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Staff Education on the Rapid Mood Screener in an Outpatient Psychiatric Setting: Enhance Screening Practices

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has been found to be complete and satisfactory in all respects,
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Executive Summary: Staff Education Project

Staff Education on the Rapid Mood Screener in an Outpatient Psychiatric Setting:

Enhance Screening Practices

by

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Summary

The persistent misdiagnosis of bipolar disorder in this psychiatric practice was thought to be due to the provider's lack of knowledge and confidence in using assessment tools. Rapid Mood Screener (RMS) is a validated brief screening tool that differentiates between bipolar disorder and unipolar depression. In this project, I educated outpatient psychiatric nurse practitioners and staff in using RMS. The project practice-focused question was: Will an educational intervention improve the knowledge and self-efficacy of the outpatient mental health providers and staff regarding using Rapid Mood Screener? I followed the ADDIE framework and incorporated Knowles' adult learning theory for the instructional approach. The project employed a ten-question pre- and posttest evaluation based on the Likert scale for data collection. The pre-evaluation showed a lack of knowledge and self-efficacy of RMS. The posttest survey after education showed that nurse practitioners and staff's knowledge and self-efficacy in using RMS significantly improved with a shift in percentage mean from 22.3% to 95.8% using descriptive statistics in Excel. Staff reported increases in the use of RMS 2 weeks after the education. The positive outcome highlights the impact of advanced practice nurses in delivering education and resources that promote diversity, equity, and inclusion through quality care that fosters patient trust and contributes to social change by reducing health disparities through standardized screening practices that minimize the risk of misdiagnosis and enhance patient outcome.

Background

Bipolar disorder is one of the leading mental health conditions that causes disability globally, affected 1 in every 150 adults in 2019, often misdiagnosed and noted for poor management (World Health Organization [WHO], n.d.); becoming more prevalent among the youth, with about 2.8% U.S. adults diagnosed (National Alliance on Mental Illness [NAMI], n.d). McIntyre et al. (2021) reported that about 69 % of patients with bipolar disorder were initially misdiagnosed, with treatment delays of an average of 10 years. Untreated or delayed treatment has severe consequences associated with functional impairment, high morbidity, mortality, healthcare cost burden, poor quality of life, and increased risk of suicide (Ahmed et al., 2020; Andersson et al., 2023; McIntyre et al., 2022). Healthcare cost burden annual cost is estimated from $195 billion to $219 billion in the United States (Bessonova et al., 2020). Individuals initially misdiagnosed accumulate higher healthcare costs than those correctly diagnosed on the first attempt; accurate screening reduces the cost (Benacek et al., 2022; McIntyre et al., 2022).

Andersson et al. (2023) concluded that suicide risk is higher among individuals with a diagnosis of bipolar disorder than major depressive disorder; about 50% of bipolar disorder have a history of suicide attempts in their lifetime, of which 20% of untreated bipolar disorder died of suicide. Delay in accurate treatment further exacerbates the suicide risk. Effective use of screening tools decreases misdiagnosis and facilitates early treatment (Benacek et al., 2022). Screening tools are vital in the assessment process; effectively probe for bipolar symptoms (Sayyah et al., 2022). This facility reports its ineffective use of screening tools and frequent misdiagnosis.

The mental health clinicians' team was concerned with frequent episodes of bipolar misdiagnosis for major depressive disorder or anxiety. The interview report indicated that a significant factor contributing to misdiagnosis is poor compliance with mood screeners due to providers' lack of confidence and knowledge. Most mental health clinicians and staff report infrequent use of current mood screening tools due to the challenges of uncompleted forms, difficulty with interpretation, and lengthy questions that are taxing for their patient population. Addressing the practice problem makes it important to promote RMS, a brief six-question screening tool. In the project, I focused on empowering providers and other mental health staff through education on using RMS to improve screening compliance, promote effective screening for early recognition of bipolar disorder, and ultimately decrease errors of misdiagnosis and apply more effective treatment.

In addressing the practice gap, I developed a question for this project: Will an educational intervention improve the knowledge and self-efficacy of the outpatient mental health providers and staff nursing staff regarding using Rapid Mood Screener? My goal was to provide educational intervention to improve the knowledge and self-efficacy of outpatient psychiatric nurse practitioners and other mental health staff in using RMS.

Staff Education Project Development

Site approval was received to proceed with the staff education project. I used credible databases to collect sources of evidence, including CINAHL Complete, Cochrane Database of Systematic Reviews, ProQuest Health Management Database, PubMed, EBSCO, and Google Scholar. The literature search inclusion was peer-reviewed journals written in English, with a preference for the most recent evidence published within the past five years, specifically from 2019 to 2024. Additionally, reputable professional organizations such as the Centers for Disease Control and Prevention (CDC), NAMI, and the WHO, provided a global perspective on the project's research question. The search strategy used keywords derived from the practice question and Boolean operators to refine the search. Keywords included terms such as *bipolar disorder, mood management, misdiagnosis, Rapid Mood Screener, mood questionnaire, staff education, psychiatric setting,* and *outpatient mental health setting.*

The literature review indicated that evidence-based education enhances nurses' knowledge and practical application and promotes nursing practice. Pre- and post-assessments showed the effectiveness of these educational interventions, demonstrating that they lead to measurable improvements in staff capabilities and promote positive project outcomes (Cardoso et al., 2021). Integrating mood disorder screening into clinical practice is essential for reducing the misdiagnosis of bipolar disorder and improving diagnostic accuracy.

The RMS is a self-reported brief six-question tool validated with a high sensitivity of 0.88 and specificity of 0.80, proven effective in distinguishing bipolar disorder from major depressive disorder when compared with other mood screeners, including mood disorder questionnaire (MDQ) suggesting its potential as a tool to help aid accurate assessment (Sayyah et al., 2022; McIntyre et al., 2021). Accurate diagnosis enables appropriate early treatment, preventing adverse patient outcomes (Nestsiarovich et al., 2022). Educating staff on the RMS's use increases their confidence in identifying bipolar disorder, supports a need to use screening tools, and reduces errors. Rhee et al. (2020)

emphasized the importance of closing the gap in misdiagnosis through targeted staff education, highlighting its impact on accurate treatment and improved clinical outcomes. The didactic education was largely based upon the Clinician Guide provided by the RMS website.

The staff education was conducted in person at the outpatient psychiatric facility, involving 12 participants: four nurse practitioners, four therapists, two psychologists, and two registered nurses. The training was relevant to these participants as their roles directly involve administering and interpreting the RMS in assessing patients with mood disorders. Participation was mandatory, aligning with the organization's competency guidelines for improving patient outcomes. The staff were informed about the training in staff meetings and the awareness flyer. Participants received instructions to utilize a unique identifier to answer all questions on the survey (see Appendix A), allowing for the blinding of the participants, but allowing for pre/post test comparisons.

The teaching session lasted 1 hour on the first day, and 15 minutes on two different days for one-on-one practice monitoring sessions to accommodate staff schedules. A comprehensive education on RMS was provided with the ADDIE model and adult learning framework. The learning styles included self-paced learning and flexibility that aligns with Knowles's framework (Luo et al., 2024). The project involved handouts for PowerPoint presentations and discussion session with interactive case studies to practice the RMS tool with real-world examples (see Appendix B). Participants demonstrated the ability to competently use the RMS assessment tool independently after the presentation. The learners had prior knowledge of bipolar disorder and understood that the screening tool does not diagnose patients but aids the process.

The participants completed an anonymous self-reported survey, each assigned a unique identifier code “S1” to facilitate accurate data comparison. Data were collected through pre- and posttest surveys of 10 close-ended items developed using a 5-point Likert scale, with assigned figures from (1, *Strongly Disagree*), (2, *Disagree*), (3, *Neutral*), (4, *Agree*), (5, *Strongly Agree*) (Sullivan & Artino, 2013) (see Appendix A). Prior to starting staff education, I conducted a thorough staff assessment and interview of the specific practice gap, pretest baseline knowledge and self-efficacy in RMS, and a posttest survey after the educational session to measure the effect of educational intervention on staff knowledge and self-efficacy in using RMS. All the 12 mental health nurse practitioners and staff fully participated and completed both surveys. Data were collected and entered in Excel for descriptive analysis and paired *t* test.

Result

Data were presented using a table and a chart. Figure 1 has the breakdown of both knowledge and self-efficacy mean score separately before and after the intervention. The result showed the nurse practitioners and staff lack knowledge and expressed no confidence in using RMS before education. The mean score improved significantly after the education. In evaluating the effect of educational intervention on both knowledge and self-efficacy, the total means percentage before intervention was 22.3%, which showed very low knowledge of RMS and low confidence. Every participant improved their knowledge and self-efficacy following the educational intervention with a total mean percentage of 95.8%.

Figure 1

Pre- and Posttest Scores

Summary of Pre- and Post -Test Score of Knowledge

Evaluation	Pre-test Mean Score	Post-test Mean Score
Knowledge	6.09	24.75
Self-Efficacy	5.08	23.17
Total mean score	11.17	47.92
Total mean Percentage	22.3%	95.8%

The outcome of the result demonstrated the effectiveness of education on staff ability to confidently use the RMS for patients with mood disorder and confidently reports ability to utilize and interpret the tool accurately This is an indication that the educational intervention can be adopted for ongoing training of staff in-patient and outpatient. It further confirms that more than 90% of the participants reported effective education.

Figure 2

Graph of Pre and Posttest Totals

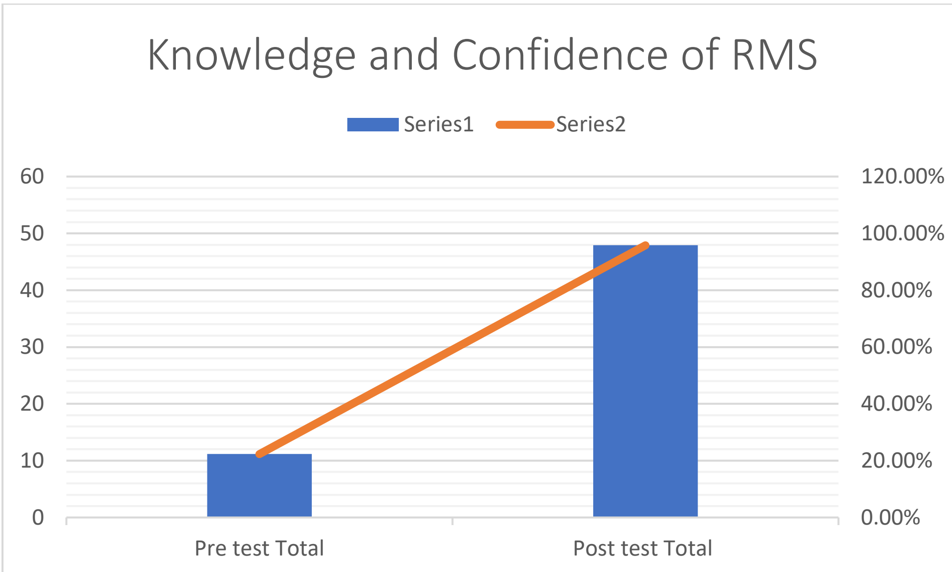

Figure 2 showed that staff were able to express significant improvement in their knowledge of RMS and confidence in using RMS with prior knowledge of 22.3% and 95.8% after education, which further indicates a significant rise in knowledge and self-efficacy from pre- to posttest, with all the staff supporting the conclusion that the educational intervention successfully met the learning objectives and the practice questions.

The paired *t* test was conducted to assess changes in knowledge and self-efficacy between the pre-and posttest. The results indicated that the intervention significantly improved staff knowledge of the RMS and their confidence in using it, with a marked increase; a two-tailed *p*-value (< 0.05) confirms a statistically significant difference between the pre-and posttest scores. The project outcome was positive on the impact on the clinician's staff knowledge and self-efficacy. The results support the need for continuous education, and staff reports of increased use with patients in identifying bipolar disorder are encouraging.

The limitation of this result is the small sample size of the participants and the use of one facility, challenging the generalization of the paper. The time constraint, with variation in staff schedules, caused mild workflow disruption and limited the timing of observations. It did not limit the completion of the paper.

The nurse practitioners and staff at the mental health clinic report that the project is crucial to their patient population, as the education on RMS has shown to be effective; it would benefit all mental health providers caring for patients with mood disorders. The tool is accessible, short, and easy to apply at any clinic visit for new and existing patients with mood disorders. More than the local site, the knowledge of RMS among mental health nurse practitioner’s inpatient and outpatient will promote screening standardization and positively impact patients and their families, including decreasing healthcare cost burden (Sayyah et al., 2022).

Conclusion

The project result reinforces the need for continuous education in clinical practice for nurse practitioners and staff, supporting the impact of DNP education in promoting quality improvement. The project is crucial to the patient population to enhance positive patient outcomes. Improving staff knowledge and self-efficacy using the RMS promotes standardization in assessment practices, overcoming the practice gap contributing to misdiagnosis while ensuring cultural sensitivity. Patients will benefit from quality care, which translates to early detection of bipolar disorder, accurate diagnosis, and timely treatment (McIntyre et al., 2021).

The providers and staff report satisfaction in enhancing patient quality care and a need to foster ongoing in-service education with the adoption of RMS. We recommend standardization of RMS for all patients with depression and other mood disorders. The stakeholders report ongoing discussions with the technical team on uploading RMS as part of the screening form. Overall, sustainability is expected to decrease treatment delays and providers' misdiagnosis errors.

The outcome successfully proved the effectiveness of the educational intervention on staff knowledge and self-efficacy in using RMS, with staff reporting consistent use in identifying bipolar disorder. The implication for nursing practice emphasized a need for continuous nursing education to promote patient safety, ensure quality care, and improve patient overall outcomes locally and in a larger population. The project is crucial to mental health to advocate for bipolar disorder, reduce stigmatization, promote timely, accurate treatment, address practice gaps, and promote staff education, which is important in assuring social change, equity, diversity, and inclusion.

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Appendix A

Survey

Staff Education on Rapid Mood Screener (RMS) Evaluation of Knowledge and Self-Efficacy

Participant Code: S _

1. I understand the primary purpose of the Rapid Mood Screener (RMS).

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

2. I know how many questions in the RMS

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

3.I can accurately differentiate between symptoms of bipolar disorder and depression using RMS.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

4. I am familiar with the follow-up actions with a score of 3 on RMS assessment.

Strongly Disagree

1. Disagree
2. Neutral
3. Agree
4. Strongly Agree

5. I understand how to interpret the results of the RMS.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

6. I can confidently answer address patient on how to complete the RMS.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

7. I feel confident in using the RMS effectively in clinical practice.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

8. I am confident in accurately interpreting the RMS results.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

9. I feel prepared to make appropriate clinical decisions based on RMS results.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

10. I can educate others on the proper use of the RMS.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

Rating Scale: Please select the option that best reflects your level of agreement with each statement.
Confidentiality: We will keep your responses confidential and use them to improve future educational sessions.

Thank you for your contribution.

Appendix B: Case Study

Example Case: Patient Assessment Using the RMS

Patient Background:

· Name: Mercy John

· Age: 32

· Presenting Problem: Mary has been experiencing episodes of intense sadness, fatigue, and difficulty sleeping for the past 6 months. She has a history of depressive episodes and was previously diagnosed with major depressive disorder (MDD) by her primary care physician. Despite being on antidepressants, her symptoms have not improved, and she reports occasional bursts of energy and increased productivity lasting several days.