between the emergency physician and the psychiatry consultant. Crisis 2013;34:354-62.

[15] Marciano R, Mullis DM, Jauch EC, Carr CM, Raney L, Martin RH et al. Does targeted education of emergency physicians improve their comfort level in treating psychiatric patients? West J Emerg Med 2012;13:453-7.

[16] Holloway I, Wheeler S. Ethical issues in qualitative nursing research. Nurs Ethics 1995;2:223-32.