

Patient Utilization of Student-led Depression Screenings in the Community

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BACKGROUND

- Every year, student pharmacists provide free health screenings to the community through many student-led organizations and committees
- Samford University McWhorter School of Pharmacy's APhA-ASP chapter implemented Operation Mental Health, a student-led committee focusing on improving access of care to patients who may or may not be suffering from mental illness
- Mental illness affects 43 million adults in the United States, with depression affecting 16 million people
- Depression is one of the most common mental health disorders
 - Impacts quality of life
 - Increase in mortality due to suicide
 - Associated with other co-morbid disease states
- The United States Preventative Services Task Force (USPSTF) has rated depression screenings as a 'B' for all adults; health care plans cover depression screenings fully with no cost to insured patients through the Affordable Care Act
- Patients eligible for depression screenings are only screened 4.2% of the time in a primary care setting

OBJECTIVE

- The objective of this study is to determine the viability of depression screenings at student-led health events
- The primary objective was measured by comparing the number of all participants at the health event to the number of participants who opted into the depression screenings
- Secondary objectives was to review the impact of the service defined as how many patients had a positive result during the screening

STUDENT-LED HEALTH SCREENINGS

- Student pharmacists provide various health screenings through a CLIA-waived laboratory with the school
- The student chapter of APhA-ASP has seven distinct committees focused on health outcomes
 - Operations Diabetes, Operation Immunization, Operation Heart, Operation Mental Health, OTC Medicine Safety, Women's Health, and Generation RX
- Health events are facilitated through pharmacy students and a preceptor
- Health screenings occur in a variety of settings in the community such as health clinics, health fairs, fundraisers, farmers markets, and pharmacies
 - Student leaders organize these health fairs to provide free health services to a variety of patient populations throughout Alabama.
- Students are trained and provide services, such as, blood glucose assessments, blood pressure assessments, body mass index (BMI), immunizations, and patient education depending on the type of event held.
- Depression screenings were implemented due to the creation of Operation Mental Health and through grant funding with the Community Pharmacy Foundation
- Patients undergo depression screenings by taking the PHQ-2, and if positive, the PHQ-9, and then will be provided mental health counseling and linkage to care

METHODS

- Chart review of the Student-Led Health Screenings CLIA-waived laboratory with a focus on the initiation of depression screenings
- Any patient who consents to health screenings is included in the research as part of the health screening consent form; however, participants must be 19 years or older to be eligible.
- Data was collected from any health event that offered depression screenings
- Data collected included the number of patients at each health event, the number of patients screened for depression/blood pressure/blood glucose/BMI, the score of the PHQ-2, the score of the PHQ-9, if applicable, and the number of referrals to a primary care physician

RESULTS

Health Screening (n = total patients)	Event 1 n=25	Event 2 n=70	Total n=95
Blood pressure	24 (96%)	59 (84%)	83 (87%)
Blood Glucose	20 (80%)	63 (90%)	83 (87%)
BMI	5 (20%)	51 (73%)	56 (59%)
Depression	8 (32%)	28 (40%)	36 (38%)

Health Screening Abnormal Values (n = total patients utilized service)	Event 1	Event 1 Abnormal Values	Event 2	Event 2 Abnormal Values	Total	Total Abnormal Values
Blood Pressure Abnormal: > 140/90 mmHg	n=24	7 (29%)	n=59	2 (3%)	n=83	9 (11%)
Blood Glucose Abnormal: > 200 mg/dL	n=20	3 (15%)	n=63	17 (27%)	n=83	20 (24%)
BMI Abnormal: > 26 kg/m ²	n=5	4 (80%)	n=51	29 (56%)	n=56	34 (58%)
Depression Abnormal: PHQ-2 > 0	n=8	6 (75%)	n=28	9 (32%)	n=36	15 (42%)

DISCUSSION

- Depression screenings were the least utilized out of the four services offered at health events
- Pertaining to Event 1, more patients opted for depression screenings over a BMI assessment
- Depression screenings had a higher incidence (42%) of abnormal values compared to blood pressure or blood glucose; however BMI (58%) had the highest incidence
- Out of the 36 patients screened for depression, 15 patients (42%) were connected to follow-up care
- There was difficulty establishing connections that would allow students to perform depression screenings alone
 - Screenings were offered as an additional service to events already established through other committees within the chapter
 - This impacted student outreach to offer the service to patients
- Many patients declined the service due to the negative stigma that surrounds mental illness
 - Students found this the most difficult part to conducting the screenings

CONCLUSIONS

- Depression screenings are a new service student pharmacists can implement in patient care delivery during volunteer events
- Similar to initiation of blood glucose or blood pressure services, students should be trained on the policy and procedures for the service
- Student pharmacists can play a key role in providing this service to the community
 - Student pharmacists are readily accessible to patients in various health care settings
 - Students can increase patient awareness of mental health disorders and encourage screening
- Student pharmacists plan to incorporate this service into future health events

DISCLOSURES

- This project was funded by the Community Pharmacy Foundation
- Additional funding was provided by Our Family Pharmacy (OFF)
- Additional acknowledgements to APhA-ASP for helping start Operation Mental Health

REFERENCES

- Any mental illness (AMI) among U.S. adults. National Institute of Mental Health website. <https://www.nimh.nih.gov/health/statistics/prevalence/any-mental-illness-ami-among-us-adults.shtml>. Accessed March 14, 2017.
- Major Depression among adults. National Institute of Mental Health website. <https://www.nimh.nih.gov/health/statistics/prevalence/major-depression-among-adults.shtml>. Accessed March 14, 2017. ⁵
- Melville NA. Depression screening in primary care still rare. *Medscape J Med*. 2017. <http://www.medscape.com/viewarticle/876075>. Accessed March 14, 2017.