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 to 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 screening.
• 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 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

<table>
<thead>
<tr>
<th>Health Screening (n = total patients)</th>
<th>Event 1</th>
<th>Event 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood pressure</td>
<td>n=25</td>
<td>n=70</td>
<td>n=95</td>
</tr>
<tr>
<td>Blood pressure abnormal</td>
<td>24 (96%)</td>
<td>59 (84%)</td>
<td>83 (87%)</td>
</tr>
<tr>
<td>Blood glucose</td>
<td>n=20</td>
<td>n=63</td>
<td></td>
</tr>
<tr>
<td>Blood glucose abnormal</td>
<td>20 (80%)</td>
<td>63 (90%)</td>
<td>83 (87%)</td>
</tr>
<tr>
<td>BMI</td>
<td>n=5</td>
<td>n=51</td>
<td></td>
</tr>
<tr>
<td>BMI Abnormal</td>
<td>5 (20%)</td>
<td>51 (73%)</td>
<td>56 (59%)</td>
</tr>
<tr>
<td>Depression</td>
<td>n=8</td>
<td>n=28</td>
<td></td>
</tr>
<tr>
<td>Depression Abnormal</td>
<td>8 (32%)</td>
<td>28 (40%)</td>
<td>36 (38%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Screening Abnormal Values (n = total patients utilized service)</th>
<th>Event 1 Abnormal Values</th>
<th>Event 2 Abnormal Values</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Pressure Abnormal &gt; 140/90 mmHg</td>
<td>n=24</td>
<td>n=59</td>
<td>n=83</td>
</tr>
<tr>
<td>Blood Glucose Abnormal &gt; 200 mg/dL</td>
<td>n=20</td>
<td>n=63</td>
<td>n=83</td>
</tr>
<tr>
<td>BMI Abnormal &gt; 26 kg/m²</td>
<td>n=5</td>
<td>n=51</td>
<td>n=56</td>
</tr>
<tr>
<td>Depression Abnormal: PHQ ≥ 2</td>
<td>n=8</td>
<td>n=28</td>
<td>n=36</td>
</tr>
</tbody>
</table>

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.
• Students were able to offer this 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 Farmacy (OFF)
• Additional acknowledgments to APHA-ASP for helping start Operation Mental Health Screening Abnormal
• Any patient who consents to health screenings is included in the research as part of the health 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.

REFERENCES

• This project was funded by the Community Pharmacy Foundation
• Additional funding was provided by Our Family Farmacy (OFF)
• Additional acknowledgments to APHA-ASP for helping start Operation Mental Health Screening Abnormal
• Any patient who consents to health screenings is included in the research as part of the health 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.

• National Survey of Mental Health among U.S. residents. NAMH website.
• Major Depression among adults. National Institute of Mental Health website.
• Major depression among adults. NAMH website.
• Major depression among adults. NAMH website.