

Background

In the United States, about one in five adults had a mental illness, yet only 43.3% received treatment.¹ America's Mental Health (MH) study identified "lack of access as the root cause of the MH crisis," with lack of information and cost as top barriers.² According to the study, almost half (46%) of those untreated, would not know where to go if they needed MH services for themselves or others.²

The American Pharmacists Association (APhA) adopted policies in 2019 addressing the role of pharmacists for an accessible resource for MH. First, "APhA encourages all healthcare personnel to receive training and provide services to identify, assist, and refer people at risk for, or currently experiencing, a mental health crisis."³ Second, "APhA encourages employers and policymakers to provide the support, resources, culture, and authority necessary for all pharmacy personnel to engage and assist individuals regarding mental health and emotional well-being."³ Last, "APhA supports integration of a mental health assessment as a vital component of pharmacist-provided patient care services."³

Although the APhA policy did not identify a specific MH training program for pharmacy staff, one validated training program is Mental Health First Aid (MHFA). MHFA utilizes a 5-step action plan with the acronym "ALGEE": Assess for risk of harm or suicide, Listen non-judgmentally, Give reassurance and information, Encourage appropriate professional help, and Encourage self-help and other support strategies.⁴ One way for employers to align with the APhA policy would be to train employees in MHFA.³ However, MHFA training poses financial limitations. A cost-effective alternative to train pharmacy staff must be developed when the MHFA course is not financially feasible for a pharmacy employer.

Providing pharmacy staff with MH resources consisting of professional and self-help resources is one cost-effective alternative to MHFA training. Based on the MHFA ALGEE action plan, encouraging professional and self-help are important steps for recovery.⁴ Persons experiencing mental illness may be unaware of available treatment options, where to seek help, and often delay help for several years making recovery difficult.⁴ Pharmacy staff can encourage a patient to seek help by providing the patient a list of appropriate professional and self-help resources. Often, healthcare professionals such as psychiatrists and primary care physicians, are not quickly available. Providing professional and self-help resources can further assist the patient while waiting to be seen. To align with APhA policy, pharmacy employers can provide MH resources to pharmacy staff for use in assisting and referring persons experiencing mental illness to reliable care.

This study evaluated the impact of an employer developed mental health resource document (MHRD) on pharmacy staff knowledge of MH resources, comfortability and perception providing resources, and willingness to initiate conversation regarding MH to assist persons experiencing mental illness to reliable help.

The objectives were to: (1) align with APhA policies by developing employer-provided MH resources consisting of professional and self-help resources for pharmacy staff to offer to persons experiencing mental illness, (2) assess and improve pharmacy staff knowledge on appropriate professional and self-help resources, (3) assess pharmacy staff comfortability and perception providing resources to persons experiencing mental illness, (4) assess pharmacy staff willingness to initiate conversation regarding MH.

Methods

This was a 51-item pre and post-intervention survey study assigned to pharmacy staff at 19 grocery store chain community pharmacies at Balls Food Stores (BFS) in the Kansas City area. The surveys consisted of open-ended, yes/no, select all, and five-point Likert-type scale questions. A unique participant-generated code linked surveys while maintaining anonymity.

The surveys assessed current pharmacy practices for providing MH resources, participants reported experiences over two previous months where resources would have been beneficial, access to readily available resources, and frequency providing resources. The surveys evaluated participants' knowledge of appropriate professional and self-help resources and participants' comfortability providing resources based on MH disorder. Last, the surveys assessed participants' perception providing resources, perception of pharmacy access to resources, and willingness to initiate a conversation concerning MH. The survey was piloted in eleven subjects to assess clarity.

The intervention provided a MHRD, adapted from MHFA, to BFS pharmacies for pharmacy staff use in referring persons experiencing mental illness to reliable professional and self-help resources. The MHRD included 45 professional and self-help resources limited to anxiety, depression, eating disorders, psychotic disorders, substance use disorders, and suicidal ideation. The MHRD included 26 local professional resources near BFS pharmacies and included addresses, phone numbers, hours, websites, information on financial assistance and low-cost resources for those without insurance, and if walk-in or same-day appointments were available. A 25-minute, narrated PowerPoint (PPT) presentation which further described some resources in the MHRD, was available to participants.

All BFS pharmacy staff were eligible for participation unless they completed MHFA training within the past three years. The link to the anonymous, online Qualtrics pre-survey was emailed to BFS pharmacies in November 2019. The primary author provided staffing coverage to each pharmacy so pharmacy staff could complete the survey and watch the PPT presentation. Pharmacies received a permanent MHRD book, which used colored ink to easily identify local resources with financial assistance and same-day appointments and printed copies to distribute to any person presenting to the pharmacy experiencing mental illness. The presentation and MHRD were saved to the pharmacy shared drive for pharmacy staff to access at any time.

Pharmacies received a checklist to ensure staff (1) completed the pre-intervention survey, (2) watched the PPT presentation, (3) located the MHRD. The primary author emailed and called each pharmacy manager to ensure pharmacy staff completed the tasks within two weeks. The post-intervention survey was administered via email eight weeks following the pre-survey and was assigned a two-week completion deadline. The University of Kansas Medical Center Human Subjects Committee granted exemption for this study.

Statistical analyses were performed using SPSS version 26 with an a-priori alpha value of 0.05. Descriptive statistics were used to assess patient demographics. Chi-squared assessed yes/no and knowledge question responses. Wilcoxon signed-rank test assessed questions containing a "not sure" response. Mann-Whitney U test evaluated the number of resources provided for the unmatched responses. Wilcoxon signed-rank test assessed comfortability, willingness, and perception Likert-type questions (5= strongly agree, 1= strongly disagree).

Results and Discussion

A total of 103 pre-surveys and 115 post-surveys were completed; 61 linked surveys were included for the data analysis. Some participants did not answer each survey item resulting in incomplete questionnaires and data. Participant demographics are reported in Table 1.

In general, participants were significantly more comfortable providing professional and self-help resources following the intervention as described in Table 2. Knowledge significantly improved for 3 of the 14 resources evaluated: National Suicide Prevention Lifeline (n=40, p<0.01), the Crisis Text Line (n=42, p<0.01), and the Compassionate Ear Warmline (n=40, p=0.035).

Of the 60 pre-intervention responses, 30% of participants experienced a situation in the pharmacy within the past two months where MH resources would have been beneficial compared to 29.1% of the 55 post-responses (p=0.585). In contrast, 16.7% of the 60 pre- and 72.7% of the 55 post-responses reported having readily accessible resources to provide for someone experiencing mental illness (p<0.01). Following the intervention, there was a statistically significant increase in the number of resources provided (p=0.025).

Of the 60 pre-responses, 71.6% agreed or strongly agreed that it was important to have professional resources readily available compared to 78.8% of the 52 post-responses (p=0.68). Participants who agreed or strongly agreed to willingness to initiate conversation increased from 60% of the 60 pre- and 73% of the 52 post-responses (p=0.278).

Results highlighted that providing MH resources for pharmacy staff use, significantly improved participants' knowledge of and comfortability providing MH resources as well as increased the number of resources provided. To our knowledge, no previous study provided pharmacy staff with MH resources and evaluated the impact on pharmacy staff knowledge of resources, comfortability and perception providing resources, and willingness to initiate conversation regarding MH.

Before the intervention, one-third of participants experienced a situation where MH resources would have been beneficial, however, the majority denied having readily accessible MH resources. Participants were not well equipped to refer patients if and when they needed help. Witry et al. performed a longitudinal evaluation of MHFA trained pharmacists and suggested a need for additional resources and training on local MH resources, which may be satisfied by implementing a similar intervention and providing tangible resources like the MHRD.⁵ Although providing the MHRD did not significantly improve participants' knowledge of all MH resources, there was a significant improvement in knowledge of crisis lines, including the National Suicide Prevention Lifeline. This is not surprising and may be important as during a crisis situation, knowing who to contact without needing to search for resources would be beneficial.

This study found that providing a MHRD significantly improved participants' comfortability providing resources to refer persons to appropriate care and there was a significant increase in number of resources provided. These findings are supported by Watkins et al. who found uninsured or underinsured patients, and lack of information to refer patients as top barriers to community pharmacists serving patients with mental illness.⁶ These barriers were addressed by the MHRD which included on local clinics with walk-in appointments for urgent needs, financial considerations of clinics, and several clinics with low cost services specifically for the uninsured. While a structured referral system was not in place, participants could provide the MHRD to a patient, which may help access care as supported by Rosser et al.⁷ The study by Rosser et al. found 60% of patients, who were referred to

their provider after a pharmacist administered and detected a positive depression screening, followed-up with their provider for treatment.⁷

Although mostly positive to begin with, participants' perception providing resources and willingness to initiate conversation did not significantly improve. This is not surprising as this study did not address identifying persons with mental illness or initiating conversation. This study suggests participants may not be willing to initiate a conversation but if in a situation where resources may be necessary, resources were provided likely due to improved knowledge and comfortability providing resources.

There are a few limitations to our study. First, the participant confusion regarding linking questions resulted in unlinked surveys. The survey design was not formally validated, which may limit the findings. Social desirability bias may have impacted responses regarding self-reported comfortability, willingness, and perception providing MH resources and recall bias may have impacted responses regarding situations where resources may have been beneficial and frequency of providing resources. Due to the short length of this study, it is difficult to determine the long-term impact. Participants completed the surveys and watched the presentation at work with noise and disruptions, thus it may have impacted their responses. Participants could have accessed the MHRD for the post-survey however the overall lack of improved knowledge suggests participants did not utilize the MHRD, but it cannot be confirmed. Last, the study only evaluated the willingness to initiate a conversation regarding MH, which may not reflect true engagement in conversation.

Conclusion

Overall, providing pharmacy staff a MHRD of local and national professional resources and self-help resources improved pharmacy staff knowledge and comfortability providing MH resources to refer persons to reliable care. Following the intervention, there was an increased number of resources provided, which may increase access to care. Future studies should evaluate if providing a MHRD to refer patients to reliable help increases patients accessing MH care. Future research should provide tangible MH resources such as the MHRD and evaluate barriers to willingness for initiating a conversation regarding MH and willingness engaging in conversation regarding mental illness.

References

1. Bose J, Hedden S, Lipari R, and Park-Lee E. (2018). Key Substance Use and Mental Health Indicators in the United States: Results from the 2017 National Survey on Drug Use and Health. Online. Samhsa.gov. Available at: <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHFFR2017/NSDUHFFR2017.pdf>. Accessed 1 Aug. 2019.
2. New Study Reveals Lack of Access as Root Cause for Mental Health Crisis in America. (2018, October 18). [501(c)(3) nonprofit association]. National Council for Behavioral Health. <https://www.thenationalcouncil.org/press-releases/new-study-reveals-lack-of-access-as-root-cause-for-mental-health-crisis-in-america/>
3. Actions of the 2019 American Pharmacists Association House of Delegates. Journal of the American Pharmacists Association. Volume 59, Issue 4, e16 - e33. [https://www.japha.org/article/S1544-3191\(19\)30248-1/pdf](https://www.japha.org/article/S1544-3191(19)30248-1/pdf). Accessed 2 Aug. 2019.
4. Mental Health First Aid USA, Adult. Washington, DC: National Council for Behavioral Health. 2015.

5. Witry, M., Karamese, H., & Pudlo, A. (2020). Evaluation of participant reluctance, confidence, and self-reported behaviors since being trained in a pharmacy Mental Health First Aid initiative. *PLOS ONE*, 15(5), e0232627. <https://doi.org/10.1371/journal.pone.0232627>
6. Watkins, A., McKee, J., Hughes, C., & Pfeiffenberger, T. (2017). Community pharmacists' attitudes toward providing care and services to patients with severe and persistent mental illness. *Journal of the American Pharmacists Association*, 57(3), S217-S224.e2. <https://doi.org/10.1016/j.japh.2017.02.020>
7. Rosser, S., Frede, S., Conrad, W. F., & Heaton, P. C. (2013). Development, implementation, and evaluation of a pharmacist-conducted screening program for depression. *Journal of the American Pharmacists Association*, 53(1), 22–29. <https://doi.org/10.1331/JAPhA.2013.11176>