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Staff Education to Use the Patient Health Questionnaire-9 to Improve Identification of Depression Among Mental Health Clients

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Executive Summary: Staff Education Project

Staff Education to Use the Patient Health Questionnaire-9 to Improve Identification of Depression Among Mental Health Clients

by

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Summary

This doctoral project was an educational intervention to improve depression screening in a health clinic through standardized training using the Patient Health Questionnaire-9 (PHQ-9). The targeted practice issue was the variable use of the PHQ-9 which led to possible misdiagnosis or underdiagnosis of depression, a critically vital issue in nursing practice owing to the necessity of frontline mental status evaluation by nursing staff. The practice focused question was, for staff in a mental health clinic, will training on the use of the PHQ-9 tool increase knowledge toward the goal of improving the identification of depression among clients? Hence, the overall purpose was to enhance clinical competence for diagnostic accuracy and thus provide earlier treatment for patients with depression. Project evaluation consisted of knowledge-based questionnaires administered pre- and posttraining, which were analyzed using simple descriptive statistics. The pre-and post-results indicated an improvement in knowledge with scores increasing from 50% in the pretest to 90% in the posttest, an increase of 40%. The project has implications for the organization as leadership plans to use this training in the future and currently as the first part of a greater quality improvement process. The project has meaningful implications for nursing practice, as greater knowledge of the PHQ-9 can improve patient care quality for patients at risk for depression. The project may promote positive social change because it endorses equitable access to mental health care, the reduction of diagnostic inequities, and enhanced practice among nurses by providing opportunities to enable all patients to receive fair and impartial mental health screening that is culturally relevant.

Background

Effective depression screening is paramount in combating mental illnesses in health care facilities. The PHQ-9 is an assessment tool used to screen for depression; its ratings range from 0 (*absence of depression*) to 27 (*severe depression*; Vojvodic, 2022). A major obstacle lies in effectively translating adequate nursing training into practical applications. Studies indicate that numerous health care organizations have room for improvement in delivering tailored, practical training on using the PHQ-9 tool. Studies suggest that enhancing the effective use of this screening tool may help clinicians to prevent missed diagnoses and improve patient outcomes (McMullen, 2020). The practice focused question that underpinned this project was, for staff in a mental health clinic, will training on the use of the PHQ-9 tool increase knowledge toward the goal of improving the identification of depression among clients?

I developed this project to improve the quality of depression screening by facilitating proper training of medical professionals on the effective use and interpretation of PHQ-9. Enhanced training procedures strengthen diagnostic accuracy, enabling early and effective mental health interventions. Limited opportunities for staff development in the effective use of the PHQ-9 tool have long been a widespread issue across the health care sector. Research has shown that although the PHQ-9 is a highly reliable and validated screening tool, inadequate training among health care professionals significantly hinders its effectiveness. For example, Nguh (2024) found that many professionals lacked confidence in using PHQ-9, primarily because their training had been inadequate. As a result, the staff applied the tool inconsistently, leading to frequent

misinterpretations. Nguh (2024) concluded that gaps in PHQ-9 training contributed to both the underdiagnosis and misdiagnosis of depression, an issue of great concern given the high prevalence of depression in modern society.

Ensuring that health care personnel are adequately trained in using the PHQ-9 tool for depression screening is an important area of nursing focus. A number of researchers have noted that although PHQ-9 is a valid and widely applied tool for depression screening, its success is adversely affected by inadequate training among health professionals. Research highlights the importance of providing health professionals with practical training or enhanced education in using PHQ-9 (Ford et al., 2020; Nguh, 2024). Inadequate training on the instrument it leads to disparate screening practices and missed diagnoses. Levis et al. (2019) further emphasized that inadequate training prevents the PHQ-9 from fully improving patient outcomes.

There is additional evidence to support formal PHQ-9 training programs. Evidence attests that clinicians rarely feel confident giving and interpreting PHQ-9 due to inadequate training (Nguh, 2024). Ford et al. (2020) attested that poorly trained clinicians often skip screening questions; fail to follow up on positive results; and, therefore, miss diagnoses. Levis et al. (2019) highlighted that recurrent high-quality training programs increase the validity of screening and patient outcomes. Levis et al. reported that recurrent high-quality training programs strengthen screening validity and improve patient outcomes. These conclusions rely on solid evidence, as researchers derive the outcomes from systematic reviews and extensive studies.

By addressing this training gap, leaders of health care organizations can enhance depression screening accuracy, improving patient care and mental health outcomes. Formal training programs are the solution for advancing the general quality of depression care. There is a body of evidence demonstrating the gap in demand for depression screening due to the lack of proper training that health care professionals receive on the utilization of the PHQ-9 (Arias, 2024). Despite general acceptance and agreement on using the PHQ-9, many clinical practice sites have misused or failed to apply the scale. Nguh (2024) conducted a cross-sectional study illustrating that more than 60% of clinicians lacked confidence in administering and interpreting the PHQ-9. A lack of training sessions largely contributed to this inadequacy. This evidence is strongest both in sample size and in having a direct response from providers and is thus most relevant to practice.

Similarly, Ford et al. (2020) found moderate-to-strong evidence for training need using a quasi-experimental trial with two groups of clinicians: clinicians trained on PHQ-9 and those not trained on the instrument. Trained clinicians were considerably more accurate at detecting depression and were also more consistently following up positive screens. The trained group also observed a 30% increase in care coordination and documentation. Negeri et al. (2021) provided the strongest level of evidence; their systematic review of 29 studies indicated that formal training substantially strengthens the validity and reliability of PHQ-9. The review also stated that even brief educational interventions led to measurable improvements in screening performance and patient outcomes.

In summary, this research demonstrates a continuing practice gap and confirms the need for standardized training programs in PHQ-9. The quality of this evidence, from a range of systematic reviews to extensive observational studies, made a solid evidence-based argument for institutionalizing formal PHQ-9 training to enhance depression screen quality and fidelity of care. Without formal training, the full utility of the tool is not achieved, resulting in missed diagnoses and postponed mental health interventions that might otherwise improve patient outcomes in its wake.

Staff Education Project Development

To increase depression screening at the health care facility, I sought in this project to equip nurses and other health care professionals with skills to administer, score, and interpret the PHQ-9 in a proficient manner. The project took place at a mental health care facility in a northeastern U.S. state, where the standardization of depression screening processes was lacking due to limited training and varying levels of staff confidence. As a Doctor of Nursing Practice student, I worked with leadership to develop an evidence-based educational offering to teach and reinforce fundamental use of the PHQ-9 instrument in the clinic setting. I then conducted training of six multidisciplinary staff members: three RNs, two front-office secretaries, and one medical technician. The selected participants were deemed by clinic leadership to be the best points of patient contact and, thus, the best for implementing systematic screening.

The educational program included a slide presentation on the PHQ-9 screening tool and its evidence-based applications (see Appendix A). Guided by the knowledge-to-action framework, the implementation focused on structured knowledge development and

iterative action cycles. The interactive approach encouraged participation and enhanced learning through role-playing and constructive feedback. All participants completed identical pre-and posttraining assessments consisting of 10 multiple-choice questions to evaluate knowledge improvement (see Appendix B). I managed the distribution and collection of all assessment materials while strictly adhering to data security protocols and ensuring participant confidentiality. Descriptive statistics were employed to assess the percentage of correct responses and evaluate the knowledge enhancement of each participant and the overall group.

Results

A comprehensive training session introduced employee-level depression screening to selected clinic staff. I assessed the training's effectiveness using pre- and posttest knowledge-based questionnaires consisting of 10 multiple-choice items. Participants demonstrated low pretest knowledge by achieving a pretest score of 50%. Upon completions of the training, participants as a group scored 90% demonstrating a 40% increase in knowledge acquisition, Findings validated that formal training improved staff knowledge regarding depression screening so that staff could utilize the PHQ-9 tool more effectively in the clinical setting (see Bo et al., 2019). The participants voiced increased confidence to interpret and administer the PHQ-9. Thus, the organization can leverage various program benefits. For example, standardizing the depression screening processes can potentially help clinicians to reduce missed diagnoses and improve early intervention. The improved precision in the diagnosis of depression has the potential to also significantly reduce excessive follow-up and improve resource allocation.

Despite the beneficial outcomes, several challenges and limitations arose during the project. Variability in nurses' experience levels could negatively impact the consistency of PHQ-9 administration, potentially affecting screening accuracy. Additionally, time constraints in the busy clinical environment sometimes hinder thorough assessments. These factors highlight the importance of continuous refresher training and integration of the PHQ-9 tool into electronic medical records to streamline workflow and enhance efficiency. The program's success goes beyond the organization's benefits, demonstrating the benefit of teaching systematized depression screening to primary care practice. The findings affirmed the benefit of including PHQ-9 training in professional development and nursing school curricula to facilitate improved mental health care nationally.

Beyond improving individual clinical practice, the project may strengthen the organization's overall approach to mental health care. By standardizing PHQ-9 training, institutional leaders may foster a culture of continuous learning and evidence-based practice, leading to improved depression screening. The initiative also reinforces the organization's commitment to quality care and professional development, positioning it as an effective mental health intervention leader. Apart from enhancing efficiency, the project may help to create a healthy mental health culture in the organization. Ongoing professional development may lead to continued learning and increased proficiency of the nurses. Knowledge transfer practices may facilitate the passing of best practices across the team, leading to an improved and highly skilled workforce. Lastly, the project reinforces the organization's commitment to exceptional mental health care.

Conclusions

The project incorporated evidence-based practice to close knowledge gaps and strengthen staff expertise using the PHQ-9 depression screening tool. Researchers, drawing on existing knowledge, have identified this challenge as a widespread issue in health care organizations (Arias, 2024). Staff training on the use of the PHQ-9 tool has the potential to improve workflow efficiency, foster better collaboration with mental health professionals, and reduce health care expenses.

Recommendations for the leaders of the organization include prioritizing ongoing education, broadening mental health screening efforts to reach underserved populations, and leveraging digital media for accurate and efficient documentation. Promoting interdisciplinary collaboration is also essential for enhancing outcomes. This project highlights the importance of standardized mental health screening within integrated care. Future initiatives could further ensure social benefit by fostering inclusiveness and equity in care delivery. With an emphasis on diversity, equity, and inclusion, health care organizational leaders can potentially establish an enabling environment that empowers providers and patients, resulting in improved community well-being.

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Appendix A: PowerPoint Presentation

Staff education on the PHQ-9

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Overview

- PHQ-9 tool, its administration, clinical application, and best practices, which aligns with the goal of improving patient outcomes through accurate depression diagnosis and management.

Purpose of the staff education

- Screen for the presence and severity of depression.
- Aid in the accurate diagnosis of depression.
- Monitor treatment progress over time.

How to Administer the PHQ-9

- Ensure a private and comfortable setting for the patient.
- Explain the purpose of the questionnaire to the patient.
- Read each question clearly and allow the patient time to respond.
- Record responses accurately.

Interpreting PHQ-9 Results

- Understand the scoring system.
- Recognize different severity levels of depression.
- Know when to refer patients for further evaluation or treatment.
- Maintain confidentiality and sensitivity.
- Provide support and resources to patients as needed.

Interpreting PHQ-9 Results Cont.

- 0-4: Minimal or no depression: Explain to the patient that their score suggests minimal or no depression. Reassure them that their mental health appears stable. Encourage maintaining healthy lifestyle habits and regular check-ins.
- 5-9: Mild depression: Explain that their score indicates mild depression. Discuss potential symptoms and how they might impact daily life. Suggest lifestyle changes, such as exercise, healthy eating, and social activities. Consider follow-up or a referral for further evaluation if symptoms persist.
- 10-14: Moderate depression: Inform the patient that their score reflects moderate depression. Discuss the importance of seeking further evaluation and potential treatment options. Offer support resources and information on therapy or medication.
- 15-19: Moderately severe depression:Explain that their score indicates moderately severe depression. Stress the importance of seeking immediate evaluation and treatment. Provide information on therapy, medication, and support groups.

Best Practices for PHQ-9 Integration

- Regularly include PHQ-9 in patient evaluations.
- Increase knowledge to all relevant staff on PHQ-9 administration and interpretation.
- Ensure privacy and comfort during the questionnaire.
- Use the results to guide patient care and treatment plans.
- **Strategy:** Educate patients about the importance of the PHQ-9 and create a supportive environment.

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Appendix B: Assessment Questions and Answers

1. Why is it essential to regularly include the PHQ-9 inpatient evaluations?
    - A. To ensure the patient is physically active
    - B. To assess the patient's financial status
    - C. To monitor and evaluate the patient's mental health
    - D. To determine the patient's dietary habits
    - **Answer:** C. To monitor and evaluate the patient's mental health
2. What should staff increase their knowledge of concerning PHQ-9?
    - A. General medical procedures
    - B. Administration and interpretation of the PHQ-9
    - C. Financial implications for the patient
    - D. Legal requirements for patient data
    - **Answer:** B. Administration and interpretation of the PHQ-9
3. During the administration of the PHQ-9, what do you do for the patient?
    - A. High level of physical activity
    - B. Limited access to medical resources
    - C. Privacy and comfort
    - D. Exposure to loud noises
    - **Answer:** C. Privacy and comfort
4. How should the results of the PHQ-9 be used in patient care?
    - A. As a basis for prescribing dietary supplements
    - B. To guide patient care and treatment plans

- C. To assess the patient's physical fitness
- D. To determine the patient's employment status
- **Answer:** B. To guide patient care and treatment plans

5. What should a patient scoring 0-4 on PHQ-9 be informed about their mental health?
   - A. They have severe depression
   - B. Their score suggests minimal or no depression
   - C. They need immediate medical intervention
   - D. Their score indicates severe anxiety
   - **Answer:** B. Their score suggests minimal or no depression
6. What lifestyle changes can the healthcare provider suggest to patients with a PHQ-9 score of 5-9?
   - A. Avoid social activities
   - B. Engage in exercise, healthy eating, and social activities
   - C. Decrease physical activities
   - D. Follow a strict medication regime without changes in lifestyle
   - **Answer:** B. Engage in exercise, healthy eating, and social activities
7. What is recommended for a patient scoring 10-14 on the PHQ-9?
   - A. Seeking immediate medical intervention only
   - B. Ignoring the symptoms and continuing regular activities
   - C. Seeking further evaluation and discussing potential treatment options
   - D. Limiting discussions about their mental health

- **Answer:** C. Seeking further evaluation and discussing potential treatment options

8. What actions should a healthcare provider take for a patient with a PHQ-9 score of 15-19?
    - A. Reassure them that there is no need for concern
    - B. Suggest minimal lifestyle changes
    - C. Stress the importance of seeking immediate evaluation and treatment
    - D. Ignore the symptoms until they worsen
    - **Answer:** C. Stress the importance of seeking immediate evaluation and treatment
9. What is one of the primary purposes of using the PHQ-9 inpatient evaluations?
    - A. To evaluate the patient's physical fitness
    - B. To screen for the presence and severity of depression
    - C. To determine the patient's dietary preferences
    - D. To assess financial stability
    - **Answer:** B. To screen for the presence and severity of depression
10. How can PHQ-9 aid healthcare providers in patient care?
    - A. By diagnosing cardiovascular diseases
    - B. By aiding in the accurate diagnosis of depression
    - C. By monitoring the patient's physical activity
    - D. By assessing the patient's employment status
    - **Answer:** B. By aiding in the accurate diagnosis of depression