

IRIS Fellowship Research Project Write Up

Research project title: An examination of potential knowledge gaps in Emergency Department providers regarding SBIRT, Stigma, and Emergent Drugs

Researcher/Fellow name: Paul Edward Cooper, CRPS, RPS, MSB

“Learning about knowledge gaps and how to fill them is paramount in providing the very best in patient care.” - Doctor at Medstar Health, Study Participant

Introduction

In my time working as a Certified Peer Recovery Support Specialist in the Emergency Department (ED) of MedStar Health’s Franklin Square Hospital, I have noticed certain trends and knowledge gaps regarding patients with substance use disorder (SUD) that may negatively affect patient outcomes. This study examines how prevalent these knowledge gaps are and where additional education for staff may be needed. Specifically this research will measure ED staff knowledge of the different forms of treatment, and attitudes towards these treatments and their effectiveness.

The aim of this research is therefore to identify and address existing knowledge gaps within MedStar Health’s EDs. Possible solutions that may become hospital practice and policy implications of this research include additional education opportunities, including through expanded mandatory educational videos.

This study will focus on three main areas of ED staff knowledge:

1. Screening, Brief Intervention and Referral to Treatment (SBIRT) responsibilities, areas of expertise, and how SBIRT integrates with the ED workforce
2. Staff attitudes, and the potential of stigma, towards patients with SUD, particularly with regards to Medically Assisted Treatment (MAT)
3. Emergent novel drugs (i.e., Xylazine, Iso, Benzodope) and how to identify and effectively treat patients using these drugs

SBIRT

SBIRT has become an effective practice for EDs over the past two decades, as indicated by several studies which have demonstrated that “SBIRT interventions in these setting are effective in reducing unhealthy drug use and getting SUD patients into treatment” (1).

For many patients the ED may be their primary contact with the healthcare system. EDs are well positioned to be on the front line of screening for risky behavior. “The use of SBIRT teams is critical to identifying people at high risk for drug use and improving health outcomes” (2).

With several departments dedicated to specialized services for patients (including SBIRT, Social Work, Case Management, and Community Health), there are times when the duties, services, and responsibilities of each department are not clear in the minds of providers, contributing to delays in service and reduced patient satisfaction. “It is vitally important that the correct department is contacted for the correct issue the patient is having” (3).

Stigma and MAT

Numerous studies have shown that stigma has a negative impact on patients being treated for SUD. The attitudes and behaviors of practitioners have been linked to a variety of suboptimal clinical outcomes in different patient groups. “Specifically for people who use drugs, this results in barriers to health care access and poor treatment outcomes.” (4)

Stigma occurs when negative attitudes and behaviors are directed towards a person or group of people; this could be due to numerous factors, including health, gender, sexual orientation, race, and religion. “Stigma is distinct from disapproval, as stigma is not necessarily linked to an individuals’ attributes or behaviors; rather people who demonstrate stigma towards others make assumptions about an individual’s or groups’ attributes or behaviors” (5).

Stigma, in relation to health, is typically characterized by social disqualification, whereby individuals or groups are devalued and excluded because of a particular health problem. The extent to which medical conditions are stigmatized can vary significantly in social contexts. “The stigma experienced by people who use drugs is unique as individuals are perceived as having personal control over their illness and are therefore held responsible and oftentimes blamed for their drug use” (4).

This stigma can also apply to the use of MAT in treating SUD. “Provider based stigma serves as a barrier to fully implementing harm reduction strategies, such as the use of naloxone and medication assisted treatment” (6). This is because medical staff are reluctant to prescribe MAT if they have a deeply personal bias against it.

Emergent Drugs

The emergence of new, highly addictive and deadly drugs that people misuse is a critical issue affecting EDs worldwide. “Remaining abreast of emerging drugs continues to challenge ED staff” (7). A timely example is the increasing use of xylazine, most often in combination with other drugs, such as Fentanyl. This is a rapidly growing threat to human health in the United States.

A lack of knowledge among ED staff regarding emerging drugs, such as Xylazine, can produce confusion and delay proper treatment. It is critical that ED staff have a working knowledge of emerging drugs being used within the hospitals’ area of service. Lack of knowledge can adversely affect patient treatment, quality of service, and outcomes. Negative attitudes towards treatment and SUD patients can be mitigated by proper training and education. Learning specifics of SUD related to emergent drugs and forms of treatment can lower barriers and social stigma associated with SUD and its sufferers, related to these and all drugs.

Research Questions

This study seeks to determine the knowledge gaps in ED staff and come up with effective strategies to fill those gaps for the optimal outcome for patients with SUD. The research question below was therefore posed, with the hypothesis that there would be knowledge gaps in all three areas.

What knowledge gaps exist among MedStar's ED providers related to the work of SBIRT; attitudes towards and potential stigma related to SUD and SUD treatment, including MAT; and emergent drugs and treatment for these drugs?

Methods

This study used an anonymous, voluntary, online survey utilizing Qualtrics. The survey collected quantitative data except for one open-ended question which was primarily not answered, so was excluded from data analysis beyond providing useful background and a powerful *in vivo* quote which begins this paper. The survey was created by the study author in consultation with researchers from the University of Maryland School of Social Work. The survey targeted doctors, nurses, physician assistants, and support staff in four Baltimore, Maryland area MedStar EDs. These surveys were distributed by email to the heads of the four EDs, along with charge nurses, and other ED leaders to distribute to ED staff. Data was collected between February 1 and February 28, 2023.

The survey presented types of knowledge such as, "I understand the role and purpose of SBIRT" and then to assess staff knowledge levels utilized a standard 1-5 Likert scale of (1) Strongly Disagree, (2) Disagree, (3) Neither Agree Nor Disagree, (4) Agree, and (5) Strongly Agree. The analysis produced a mean response score for each question. For the purpose of this study, any question with a mean score of below 4 indicated that staff as a whole did not agree that they held the knowledge being assessed, and therefore this presented as a knowledge gap that should be addressed with hospital knowledge building activities.

Results

Out of the 300 providers currently working in the four Medstar EDs, responses were received from 60 participants, which indicates a 20% response rate. The breakdown of the final sample ($n=60$) is presented in Table 1 below.

Table 1. Survey participants breakdown

- Physician 15%
- Physician Assistant 12%
- Nurse 60%
- Support Staff 13%

Data analysis shows that the provider population is knowledgeable in many facets of SBIRT, treatment, and the current needs of SUD patients:

- I understand the role and purpose of SBIRT ($M= 4.58$)
- The SBIRT intervention contributes to the overall health and well-being of patients. ($M= 4.81$)
- I am knowledgeable about the various types of substances a patient may use. ($M=4.39$)
- I know how to treat patients for the variety of substances they may use. ($M=4.09$)
- I believe in the disease model of addiction (i.e. addiction is a brain disease). ($M=4.18$)

Conversely, data analysis of the Qualtrics surveys indicate potential knowledge gaps in the following areas:

- I understand the difference in the duties of Social Workers, Case Managers, Community Health, and Peer Recovery Coaches. ($M=3.95$)
- MAT is a good investment for society. ($M=3.58$)
- I know about the rise of new addictive substances (Iso, Xylazine, Benzodope). ($M=2.95$)
- I know how to treat an overdose of these new addictive substances. ($M=2.77$)

Discussion

Lack of knowledge can adversely affect patient treatment, quality of service, and outcomes. This study indicates and supports the hypothesis that there is room for improvement in the three areas studied: increased understanding of the role of SBIRT, reducing stigma associated with SUD and MAT, and a knowledgeable response to emergent drugs. Results of this study demonstrates that more education is needed in these areas to improve patient treatment and experiences.

One strength of this study was the 20% response rate, especially given the short one-month time the survey was open and the busy schedules of hospital ED staff. Another strength is the timely and urgent topic, particularly around emergent drugs. A study limitation was that the survey was created and utilized for the first time in this study, so has not been tested and validated prior. It is therefore not a proven instrument. Another limitation is that results may not be generalizable for other EDs, other geographical locations, or other ED staff members.

Conclusion

There is a great need for more education regarding the specific knowledge gaps identified in this study: around SBIRT services, emergent drugs, and understanding of the importance of patient-directed care. The recommended formats of this education are mandatory MedStar Health online education modules addressing these issues and including these topics within discussions

during medical rounds as well as team and individual meetings between supervisory and service delivery staff. As new medical staff are trained in educational programs, at universities and within hospital residency and other training programs, these topics should also be a strong focus within those curricula.

References

1. Hawk K, D'Onofrio G. Emergency department screening and interventions for substance use disorders. *Addict Sci Clin Pract.* 2018 Aug 6;13(1):18. doi: 10.1186/s13722-018-0117-1. Erratum in: *Addict Sci Clin Pract.* 2019 Jul 16;14(1):26. PMID: 30078375; PMCID: PMC6077851.
2. McDermott, Warren P. and Palumbo, Mary Val Dr., "Implementing SBIRT in a Critical Access Emergency Department" (2022). College of Nursing and Health Sciences Doctor of Nursing Practice (DNP) Project Publications. 94. <https://scholarworks.uvm.edu/cnhsdnp/94>
3. Horn BP, Crandall C, Forcehimes A, French MT, Bogenschutz M. Benefit-cost analysis of SBIRT interventions for substance using patients in emergency departments. *J Subst Abuse Treat.* 2017 Aug;79:6-11. doi: 10.1016/j.jsat.2017.05.003. Epub 2017 May 4. PMID: 28673528; PMCID: PMC5538788.
4. Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: Systematic review Leonieke C. van Boekel, Evelien P.M. Brouwers, Jaap van Weeghel and Henk F.L. Garretsen *Drug and Alcohol Dependence*, 2013-07-01, Volume 131, Issue 1, Pages 23-35
5. Landry, M. Anti-Stigma Toolkit: A Guide to Reducing Addiction-Related Stigma. 2022 Edition. Available from <https://attcnetwork.org/sites/default/files/2019-04/Anti-Stigma%20Toolkit.pdf> Accessed December 15th 2022. 2022
6. Harm Reduction Coalition. Understanding drug-related stigma: Tools for better practice and social change. Available from <https://harmreduction.org/issue-area/issue-drugs-drug-users/understanding-drug-related-stigma/> Accessed Accessed December 15th 2022. 2010.
7. Nelson ME, Bryant SM, Aks SE. Emerging drugs of abuse. *Emerg Med Clin North Am.* 2014 Feb;32(1):1-28. doi: 10.1016/j.emc.2013.09.001. Epub 2013 Oct 15. PMID: 24275167.