

Introduction

Primary care physicians are often on the frontline of mental-health care because of rising demand and deficit of mental health professionals. Pine Rest's Child and Adolescent Psychiatry training program has initiated a collaborative care program with a group of pediatricians to meet the need of patients in West Michigan. Collaborative care models are well established in adult care and have been shown to result in better outcomes, sustained benefits, and long-term cost saving potential.¹ The study team's interest was how the collaborative care model would translate to pediatric care. Comfort was selected to capture not just perceived competence but also a willingness to provide psychiatric care. Limited data is available reflecting pediatrician comfort with provision of psychiatric care.²

Pediatrician "comfort" was selected as a potential indicator of program success, with the hypothesis that a collaborative care program would increase pediatrician skills over time and therefore comfort with providing psychiatric care. Data presented represents a baseline for our population and will be incorporated into a longitudinal set with future survey administrations at six and twelve months into the program.

Methods

The Population: Pediatricians ($n = 41$) from the "We Are For Children" pediatrics group (nine independent pediatric offices in the Grand Rapids area).

The Survey: 54-items total. To view/download the survey, use this QR code

Comfort Providing Psychiatric Care: 5-point Likert scale was used to rate comfort with:

- Managing psychiatric medications and treating psychiatric diagnoses
- Managing mental health with different levels of support

Encounter Frequency in Clinical Practice: Rated on 3-point scale for psychiatric medications and diagnoses

Subject Variables: Multiple choice/short answer items assessed the following:

- Years in practice
- Time in residency training dedicated to mental health (weeks)
- If continuing medical education (CME) pertaining to mental health had been sought out (Yes/No)



SCAN TO VIEW SURVEY

Analyses:

Relationships Between Comfort and Encounter Frequency: Spearman's rank correlation coefficient was calculated for each pediatrician's ratings of comfort and encounter frequency by medication/diagnosis. Relationships between pediatricians' individual mean comfort rating and mean encounter frequency were analyzed across pediatricians using Spearman's rank correlation coefficient.

Principal component analyses (PCA) using direct oblimin rotation were used to categorize pediatrician comfort ratings, with separate PCAs for diagnoses and medications. Both PCAs resulted in three subcategories each for diagnosis and medication items.

Psychiatric Diagnosis Groups from PCA	Psychiatric Medication Groups from PCA
Comfortable Diagnoses: Anxiety Disorders, Major Depressive Disorder, Attention Deficit Hyperactivity Disorder, Autistic Spectrum Disorder, and Obsessive-Compulsive Disorder	Comfortable Medications: SSRIs, SNRIs, Tricyclic antidepressants, 'Other antidepressants', Stimulants, Non-Stimulants, Alpha agents, Anxiety medications, Sleep medications and Supplements.
Low Comfort Diagnoses: Schizophrenia Spectrum Disorders, Addictive Disorders, Conduct Disorder, Bipolar Disorder, Disruptive Mood Dysregulation Disorder, Trauma and Trauma-Related Disorders, Oppositional Defiant Disorder, Conversion Disorder, and Eating Disorders	Mood Stabilizers: Ziprasidone, Olanzapine, Clozapine, Aripiprazole, Quetiapine, Risperidone, and 'Other mood stabilizers'
Psychosocial Problems: Parent-Child and Sibling Relational Problems, Struggles with Behaviors, School Refusal, Sleep Problems, and Technology Use Problems	Other Medications: Depakote, Benzodiazepines, and 'Addiction Medications'.

Subject Variables: Independent samples t-tests and Analyses of Variance (ANOVAs) were used to analyze between-group differences in mean comfort managing psychiatric medications (Overall Medication Comfort) and diagnoses (Overall Diagnosis Comfort) for each subject variables. Subsequent analyses for each corresponding subscale were completed when significant differences were identified for Overall Medication Comfort or Overall Diagnosis comfort. Years of post-residency experience recoded into a dichotomous variable using a median split.

Different Support Options: Repeated measures ANOVAs were utilized to assess for differences in anticipated comfort managing psychiatric diagnoses and medication if receiving different types of support.

Results

Overall: Mean comfort for all diagnoses ($M = 3.0$, $SD = 0.6$) and medications ($M = 2.1$, $SD = 0.5$) was rated uncomfortable to neutral.

Relationships Between Comfort and Encounter Frequency:

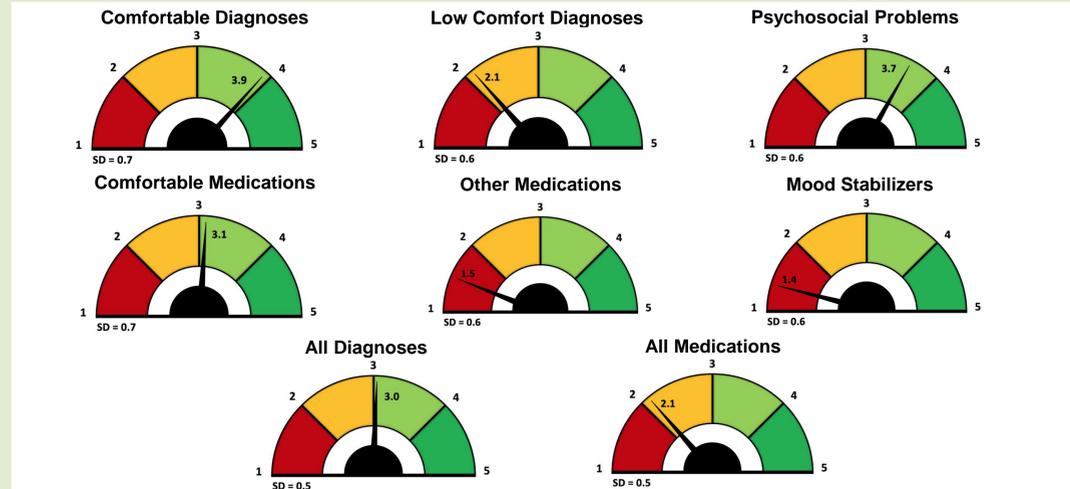
- Individual mean comfort and encounter frequency were not significant across pediatricians, $r_s(31) = .26$, $p = .139$,
- Encounter frequency and comfort rating by medication/diagnosis rates were positively correlated when analyzed for each pediatrician, $r_s(40) = .48$ to $r_s(40) = .98$, $p < .002$.

Comfort Ratings by Psychiatric Diagnosis and Medication Category

- Comfort was significantly greater for diagnoses (Comfortable Diagnoses; $M = 3.9$, $SD = 0.7$) and medications (Comfortable Medications; $M = 3.1$, $SD = 0.7$) commonly encountered with pediatric patients, with $F(2, 80) = 160.35$, $p < .001$, $\eta_p^2 = 0.80$, and $F(2, 80) = 162.05$, $p < .001$, $\eta_p^2 = 0.80$, respectively. (See Figure 1)

Figure 1

Mean Pediatrician Comfort with Managing Psychiatric Medications and Disorders



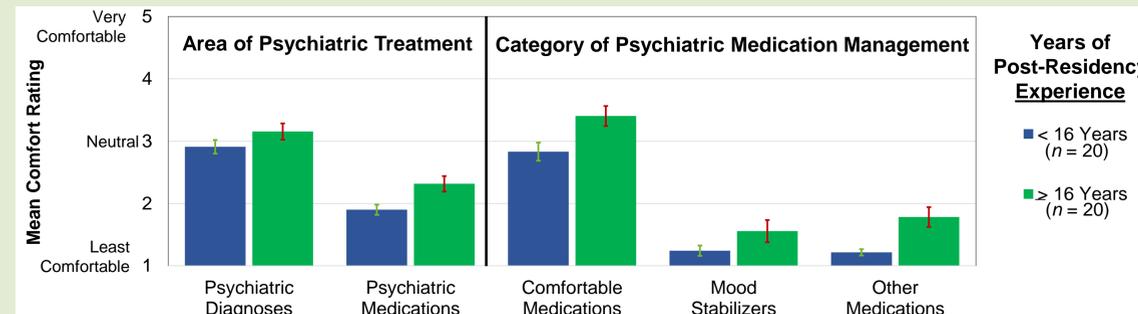
Note. 1=Least comfort, 3=Neutral, and 5=Most comfortable

Subject Variables

- Mean Overall Diagnosis Comfort and Overall Medication Comfort *did not significantly differ* between pediatricians in:
 - Having sought out mental health CMEs, $t(36) = 0.75$, $p = .457$, $d = 0.57$ and $t(36) = 0.81$, $p = .425$, $d = 0.51$, respectively.
 - Weeks of mental health training in residency, $F(3, 34) = 1.64$, $p = .200$, $\eta^2 = 0.13$ and $F(3, 34) = 0.91$, $p = .445$, $\eta^2 = 0.08$, respectively.

Figure 2

Mean Comfort By Years of Post-Residency Experience

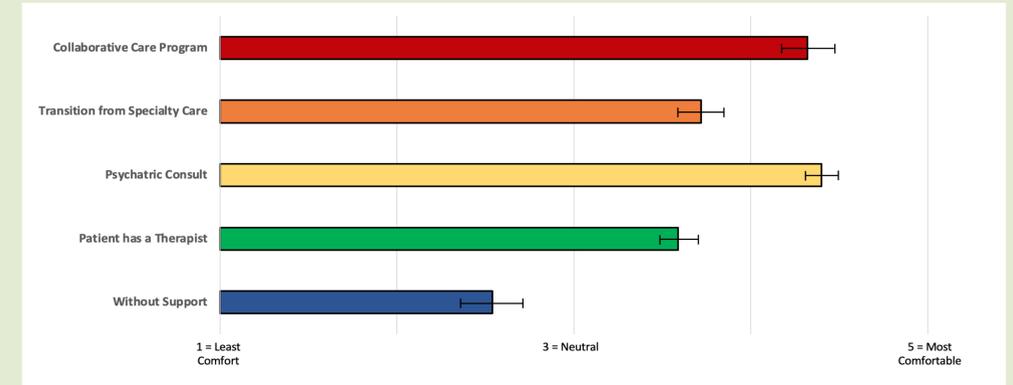


Note: Pediatricians with ≥ 16 years of experience reported greater comfort with psychiatric medications ($p = 0.008$) but not with diagnoses ($p = 0.162$) relative to other pediatricians. Differences in mean comfort for Comfortable Medications, $t(38) = 2.65$, $p = .012$, $d = 0.68$, and Other Medications, $t(38) = 3.39$, $p = .002$, $d = 0.53$, but not Mood Stabilizers, $t(27.0) = 1.59$, $p = .125$, $d = 0.63$.

Results

Figure 3

Mean Anticipated Comfort Managing Psychiatric Diagnoses and Medications with Different Forms of Psychiatric Support



Note. $N = 37$. Mean anticipated comfort significantly differed between support options, $F(2.8, 100.6) = 46.12$, $p < .001$, $\eta_p^2 = 0.56$. Anticipated comfort was significantly higher for all support items relative to Without Support, $p < .001$. Anticipated comfort for Psychiatrist Consultation and Collaborative Care was significantly higher than for all other support options, $p < .002$, but did not significantly differ from each other, $p = .186$. Mean anticipated comfort when a patient has a therapist and once psychiatry has recommended a patient return to the primary care setting after treatment did not significantly differ from each other, $p = .457$.

Conclusions

Summary:

- Pediatricians within our population are operating with limited comfort even with diagnoses and medications that are more commonly used in pediatric psychiatric patients.
- More frequently encountered diagnoses and medications were associated with greater comfort across all pediatricians.
- Pediatricians with more years of post-residency experience reported greater comfort with psychiatric medications; however:
 - Individual pediatricians who reported encountering psychiatric medications and diagnoses more frequently did not report greater comfort providing psychiatric care than pediatricians reporting less frequent encounters with psychiatric medications and diagnoses
 - Years of post-residency experience was not associated with differences in comfort treating psychiatric diagnoses or managing some types of psychiatric medication (Mood Stabilizers)
- The survey data suggests that, apart from managing common psychiatric medications (Comfortable Medications), comfort with providing psychiatric care is not a function of time or experience in pediatric practice.
- Differences in time spent in post graduate training and continuing medical education focused on mental health was also not associated with increased comfort providing psychiatric care in our pediatrician sample
- Anticipated comfort with psychiatric consultation and collaborative care was significantly higher than other means of support, suggesting that pediatricians within our population prefer these support modalities.

Limitations: The small sample size from West Michigan limited power and generalizability; null findings should be interpreted with caution. Data was collected about one month after the collaborative care program started, however, pediatrician participation in the program was limited at that point.

Implications: This data provides a baseline for the pediatricians engaging in our collaborative care program and contributes to the limited available data on pediatrician comfort with managing psychiatric conditions. Further studies are needed to inform policy changes; however, this data suggests that more support is needed and that pediatricians would have greater comfort with providing psychiatric care with the support of a psychiatrist. Data from future surveys will indicate how the collaborative care program affects pediatrician comfort.

References

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Disclosures

None of the poster's authors have disclosures relevant to this poster presentation.