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Abstract

Objective: To understand emergency department (ED) providers' perspectives regarding the barriers and facilitators of suicide risk assessment and to use these perspectives to inform recommendations for best practices in ED suicide risk assessment.

Methods: Ninety-two ED providers from two hospital systems in a Midwestern state responded to open-ended questions via an online survey that assessed their perspectives on the barriers and facilitators to assess suicide risk as well as their preferred assessment methods. Responses were analyzed using an inductive thematic analysis approach.

Results: Qualitative analysis yielded six themes that impact suicide risk assessment. Time, privacy, collaboration and consultation with other professionals and integration of a standard screening protocol in routine care exemplified environmental and systemic themes. Patient engagement/participation in assessment and providers' approach to communicating with patients and other providers also impacted the effectiveness of suicide risk assessment efforts.

Conclusion: The findings inform feasible suicide risk assessment practices in EDs. Appropriately utilizing a collaborative, multidisciplinary approach to assess suicide-related concerns appears to be a promising approach to ameliorate the burden placed on ED providers and facilitate optimal patient care. Recommendations for clinical care, education, quality improvement and research are offered.

Keywords: Suicide, Suicide risk assessment, Emergency department, Qualitative methods, Health care providers

1. Introduction

An average of 420,000 emergency department (ED) visits for attempted suicide and self-inflicted injury occurs annually in the United States, a figure that has doubled over the last 20 years.¹ Individuals

who die by suicide commonly utilize ED care in the year before death.^{2,3,4} Approximately 6–12% of ED patients seeking treatment for medical complaints endorse suicidal ideation and 12% report a history of a past suicide attempt.^{5,6,7} Suicide risk often goes undetected in EDs⁸ with substantial negative consequences to both ED patients and staff. Patients who present to an ED with self-inflicted injuries have suicide mortality rates that are higher than expected population-based rates and are more likely to be high utilizers of ED services.^{9,10,11} ED providers face potential litigation if a patient dies by suicide after discharge and are at greater risk for burnout.^{12,13}

There has been a call to improve the assessment and management of suicide risk in emergency medicine.^{13,14,15,16,17} The Joint Commission (National Patient Safety Goal 15.01.01¹⁸) also mandated in part that ED providers assess suicide risk in patients being seen for emotional or behavioral problems. However, the dearth of validated tools and practice guidelines specific to assess suicide risk in EDs^{19,20} challenges ED providers' ability to integrate this practice into clinical care.

Recent studies have supported the feasibility of conducting suicide risk assessment with pediatric and adult ED patients.^{21,22} However, these findings may not generalize to EDs that do not have dedicated psychiatric support staff given the inherent logistical barriers that many EDs have integrating preventive health procedures.²³ In regard to assessing suicide risk, ED providers treat high volumes of patients in a short amount of time, have limited access to mental health resources and acknowledge skill gaps in assessing and treating suicidal patients.^{24,25,26} Recommendations for assessing suicide risk in EDs have been offered in a top-down manner,^{16,17,18} which may not fully recognize the nuanced difficulties that providers experience while implementing the practice in clinical care. A small body of qualitative work has demonstrated that ED providers experience negative emotions when working with patients who present with suicide-related concerns, including frustration, lack of confidence and a desire to focus on patients' medical concerns rather than on psychosocial needs.^{27,28,29} To date, we are aware of no published qualitative research that has examined ED providers' perspectives on the process of assessing suicide risk.

This study aimed to provide the first inductive investigation of ED providers' perspectives on the factors that either facilitate or hinder effective suicide risk assessment. We sought to use these perspectives to inform recommendations for acceptable and feasible suicide risk assessment practices in EDs.

2. Materials and methods

2.1. Study setting and participant selection

Ninety-two providers from two hospital systems in a Midwestern state participated. Fifty-seven providers participated from an ED at an academic medical/Level 1 trauma center that serves an urban and suburban patient population; this ED recorded 49,703 visits in 2013.³⁰ Thirty-five providers participated from two EDs within the same community hospital system that serves a suburban patient population (21 providers from an ED at an acute-care hospital and 14 providers from an ED at a tertiary-care hospital that recorded 39,321 ED visits and 13,856 ED visits in 2013, respectively³⁰).

Participants were selected via maximum variation sampling in order to capture the cross-cutting themes among ED providers in two hospital systems with varying levels of patient acuity, volume and populations.³¹ The purpose of this sampling strategy was to identify common themes among diverse environments in order to speak to the shared aspects in the phenomenon of ED suicide risk assessment. All attending physicians, emergency medicine residents and fellows, nurse practitioners, physician assistants, registered nurses and social workers who employed more than half time in their ED were eligible to participate. Of the 261 providers that were contacted, 92 providers agreed to participate (35.25% total response rate). Fifty-seven of the 170 providers from the academic medical center participated (33.5% response rate) and 35 of the 91 providers from community hospital system participated (38.4% response rate).

2.2. Characteristics of the research team

The authors included one clinical psychology fellow, one emergency psychiatrist and two clinical psychologists. The research

team also involved an emergency physician and a psychologist with expertise in qualitative research methods who offered consultation throughout the study. Two advanced undergraduate students majoring in psychology assisted qualitative analyses. Participants were told that the lead author's research interests include the assessment of suicide risk in EDs.

2.3. Study protocol

The participants responded to three open-ended questions via an online survey that assessed their perspectives on suicide risk assessment. These questions were administered in the context of a larger survey that examined providers' knowledge, attitudes and work experiences related to assess suicide-related concerns. A liaison at each medical center sent eligible staff an email that contained a link to the survey. The liaison at the academic medical center was the Chair of the Department of Emergency Medicine and the liaison at the community hospital system was the Interim Director of Emergency Services. Informed consent was obtained before beginning the survey, which included permission to publish deidentified data. The first author's university institutional review board approved the study protocol. The results of this work are presented using the consolidated criteria for reporting qualitative research.³²

Three open-ended questions asked the participants to describe their perspectives on (1) the barriers to assess suicide risk, (2) their preferred assessment methods and (3) the factors that facilitate suicide risk assessment. The providers completed the open-ended questions at the outset of the survey to prevent response bias and fatigue. Questions were developed through literature review and consultation with the research team.

2.4. Data analysis

An inductive thematic analysis approach³³ was used to identify themes in the qualitative responses. A three-person committee, which consisted of the first author and two advanced undergraduate psychology students, worked in several stages to code the data. Responses were cleaned and identifying information was replaced with

pseudonyms prior to coding. Each committee member initially read all responses to gain familiarity with the data. Next, all members engaged in an initial coding process in which they evaluated the data in a line-by-line fashion and provided codes that identified notable concepts and key phrases. During initial coding, the team examined how each participant's response was similar to and different from the other responses. Initial coding continued until theoretical saturation was reached (i.e., no new codes emerged). All initial codes were then compiled and collaboratively analyzed to determine the most significant and/or frequent. The team discussed discrepancies in the initial categorization until consensus was reached. This method uncovered 13 total codes. The first author created a Coding Manual and trained the two undergraduate students in the use of the manual. The undergraduate students scored the responses as present, absent or no data for each code. Interrater reliability was strong (Cohen's kappa>.90). These codes were transformed into six broad themes via collaborative and iterative discussions with the larger research team. This study also triangulated the findings across investigators (ensuring consensus in coding among all team members) and sources of data (iterative process of analyzing codes across each survey respondent) to ensure trustworthiness of the data.³¹ No software was used to assist qualitative analyses.

3. Results

3.1. Characteristics of study participants

The majority (69.5%) of all participants were registered nurses, 9.8% were attending physicians, 9.8% were emergency medicine residents or fellows and 4.4% were social workers. The mean time employed in emergency medicine was 9.65 years (SD=7.49; range=0.25–32 years). The average age of all participants was 38.13 years old (SD=9.94). The sample was primarily female (75%) and Caucasian (89.1%). Table 1 displays demographic information by hospital system.

Table 1. Demographic and occupational information of ED providers.

Characteristic	Academic Medical Center (n= 57)	Community Hospital System (n= 35)
Gender, n (%)		
Male	16 (28.1)	7 (20.0)
Female	41 (71.9)	28 (80.0)
Race and Ethnicity, n (%)		
Asian American	0 (0.0)	1 (2.9)
Caucasian	48 (84.2)	34 (97.1)
Latina(o)	3 (5.3)	0 (0.0)
Multiracial	3 (5.3)	0 (0.0)
Other	4 (7.0)	0 (0.0)
Position, n (%)		
Attending Physician	8 (14.0)	1 (2.9)
Emergency Medicine Resident or Fellow	9 (15.8)	0 (0.0)
Physician Assistant	3 (5.3)	3 (3.6)
Registered Nurse	33 (57.9)	31 (88.6)
Social Work	4 (7.0)	0 (0.0)
Mean Age (SD)	35.91 (7.89)	41.74 (11.83)
Mean Years Employed in Emergency Medicine (SD)	8.06 (5.86)	12.20 (9.06)

3.2. Qualitative themes

Qualitative analysis elicited six broad themes: (1) time, (2) privacy, (3) communication with other patients and providers, (4) integration of standard protocol in routine care, (5) patient participation and engagement and (6) collaboration and consultation with other professionals. Table 2 displays quotations that illustrate each of these themes. The provider's occupation and the specific question to which the provider was responding (barriers, preferred assessment methods or facilitators) provides context to each quotation.

Table 2. Quotations illustrating emergency medicine providers' perceptions of barriers, facilitators and preferred method.

Time

"The main factor is the lack of time and high patient volume — this really prevents us from doing anything other than focus on an acute issue. There is little time to delve in suicide risk or talk about any sort of preventive medical topics"

Attending Physician (Barriers)

"It is seldom there is time to spend time with the patient to find out what their true intent is/was. Most often you look at what the attempt was medication, physical harm or what...When there is time you can sometimes break through to them and get true answers"

Registered Nurse (Facilitators)

"Getting more time with a patient is the most important factor"

Attending Physician (Facilitators)

Privacy

"Suicidal patients come in with family and insist on having them in the room with them. It makes it difficult to get an honest and complete history from the patient. If you ask the family to leave, the patient gets upset and either doesn't answer the questions or they become very short with their answers"

Registered Nurse (Barriers)

"Patients are commonly barraged by nurses, police — [it is] hard to get an honest interview where a patient feels like they can trust me"

Emergency Medicine Resident (Barriers)

"Difficulty in initiating the conversation...the presence of others in the room who the patient may or may not feel comfortable answering in front of [and] the awkwardness of asking said family or friend to leave the room"

Registered Nurse (Barriers)

Patient Participation and Engagement

"If the patient has not had a positive experience within a mental health facility, the patient is not as willing to be forth-coming with the information regarding self-harm thoughts"

Registered Nurse (Barriers)

"When a patient is pegged as combative, they are usually escorted by [police] and then met by all of our security guards, who stand out at the door ready to pounce on this patient. I find this increases their unwillingness to cooperate"

Registered Nurse (Barriers)

"Patients trying to manipulate the system. Some patients do appear to be a risk but they purposely say something so that they can be either admitted (i.e. homeless on a cold night) or at least further evaluated"

Physician Assistant (Barriers)

Communication with Patients and Other Providers

Time

"Multiple stories from paramedics, EMS, police, and patient. Occasionally patients will say something about hurting themselves and it is interpreted in different ways by health care providers and law enforcement"

Registered Nurse (Barriers)

"Patients say one thing to one provider and then something else to a social worker (for example, say they are suicidal with no plan to doctor, then admit a plan to social worker)...[and] different professional opinions about what constitutes risk"

Social Worker (Barriers)

"I try to ask them in a non-accusatory or loaded manner"

Emergency Medicine Resident or Fellow (Methods)

"I believe sitting at the patient's level and talking directly to them in a caring manner can be helpful to some, others need a more matter-of-fact 'business like' approach. The problem is not everyone can be fit into the same mold; what works for one patient and gets them to open up is a 'turn off' to the next and causes them to clam up"

Registered Nurse (Methods)

Integration of Standard Protocol in Routine Care

"Asking patients screening questions related to suicide ideation and attempts, no matter what chief complaint is when presenting"

Registered Nurse (Methods)

"Nursing screening on intake history - asking every patient despite chief complaint so I know what I'm getting myself in to before seeing the patient - would also help with time management, can organize resources while doing history and exam"

Emergency Medicine Resident or Fellow (Methods)

"I do not think there are a lot of tools in place that aid in assessing for suicide risk. In the ER we make a verbal inquiry but if the patient states that they do not feel like they are going to hurt themselves there are no other tools that help assess for suicide risk"

Registered Nurse (Methods)

Collaboration and Consultation with Other Professionals

"We do not have psych consults from the ED and rely on [separate psychiatric emergency facility] to evaluate the patients who are on a hold for suicidal ideation or attempt"

Emergency Medicine Resident (Barriers)

"The support of the ancillary staff such as security and case managers makes a huge difference"

Registered Nurse (Facilitators)

"Using a social worker who can sit and talk to the patient for a lengthy period of time and get to the bottom of what is really going on...[and] availability of security to sit at bedside"

Attending Physician (Facilitators)

Time

"[Psychiatric consultation service] are the counselors available and are consulted very early to assess the patient; in most instances, their evaluation determines the rest of the ER encounter and admission or non-admission of the patient so [psychiatric consultation service] is our best "tool" given our limited abilities in a busy ER"

Physician Assistant (Methods)

3.2.1. Time

The *time pressures* within emergency medicine, which include the need to simultaneously treat numerous high acuity patients and to reduce the duration of patient visits, emerged as a predominant barrier to assess suicide risk. One physician assistant stated, "there are too many physically sick people to spend a good amount of time correctly assessing people with mental health issues." This sentiment was also captured in one registered nurse's response, "time, time, time. There never is enough time." Conversely, *increasing time* with a patient (i.e., "more quiet time to talk") was discussed as a way to facilitate the attainment of sufficient information about a patient's suicide risk. Time also appeared essential to "build the rapport needed for [patients] to be truthful regarding their suicidal ideation." Providers similarly stated that "low patient volume" would allow them to spend more time spent with patients.

3.2.2. Privacy

Participants observed that the level of privacy afforded to a patient impacted the validity of a suicide risk assessment. Several characteristics of the ED setting contribute to *limited privacy*, which was repeatedly cited as an obstacle to assess suicide risk. For example, family members are commonly present during ED procedures, including interviews. The hindering effect of the presence of others is seen in this quotation by a registered nurse, "patients come in with large numbers of family...causing them to feel uncomfortable with honest and open question answering." ED work flow and space constraints were cited as deterrents to privacy in both screening and suicide risk assessments: "The location of our triage room...It is within hearing distance of the EMS room as well as the admitting desk." Completing an assessment in a way that "ensured" *patient privacy* was noted as a facilitator of improved honesty in

responding and patient engagement. This involved speaking with the patient "alone" and in a "quiet, secure and trusting area." One physician assistant's response highlighted the unique effort that may be needed to ensure patient privacy when assessing suicide risk in an ED: "I will often take the patient to the bathroom to obtain the information [or] I will ask family or friends to leave the room."

3.2.3. Patient participation and engagement

Providers' perspectives suggested that a patient's *inability or unwillingness to participate in suicide risk assessment* procedures was a barrier to assessment. Acute medical issues may hinder a patient's ability to participate in a suicide risk assessment while the "use of alcohol or drugs blurs the true picture." Providers also noted that patients are not always willing to honestly answer risk assessment questions. For example, providers noted that patients may be "defensive" and reluctant to cooperate if they are monitored by police officers or security guards. A patient may also alter his/her response to risk assessment in order to either avoid psychiatric hospitalization or, in contrast, be hospitalized for "secondary gains."

3.2.4. Communication with patients and other providers

The importance of communication methods when asking patients about suicide risk emerged as a theme. *Administering questions verbally* and in a "direct" and "conversational" format was identified to be an efficient and effective method, and it was also observed to be one of the only known methods for screening and evaluating suicide risk. If suicide-related concerns were identified, directly asking follow-up questions related to the presence of a suicide plan, intent, access to means and protective factors was seen as essential in the assessment of suicide risk. Providers also noted that establishing "eye contact" and using a "nonjudgmental tone and language" were facilitators of effective risk assessment. These *interpersonal elements* helped build rapport and increase patient engagement in suicide risk assessment.

Communication difficulties with other providers emerged as a barrier to effective risk assessment. This included the difficulty of effectively communicating across multiple disciplines. The challenge of

gathering consistent and/or accurate information from various sources was evident in an attending physician's statement: "Discussions between the patient, nurse, social worker, police and security staff are not discussed formally with the ED physician." The difficulty sharing information concerning a patient's suicide risk in a timely way between ED providers resulted in "redundancy...each patient is asked over and over again."

3.2.5. Integration of standard protocol in routine care

The ED providers noted that they prefer to *utilize a routine, standardized method* for screening suicide risk. Numerous providers stated that they prefer to incorporate screening questions during the "initial assessment" or while gathering history during intake procedures. Some providers spoke of *standard protocols* that increase the likelihood that providers will ask patients about suicide-related concerns. Such protocols include the incorporation of prompts or charting templates specific to identifying suicide risk in the electronic medical record. Other responses called for increasing the availability of validated instruments to screen and assess suicide risk.

3.2.6. Collaboration and consultation with other professionals

Another principal theme was that effective suicide risk assessment requires a collective effort across multiple disciplines and providers. Responses indicated that providers rarely engaged in suicide risk assessment alone; rather, *collaborating* with ED colleagues or police officers often assists the practice. This approach can be seen in an attending physician's response to the prompt assessing perceived facilitators: "Speaking with our ED social worker for input...I do not like to rely on police officers to make the determination but would err on the side of caution and value their input if they witnessed history prior to arrival in ED." Providers reported a preference to *consult* mental health professionals, such as social workers or psychiatric consultants, during suicide risk assessments as they are "trained to speak to patients on this topic." ED providers indicated that they prefer to ask the "screening questions" and, if indicated, consult mental health specialists to assist in assessing a patient's level of suicide risk and determining an appropriate disposition.

ED providers noted that they often assess suicide risk with *insufficient mental health resources*, both within the ED and in the community. A subset of providers believed that they have a "lack of training" and "a lack of continuing education to feel knowledgeable addressing the subject with the patient," resulting in "fear," "discomfort" and a preference to consult a mental health specialist to assess risk. Unfortunately, many of these ED providers reported that their access to psychiatric consultation services is limited and that there is a dearth of aftercare options for patients at risk of suicide. This reality negatively impacts a provider's disposition planning and may implicitly act as a deterrent to assess suicide risk: "Sometimes staff doesn't care to ask if a patient is suicidal. They don't want to deal with the work involved in getting someone care, especially due to the lack of resources in the community."

4. Discussion

This study provides an important step toward understanding how to lessen the burden placed on emergency medicine to assess patients at risk of suicide. ED providers from two diverse hospital systems, with an average of 10 years of clinical expertise, offered valuable insight into the barriers and facilitators of suicide risk assessment. Findings suggest that suicide risk assessment is impacted by environmental and systemic aspects of the ED, such as the duration of an ED visit, patient privacy, the multidisciplinary nature of care and the standardization of assessment in routine care. Patient engagement, communication styles and providers' interpersonal approach also impact the effectiveness of suicide risk assessment.

Previous work has identified limited time as a barrier to integrate other preventive health services in EDs,²³ which is consistent with the findings in this study. The issues of privacy, patient engagement and effectively navigating the multidisciplinary nature of care appear to be specific to implementing suicide risk assessment in EDs. While prior research supports the feasibility of ED suicide risk assessment,^{21,22} these results suggest that it may be more seamlessly implemented in EDs with regular access to mental health consultants. ED providers are faced with numerous competing demands in their work,²⁴ which may be related to the preference for standardization of

the process to screen for suicide risk. Provider responses also called for increased availability of tools, which is consistent with the relative dearth of suicide risk assessment measures validated for ED patients.^{19,20}

To our knowledge, there are no other qualitative investigations of provider perspectives regarding the barriers and facilitators to assess suicide risk in emergency medicine. Understanding the perspectives of ED providers and the context in which they practice illuminates the complexity in assessing suicide risk in this setting. The environment-level, patient-level and provider-level themes that emerged in this study inform recommendations for clinical practice, education, quality improvement and research efforts related to improving suicide risk assessment in emergency medicine.

The themes of time and privacy offer insight into the contextual and systemic factors that must be considered when making clinical recommendations to improve suicide risk assessment in EDs. The extent to which each of these factors was present or absent determined its categorization as a barrier or facilitator. As ED providers are challenged by assessing suicide risk in a setting where time and privacy are inherently limited, it is not likely feasible to recommend mechanisms to carve out additional time or privacy. It may be more beneficial for EDs to adopt procedures for suicide risk assessment that strike a balance among efficiency, establishing an interpersonal connection and patient confidentiality.

Another environmental theme indicated that ED providers often consult mental health specialists to assess suicide risk despite the lack of regular access to such specialists. The few mental health referral options also highlighted a major concern among providers — assessing suicide risk without appropriate disposition options may result in frustration and prolonged ED stays. Given these barriers, emergency physicians' efforts may be best allocated in stratifying suicide risk and managing low-risk patients whereas a psychiatric consultant can offer assessment and treatment recommendations for complex or higher-risk cases. Capitalizing on the expertise of the various disciplines may streamline suicide risk assessment, offer improved care for at-risk patients and offer ED providers more time to care for other emergently ill patients. Treating suicidal patients can be burdensome,^{27,28,29} and

appropriately utilizing psychiatric consultants can help combat such negative feelings. Given the shortage of mental health resources, improving ED providers' ability to effectively assess and manage suicide risk is of utmost importance.

While the ED providers were asked specifically about the preferred methods to assess suicide risk, methods to screen were also discussed. Thus, another environmental theme was the providers' preference to integrate a standardized approach to screen for suicide-related concerns into the ED. Many providers endorsed the implementation of a universal screening approach that would be guided by systemic reminders. Boudreaux and Horowitz recommend conducting screening and assessment in a coordinated fashion, with screening aimed at identifying patients who present with actionable risk and assessment aimed at stratifying the severity of identified risk in order to inform clinical decision making.¹⁹ It is crucial that ED providers recognize the important difference between these two processes. Standardization will likely benefit screening processes, but standard protocols for the assessment and management of suicide risk are less likely to improve patient care.¹⁹ For example, automatically placing a psychiatric consultation for any level of suicide risk may lead to unnecessarily longer stays for patients with low risk. ED providers may find value in practicing risk stratification activities to differentiate the severity (low, moderate and high) and temporality (acute versus chronic) of a patient's suicide risk.³⁴ To hone clinical judgment, ED providers may benefit from learning to differentiate low and high acute suicide risk and from consulting other professionals regarding risk stratification decisions. Proficiency in stratifying risk may ameliorate the frustration and uncertainty that ED providers commonly feel when working with at-risk patients^{27,28,29} and help guide clinically indicated disposition decisions.

ED providers' responses indicated interest in further training in psychiatric emergencies. Training opportunities may be offered during residency or in continuing education workshops. Providers may find benefit in accessing ED-specific resources for the assessment and management of suicide risk assessment. The Suicide Prevention Resource Center has compiled an extensive list of resources to enhance ED providers' ability to recognize and respond to acute suicide risk, improve care for ED patients who have attempted suicide or

utilize Safety Planning as a brief clinical intervention to mitigate acute risk.³⁵ Additionally, some of the providers' responses indicated a belief that psychiatric and physical conditions are distinct entities. It is recommended that trainings address these beliefs and provide education regarding the assessment of suicide risk in patients with comorbid mental and physical health conditions.

A caveat in offering broad recommendations for improving the care of suicidal patients is that each ED will vary greatly in its resources to incorporate such suggestions. The methods of this study model a possible quality improvement effort for EDs interested in making changes to their policies and procedures regarding suicide risk assessment. In order to ascertain site-specific preferences and needs, it is recommended that ED administrators obtain their providers' perspectives on the barriers, facilitators or preferred suicide risk assessment methods. This recommendation is in line with Boudreaux and Horowitz's¹⁹ assertion that a health care setting's suicide risk assessment policies must be tailored to consider its infrastructure and scope of practice.

4.1. Limitations

Online data collection is an emerging technology in qualitative designs that has strengths and weaknesses.³⁶ The online survey allowed this research team to gather a broad set of perspectives, provided busy medical providers flexibility in participating and possibly reduced social desirability bias. However, the qualitative data lacked any emotional valence that may have been conveyed in an interview and the research team was unable to modify the prompts to account for emerging themes. The research team was also unable to provide participants direction to focus on solely risk assessment while completing the study. This resulted in some providers shifting between discussing screening and assessment when responding to the prompts, but this shift was accounted for in the interpretation of the data. Despite these limitations, qualitative analysis of electronic text responses is increasingly used, especially with health care providers. Two recent studies analyzed open-text responses collected on Web-based surveys to identify the themes associated with adverse events during transfer from an ED to internal medicine³⁷ and to examine

primary care providers' perspectives regarding the implementation of a patient-centered medical home model.³⁸

This study's sampling strategy also impacts the interpretation of the findings. While analysis of the different roles and hospital settings may impart meaning, maximum variation sampling is a purposeful strategy that was used to capture the themes that cut across diverse provider roles and ED environments.³¹ The common themes identified in this study suggest shared aspects in the phenomenon of assessing suicide risk in EDs. The sample also predominately consisted of registered nurses, which may be a limitation as nurses often play more of a role in screening whereas emergency physicians may be more involved in suicide risk assessment. The results may be biased toward a nursing perspective and ensuring a more evenly distributed representation of disciplines may have allowed broader themes to emerge.

Another limitation concerns the self-selection of participants. The providers who volunteered to participate may have been more inherently interested in suicide risk assessment and perhaps more likely to have different insights than other providers.

4.2. Future directions

The themes can be used to generate hypotheses about the ways in which suicide risk assessment may be more feasibly implemented in EDs. Given the importance of access to mental health resources, future quantitative research designs could examine the impact of psychiatric consultation on the length of the ED visit or ED providers' attitudes toward treating patients with suicide-related concerns. It also would be beneficial to continue to develop and test psychometrically sound tools to assess suicide risk in EDs.

This line of work may be extended by conducting in-depth interviews with ED providers to ascertain their perspectives regarding the strengths and weaknesses of various assessment approaches as well as the value of suicide risk assessment in emergency medicine. Future research may also compare the emergence of themes across different disciplines and hospital systems. This study did not ask providers to describe the process they use to conceptualize suicide

risk, and a study examining how ED providers use assessment data to conceptualize risk would expand our knowledge on this topic.

Future qualitative research should continue to examine the perspectives of suicide risk assessment from the different stakeholders in ED care. Effectively engaging patients is essential in conducting a quality suicide risk assessment. It would also be important to understand ED patients' perspectives regarding the barriers and facilitators as well as potential benefits and consequences of engaging in a risk assessment. Organizational stakeholders may also inform risk assessment practices. The Patient Protection and Affordable Care Act's emphasis on patient-centered care may increase the amount of care coordination in which ED providers engage³⁹ and ED administrators may offer insight into how to integrate suicide risk assessment in ED care in the context of these systemic influences.

5. Conclusion

This study offers novel information regarding ED provider perspectives on the barriers and facilitators of integrating suicide risk assessment in emergency medical care. Environmental and systemic factors, such as the duration of an ED visit or privacy, may act as a barrier or facilitator depending on the level they are present. ED providers experience tension between conducting an efficient, standardized verbal screen and developing rapport to increase patient engagement in suicide risk assessment. Appropriately utilizing a collaborative, multidisciplinary approach to assess suicide-related concerns appears to ameliorate the burden placed on ED providers and facilitates optimal patient care. These factors inform recommendations for clinical practice, education, quality improvement and research efforts related in improving suicide risk assessment in emergency medicine.

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