



PRACTICE AND PERCEPTIONS OF PEDIATRIC RESIDENTS IN A TERTIARY GOVERNMENT HOSPITAL ON MENTAL HEALTHCARE AS PART OF GENERAL PRACTICE



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ABSTRACT

OBJECTIVE: This study aimed to describe mental health practice patterns, perceptions, perceived responsibility, confidence, barriers, and supports of pediatric residents in a tertiary government hospital to arrive at recommendations in enhancing their mental health competencies.

METHODOLOGY: As part of needs and baseline assessment within an existing collaboration, written self-administered questionnaires were distributed among pediatric residents of the hospital. Frequency of answers were tallied to see clustering and trends. **RESULTS:** Most of the 37 Pediatric residents had positive perceptions i.e. 78.83% - 83.78% and planned to incorporate all aspects mental healthcare in their future practice as consultants i.e. 89.19 %- 97.29 %. However, they did not get to practice or apply it as much during training. All respondents perceived that diagnosing the neurodevelopmental disorders of Autism Spectrum, Attention Deficit and Hyperactivity, Intellectual Disability and Learning was their responsibility. When it came to confidence in diagnosing other psychiatric disorders less than half to 3/5 (45.9%-64/9%) were confident or very confident in doing so. Approximately three fifths (56.75% -67.56%) of them were confident in managing neurodevelopmental disorders. There was an even lower proportion i.e. one fourth (16.21% - 32.43%) of pediatric residents who were confident in managing other psychiatric disorders. Time was the most often perceived barrier while more exposure and training were the supportive factors for integrating mental healthcare into practice.

CONCLUSION: With such positive perceptions already in place, programs to improve knowledge and skills can be developed to increase confidence, focusing on diagnosing and managing psychiatric conditions. Target areas as guided by this research can be on how to use screening tools and psychotropics, diagnosing anxiety and behavioral addictions, and managing psychosis and trauma. These should be incorporated in a time-efficient manner into usual patient interviews. Training and added exposure can be utilized in the short-term as well as institutionalization of collaboration, liaison, and feedback systems in the future.

KEYWORDS: *Pediatric Residents, primary mental healthcare, mental health competency*

INTRODUCTION

Integrating mental health (MH) into pediatric practice is seen as an effective way to maximize access, especially in developing countries. This utilizes the pediatricians' long-standing relationship with the patient and family, as well as the family-friendly nature of their practice. It is more cost effective and has been linked with better outcomes compared to a tertiary care model alone. (1) Among child and adolescent populations, pediatricians are considered the gatekeepers of care and current trends have shown the expansion of their roles to include the MH dimension. (2) This is especially important in the Philippines where there are very few child and adolescent psychiatrists to address a growing "mental health crisis" in the youth. The recently enacted National Mental Health Law (3) articulates MH as part of primary care.

In the Western setting, pediatricians were asked in a survey by the American Academy of Pediatrics (AAP) regarding their perceived responsibility to identify, manage, and refer various MH conditions. More than 80% of the surveyed pediatric consultants believed they should identify ADHD, depression, behavior management problems, anxiety disorder, substance abuse, and eating disorders. However, while 70% believed they should manage ADHD, which approximately coincided with the rate of perceived responsibility for its identification, only around 30% or less believed they should manage the other abovementioned concerns. Around 80% believed instead that they should just refer for those. (4) The discrepancy between ADHD and the other disorders was not explained but may perhaps be due to pediatricians' discomfort with matters that have strong socio-emotional components and are traditionally labeled as part of psychiatry and psychology.

In another study also by the AAP, only 13% of general pediatricians felt confident overall in their capability to manage depression. Almost 80% recalled referral to a MH professional as their "management" in their most recent case of depression. In the AAP study, the greatest perceived barriers were inadequate time to provide counseling and conduct adequate history, plus inadequate training. Other factors implicated included: insurance and financial issues, authorization and paperwork problems, patient or parent reluctance, or medical prob-

-lems being more pressing. (5) A "referral mindset" predominates, which may be affected by perceptions, perceived responsibility, confidence, barriers, and supports.

In the Philippines and among Filipino respondents that also include trainees, a 1994 study by Manapat and Ramos-Leynes showed that in a local tertiary children's hospital, none of the pediatric residents and consultants would ignore various emotional or behavioral complaints in consultations and very few would opt to just observe. However, few would opt to manage independently as well. Majority would "handle and refer" cases like bedwetting beyond five years, poor school performance, nervousness or fearfulness, and school phobia. On the other hand, problems like psychotic behavior, drug abuse or dependence, stealing, and truancy would be "referred immediately". Collectively, the study showed that in this population of Filipino pediatricians, the model was to "handle and refer" or "refer immediately" for emotional and behavioral concerns and not be the primary care provider. (6) This parallels American practice patterns in 2008 where primary care pediatricians (PCP) and also child psychiatrists believe that PCPs should identify and refer but not necessarily treat children with MH concerns. (7)

While the "referral model" has understandable basis, it is important to note that not all areas in the Philippines have access to child and adolescent psychiatrists for referral. Moreover, pediatricians have a big opportunity for promotive and preventive interventions not available to psychiatrists who usually see patients already needing treatment. Effective referral is also not a singular step but also assumes that the pediatrician is adept in identifying a MH concern, explaining it to the patient and family, forming a trusting therapeutic relationship with them, and performing psychoeducation and supportive maneuvers. This is especially true where MH stigma is rampant.

What supports the engagement of pediatricians in MH? It was found by the AAP that those who completed at least four weeks of developmental-behavioral pediatrics training had 1.8 times increased odds of co-management and those who had prior MH training had 1.4 times increased odds.

The factor which mattered most was the simple fact of having strong interest in the subject matter, which led to an increase of 2.75 times. (8)

This highlights that both training and personal factors such as interest or personality of the physician influence their willingness to tackle MH issues of their patients. Related to this, another area of effort was not just to integrate MH practice in pediatrics but to increase pediatricians who themselves were MH practitioners. In the United States, the “Post Pediatric Portal Project” is a program which enables pediatricians to train and be licensed in general psychiatry and child & adolescent psychiatry within a span of three years as a fellowship program. (9) No such program exists in the Philippines as of now, but this could very well be a way of increasing pediatricians who could manage psychiatric disorders.

Have MH practice patterns in pediatrics changed in the Filipino setting after nearly thirty years? What are the factors that influence this? In the current Filipino context, it is hypothesized that perceived responsibility and confidence levels may be lower than Western counterparts because standardized MH integration in pediatric residency curricula has not yet been established. Variations in workload, culture, and education may also cause practice patterns to differ.

The primary objective of this study was to describe the baseline practice and perceptions of pediatric residents at the University of the Philippines-Philippine General Hospital (UP-PGH) on MH practice. The focus on residents was given that practice and perceptions as consultants may be rooted and modified during formative years in residency training and it may be valuable to focus on this stage. Specific objectives are to describe the following among pediatric residents: 1) MH practice patterns and plans; 2) perceptions about MH practice; 3) perceived responsibility in diagnosing and treating various psychiatric conditions; 4) confidence in diagnosing and treating various psychiatric conditions; and 5) perceived barriers and supports in integrating MH into pediatric practice. The study was done in the context of gathering data to guide a capacity building program in MH between the UP-PGH Pediatrics and Child and Adolescent Psychiatry departments. Beyond the program, it is hoped

the study could also guide pediatric residency program of other hospitals in the future in collaboration with the professional societies involved.

METHODOLOGY

Participants / Methods for Selection

The study involved pediatric residents of UP-PGH, from first to third year level, who were recruited by the principal investigator during their weekly conferences via convenience sampling. This was permitted as part of the existing collaborative program between Pediatrics and Psychiatry to improve MH competencies among pediatric residents. Within May to July 2019, a total of 37 out of a total of seventy residents were recruited – those were present in the conference. Collection was done in three conferences (once per month) to reach those who did not attend before. However, not all residents were able to answer despite this effort due to leaves or duties in critical posts. Sample size was not computed. As the study was within the context of a program, the goal was to collect data from as many residents as possible but at the same time without disrupting their work. All residents who were present were included but medical interns, rotators from other institutions, and fellows already in subspecialty training were excluded.

Data Collection

The study followed a cross-sectional, descriptive design. A written questionnaire was formulated based on the review of literature, which included various factors that would influence the MH practice of pediatricians. This was expanded and modified based on focus group discussions with the pediatric residency training officer, chief resident of pediatrics, head of the division of child psychiatry, and chief fellow of child psychiatry. The questionnaire, phrased in English, which is the standard language of education and training in the country, was directly administered. No validation study was done as it was done in the context of guiding a time-bound program. It was divided into five parts, as follows. Part one included questions on patterns for current MH practice as a resident and for planned clinical engagement as a consultant. Part two included questions on perceptions regarding MH practice in pediatrics. Part three included questions on perceived responsibility

in diagnosing and managing specific conditions as a pediatrician. Part four included questions on confidence in diagnosing and managing specific conditions as a pediatrician. These were all in the form of Likert scales corresponding to the degree of frequency or agreement to statements. Part five included two open-ended questions on problems encountered and possible supports when it comes to MH integration in practice. (Appendix 1)

Data Analysis

Percentages of total answers per choice of each item, calculated using Microsoft Excel, were presented for parts 1 to 4. For part 5, common answers were grouped together by themes and tallied.

RESULTS

Demographic data

There was a total of 37 pediatric residents. Most (29 or 78.38%) of them were female. The mean age was 28.3 years old. The respondents were distributed relatively equally among the year levels: 11 first-years, 10 second-years, and 16 third-years. Around one-third (62.16%) of them graduated from the medical school partnered with the study hospital (UP-PGH). Undergraduate courses taken were: biology (28.73%), seven-year direct MD program (13.51%), nursing (13.51%), psychology (13.51%), other allied health courses (8.1%), and others/did not specify (21.62%).

Approximately half had their rotation in the var-

Table 1. Frequency of mental healthcare related activities as pediatric residents (N=37)

Type of MH Care	Almost Never 0-20%	Rarely 20-40%	Sometimes 40-60%	Often 60-80%	Almost Always 80-100%
Actively explore and detect MH concerns	0	5 (13.51%)	24 (64.87%)	7 (18.92%)	1 (2.70%)
Promote MH or discuss prevention of MH problems	0	9 (24.32%)	18 (48.65%)	9 (24.32%)	1 (2.70%)
Use MH screening tools (e.g., PHQ9)	10 (27.03%)	9 (24.32%)	15 (40.54%)	2 (5.41%)	1 (2.70%)
Refer to MH professional	1 (2.70%)	0	4 (10.81%)	12 (32.43%)	20 (54.05%)
Diagnose specific psychiatric conditions.	1 (2.70%)	8 (21.62%)	17 (45.95%)	10 (27.03%)	1 (2.70%)
Initiate psychotropic medication if indicated.	17 (45.95%)	12 (32.43%)	6 (16.22%)	1 (2.70%)	1 (2.70%)
Perform counseling if indicated.	0	7 (18.92%)	8 (21.62%)	14 (37.74%)	8 (21.62%)
Independently handle MH cases	4 (10.81%)	13 (35.14%)	11 (29.73%)	6 (16.22%)	3 (8.11%)

This was a purely descriptive study and no statistical correlations were analyzed.

Ethical Considerations

The study was approved by the institution's research ethics board, part of which required that researchers have undergone good clinical practice training. Participants underwent due informed consent process with their confidentiality upheld in all steps of the process. Joining the study did not impact participation in the abovementioned competency building workshop in any manner. There were no conflicts of interest that required disclosure. Results were presented as a whole without individual or sub-group identifying data to the Department of Pediatrics as part of the collaboration.

-ious MH-related rotations: child protection unit (48.65%), developmental pediatrics (54.05%), and adolescent medicine (48.65%). Notably, these rotations were randomly assigned at any year level. Due to time constraints, not all residents were able to go through all three rotations within the duration of their training.

Practice Patterns of Pediatric Residents & Future Clinical Practice

Majority of residents (greater than 75%) would explore and detect MH concerns, discuss MH promotion or prevention, diagnose specific psychiatric conditions, and perform counseling sometimes, often, or almost always in their current clinical engagements. On the other hand, many residents (greater than 50%) would almost

Table 2. Frequency of mental healthcare related activities planned in the future as consultants (N= 37)

	Almost Never 0-20%	Rarely 20-40%	Sometimes 40-60%	Often 60-80%	Almost Always 80-100%
Type of MH Care					
Actively explore and detect MH concerns	0	0	7 (18.92%)	17 (45.95%)	13 (35.14%)
Promote MH or discuss prevention of MH problems	0	0	4 (10.81%)	16 (43.24%)	17 (45.95%)
Use MH screening tools (e.g., PHQ9)	0	1 (2.70%)	8 (21.62%)	19 (51.35%)	9 (24.32%)
Refer to MH professional	0	0	2 (5.41%)	15 (40.54%)	20 (54.05%)
Diagnose specific psychiatric conditions.	0	0.00	9 (24.32%)	17 (45.95%)	11 (29.73%)
Initiate psychotropic medication if indicated.	0	4 (10.81%)	12 (32.43%)	13 (35.14%)	8 (21.62%)
Perform counseling if indicated.	0	0	8 (21.62%)	9 (24.32%)	20 (54.05%)
Independently handle MH cases	1 (2.70%)	2 (5.41%)	10 (27.03%)	13 (35.14%)	11 (29.73%)

never handle basic MH cases on their own. (Table 1). In contrast to their residency practice patterns, most of the participants planned to conduct all aspects of mental healthcare sometimes, often, or always as future consultants – even the use of screening tools (97.29%), initiation of psychotropics (89.19%), and independently handling MH cases (91.9%). This indicated that most of them plan to integrate mental healthcare in their practice, even if they did not do it as much when they were residents.

Highlighting an example of a discrepancy between current practice in training and future plan, 56.76% planned to initiate psychotropics often or almost always as future consultants, while only 5.12% actually did so during their residency. (Table 2)

Perceptions on Mental Health Practice

Results revealed that pediatric residents had a positive overall perception toward MH practice.

Table 3. Perceptions on Mental Health Practice in Clinical Practice (N=37)

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. Dealing with mental health problems will be well reimbursed in my future practice as a pediatrician.	0	3 (8.11%)	3 (8.11%)	23 (62.16%)	8 (21.62%)
2. I feel that patients are open to discuss mental health concerns with me as a pediatrician.	0	3 (8.11%)	3 (8.11%)	26 (70.27%)	5 (13.51%)
3. My patients are willing to take mental health directives or prescriptions from me as a pediatrician.	0	0	8 (21.62%)	28 (75.68%)	1 (2.70%)
4. I feel that medical concerns of patients are more pressing than mental health concerns.	4 (10.81%)	14 (37.84%)	10 (27.03%)	8 (21.62%)	1 (2.70%)
5. I feel that my role as pediatrician is more for medical concerns than mental health concerns.	5 (13.51%)	16 (43.24%)	2 (5.41%)	12 (32.43%)	2 (5.41%)
6. I am personally interested in mental health concerns of my patients.	0	1 (2.70%)	3 (8.10%)	22 (59.45%)	11 (29.72%)
7. I feel negative (e.g., burdened, irritated) when patients open-up mental health concerns with me.	8 (22.22%)	21 (58.33%)	3 (8.33%)	3 (8.33%)	2 (2.78%)
8. I am interested in psychiatry or mental health as a subject matter.	0	1 (2.70%)	6 (16.22%)	21 (56.76%)	9 (24.32%)
9. My getting involved in my patients' psychosocial concerns will have an impact in their health.	0	0	0	18 (48.65%)	19 (51.35%)
10. I need to practice child mental health because there are no/few such professionals in my area of practice in the future.	0	0	6 (16.22%)	17 (45.95%)	14 (37.84%)

Table 4. Perceptions on Mental Health in Education and Residency (N=37)

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
11. I have time to integrate mental health inquiry or management for my usual pediatric patients.	1 (2.70%)	9 (24.32%)	5 (13.51%)	20 (54.05%)	2 (5.41%)
12. As a current resident, I would like a mental health clinic as part of the pediatric services in the hospital.	0	0	0	24 (64.86%)	13 (35.14%)
13. I would like to rotate in child and adolescent psychiatry as part of general pediatric residency.	1 (2.78%)	0	4 (10.81%)	19 (51.35%)	13 (35.13%)
14. If there was a fellowship program that will allow me to become a child and adolescent psychiatrist as a pediatrician, I will go into that.	1 (2.70%)	7 (18.92%)	15 (40.54%)	12 (32.43%)	2 (5.41%)
15. Developmental pediatrics rotation has helped me integrate MH in pediatric consultations. (IF APPLICABLE)	1 (5.0%)	4 (20.0%)	1 (5.0%)	9 (45.0%)	5 (25.0%)
16. Adolescent medicine rotation has helped me integrate MH in pediatric consultations. (IF APPLICABLE)	0	0	1 (5.6%)	5 (27.8%)	12 (66.7%)
17. Child protection rotation has helped me integrate MH in pediatric consultations. (IF APPLICABLE)	0	0	0	8 (44.4%)	10 (55.6%)
18. My premedical course has helped me integrate mental health in pediatric consultations.	5 (13.51%)	10 (27.03%)	4 (10.81%)	11 (29.73%)	7 (18.92%)
19. Medical school training has helped me integrate mental health in pediatric consultations.	0	8 (21.62%)	5 (13.51%)	21 (56.76%)	3 (8.11%)

Note: For numbers 15, 16, and 17, not all respondents had rotated in these subspecialty rotations at the time of inquiry. Only those who had rotated answered this question.

As pediatricians-in-training, majority (83.78%) felt that patients were open to discuss and 78.38% would take MH directives. Many (81.08%) were interested in psychiatry as a topic and 86.49% were interested in MH concerns of their patients. Most (83.78%) of them agreed that dealing with MH problems would be adequately reimbursed. Notably, all of the respondents agreed that psychosocial concerns have an impact on health.

However, it was notable that around one fourth (24.32%) believed that medical concerns are more pressing than MH concerns and another one fourth (27.03%) were ambivalent. Around one-third (35.84%) also believed that their role as pediatrician was more for medical than MH concerns. (Table 3) Pediatric residents all wanted to have a MH clinic as part of the pediatric services in the hospital.

Table 5. Perceived Responsibility in Diagnosis (N=37)

	Highly Not Responsible	Not Responsible	Undecided	Responsible	Highly Responsible
Depression	0	2 (5.4%)	1 (2.7%)	27 (72.97%)	7 (18.9%)
Anxiety	0	3 (8.1%)	1 (2.7%)	26 (70.27%)	7 (18.9%)
Psychosis	0	4 (10.8%)	3 (8.1%)	23 (62.16%)	7 (18.9%)
Autism	0	0	0	23 (62.16%)	14 (37.83%)
Intellectual disability	0	0	0	25 (67.56%)	12 (32.43%)
ADHD	0	0	0	23 (62.16%)	14 (37.83%)
Learning disabilities	0	0	0	23 (62.16%)	14 (37.83%)
Conduct disorders	0	2 (5.4%)	2 (5.4%)	23 (62.16%)	9 (24.32%)
Substance use problems	0	0	2 (5.4%)	25 (67.56%)	10 (27.03%)
Behavioral addictions	0	0	3 (8.1%)	25 (67.56%)	9 (24.32%)
Traumatic disorders	0	1 (2.7%)	3 (8.1%)	25 (67.56%)	8 (21.62%)

Generally, 86.48% expressed willingness to rotate in child and adolescent psychiatry. All the respondents felt that the child protection unit rotation and 94.4% said that their rotation in adolescent medicine helped them integrate MH in their pediatric rotations. To a significant but lesser extent (69%), developmental pediatrics rotation was also seen to be helpful. The discrepancy in developmental pediatrics may reflect mindsets about development being a separate construct from MH. (Table 4)

For around half of respondents (48.65%), premedical studies helped them in MH aspects of pediatric care while 64.87% mentioned that it was in medical school that they learned to attend to mental health of patients. This showed a possibility that not all pediatric residents were equipped in addressing mental health concerns. Around one-third (37.84%) of respondents expressed some interest in possibly specializing in child and adolescent psychiatry if there was such a program from a background of pediatrics. (Table 4)

Perceived Responsibilities

All respondents perceived that diagnosing the neurodevelopmental disorders (ASD, ADHD, ID, and LD) was their responsibility. Almost all perceived diagnosing substance use problems (94.59%) and behavioral addictions (91.88%) to also be their responsibility.

There was more hesitation with regard conditions that were “traditionally psychiatric”; given answers of “undecided” and even “not responsible” for cases such as depression (8.1%), anxiety (10.8%), psychosis (18.9%), conduct disorders (10.8%), and trauma (10.8%); nonetheless, for these conditions, still a great majority (80% or more) felt they should be able to diagnose. (Table 5)

For neurodevelopmental disorders, a significant majority of residents felt the perceived responsibility to manage, ranging from 86.49% to 89.19%, which corresponds well to the 100% perceived responsibility to diagnose those disorders. This was not the case for the psychiatric disorders. Less respondents felt responsible to manage, ranging from 56.76% to 78.38%, despite a lot of them feeling responsible to diagnose (above 80%). On the other hand, only 67.56% felt responsible for diagnosing anxiety and 56.75% felt the same about diagnosing psychosis. This downward drift possibly illustrates where the “referral mindset” starts to manifest. (Table 6)

Confidence in Mental Health Practice

Similar to the pattern in perceived responsibility, there was greater confidence in the diagnosis of neurodevelopmental disorders, wherein 78.4%-89.2% reported being confident or very confident. In contrast, only approximate-

Table 6. Perceived Responsibility in Management (N=37)

	Highly Not Responsible	Not Responsible	Undecided	Responsible	Highly Responsible
Depression	0	5 (13.51%)	6 (16.22%)	21 (56.76%)	5 (13.51%)
Anxiety	0	5 (13.51%)	7 (18.92%)	20 (54.05%)	5 (13.51%)
Psychosis	0	10 (27.03%)	6 (16.22%)	18 (48.65%)	3 (8.1%)
Autism	0	2 (5.4%)	2 (5.4%)	22 (59.46%)	11 (29.73%)
Intellectual disability	0	2 (5.4%)	2 (5.4%)	22 (59.46%)	11 (29.73%)
ADHD	0	2 (5.4%)	3 (8.1%)	22 (59.46%)	10 (27.03%)
Learning disabilities	0	2 (5.4%)	4 (10.8%)	21 (56.76%)	10 (27.03%)
Conduct disorders	0	5 (13.51%)	5 (13.51%)	19 (51.35%)	8 (21.62%)
Substance use problems	0	4 (10.8%)	4 (10.8%)	22 (59.46%)	7 (18.92%)
Behavioral addictions	0	5 (13.51%)	6 (16.22%)	21 (56.76%)	5 (13.51%)
Traumatic disorders	0	5 (13.51%)	6 (16.22%)	20 (54.05%)	6 (16.22%)

-ly half (45.9%- 64.9%) of respondents were confident in diagnosing the other psychiatric conditions. The least number of residents were confident in diagnosing behavioral addictions (45.9%) and anxiety (48.6%). (Table 7)

Approximately three-fifths (56.75 % to 67.56%) of pediatric residents were confident or very confident in managing the neurodevelopmental disorders. On the other hand, only around one-fourth were confident or very confident in managing depression, (24.32%), anxiety (29.73%), substance problems (29.73%), and behavioral addictions (24.32%). The least number of respondents were confident in managing psychosis (16.21%) and traumatic disorders (21.62%), where the approximate ratio falls to approximately one out of five. This may possibly reflect their perceived complexity or risk with these conditions or stricter delegation of these as purely within psychiatry. For psychosis, this may also correlate with the lack of experience in using psychotropics as seen earlier in practice patterns. (Table 8)

Table 7. Confidence in Diagnosis (N=37)

	Very Unconfident	Unconfident	Undecided	Confident	Very Confident
Depression	0	9 (24.3%)	8 (21.6%)	18 (48.6%)	2 (5.4%)
Anxiety	0	12 (32.4%)	7 (18.9%)	16 (43.2%)	2 (5.4%)
Psychosis	0	12 (32.4%)	6 (16.2%)	16 (43.2%)	3 (8.1%)
Autism	0	2 (5.4%)	6 (16.2%)	24 (64.9%)	5 (13.5%)
Intellectual disability	0	1 (2.7%)	3 (8.1%)	27 (73.0%)	6 (16.2%)
ADHD	0	1 (2.7%)	3 (8.1%)	29 (78.4%)	4 (10.8%)
Learning disabilities	0	3 (8.1%)	4 (10.8%)	27 (73.0%)	3 (8.1%)
Conduct disorders	0	8 (21.6%)	7 (18.9%)	20 (54.1%)	2 (5.4%)
Substance use problems	0	6 (16.2%)	7 (18.9%)	22 (59.5%)	2 (5.4%)
Behavioral addictions	0	11 (29.7%)	9 (24.3%)	16 (43.2%)	1 (2.7%)
Traumatic disorders	0	9 (24.3%)	7 (18.9%)	19 (51.35%)	2 (5.4%)

frequent suggestion (9 respondents), followed by having more time (3 respondents) and even having a child and adolescent psychiatry rotation (3 respondents). (Table 10)

DISCUSSION

The study was able to highlight important gaps or discrepancies. First, there were positive perceptions about MH with residents planning to integrate mental health care as consultants, but there was hardly any chance to do so during pediatric residency. Second, many recognized that diagnosing and treating MH problems was their responsibility, but were not so confident in doing so.

Barriers and supports

For the questions regarding barriers and supports, these were open-ended questions to which not all respondents answered. There were answers which recurred in many answered questionnaires. The greatest perceived barrier to practicing MH in pediatric residency was the lack of time (13/ 33 respondents or 39.39%). Lack of training was the second biggest barrier (8/ 33 respondents or 24.24%). The lack of space or venue was also identified as a barrier (3 /33 respondents or 9.09%). This may point to issues about conduciveness of environment and privacy. The “referral mindset” was also mentioned, wherein the accessibility of psychiatry services led residents to just refer and focus their efforts on medical illnesses. (Table 9)

The most relevant support was to have more training or education opportunities in MH, as identified by 12 respondents (36.36%). This may be related to the lack of training mentioned earlier. More exposure was the next most

Table 8. Confidence in Management (N=37)

	Very Unconfident	Unconfident	Undecided	Confident	Very Confident
Depression	0	16 (43.24%)	12 (32.43%)	8 (21.62%)	1 (2.7%)
Anxiety	0	17 (45.95%)	9 (24.32%)	10 (27.03%)	1 (2.7%)
Psychosis	0	19 (51.35%)	12 (32.43%)	4 (10.81%)	2 (5.4%)
Autism	0	12 (32.43%)	4 (10.81%)	20 (54.05%)	1 (2.7%)
Intellectual disability	0	9 (24.32%)	3 (8.1%)	23 (62.16%)	2 (5.4%)
ADHD	0	10 (27.03%)	4 (10.81%)	21 (56.76%)	2 (5.4%)
Learning disabilities	0	10 (27.03%)	4 (10.81%)	21 (56.76%)	2 (5.4%)
Conduct disorders	0	16 (43.24%)	9 (24.32%)	10 (27.03%)	2 (5.4%)
Substance use problems	0	16 (43.24%)	10 (27.03%)	10 (27.03%)	1 (2.7%)
Behavioral addictions	0	18 (48.65%)	10 (27.03%)	8 (21.62%)	1 (2.7%)
Traumatic disorders	0	18 (48.65%)	11 (29.73%)	7 (18.92%)	1 (2.7%)

These reflect a concern that their pediatric residency training might not be adequately preparing them for something they actually consider as important and hope to get involved with in their future clinical practice. It was noted that the questionnaire did not ask if the participant planned to take further training or a fellowship program related to MH to close the gap. Requiring fellowship to achieve MH competency seems counterintuitive to the concept of primary care integration. Residents felt responsible and confident in diagnosing but not so much in managing psychiatric conditions, which may reflect that their training may have focused only on detection of such illnesses

rather than on treatment. The “handle and refer” or “refer immediately” mindset parallel to the Manapat and Ramos-Leynes study done in another Filipino tertiary hospital almost thirty years ago in 1994 can be gleaned from this. (6)

Table 9. Perceived barriers to practicing MH in residency (N=33)

Barrier	# Who Answered	%
Lack of time	13	39.39
Lack of training	8	24.24
No space or venue for it	3	9.09
Referral mindset	2	6.06
Complexity	1	3.03
No patience	1	3.03
Patients not open	1	3.03
Lack of support system	1	3.03
Lack of confidence	1	3.03
Stigma	1	3.03
Hard to open it up to patients	1	3.03

Table 10. Suggested supports to practicing MH in residency (N=33)

Suggested support	# Who Answered	%
More training/education	12	36.36
More exposure	9	27.27
More time	3	9.09
Child & Adolescent psychiatry rotation	3	9.09
Adolescent medicine and CPU rotation	2	6.06
Having a space/area for interview	2	6.06
Open-mindedness and empathy	1	3.03
Having an algorithm	1	3.03

Given the results in perceptions, one possible contributor to this includes role confusion – should they prioritize physical or MH? This conceptual divide may be influenced first by the high workload that limits time. Second is the presence of dedicated MH service (i.e., psychiatry) in the current hospital setting that makes referral more practical and perhaps the pressure to avoid overlaps and infringements in roles.

On the more positive side, the results reflect that efforts to integrate MH in pediatric practice are likely to be perceived as relevant and fruitful by the residents should it be established. There is no need to work from the very bottom to address misconception and resistances anymore, and institutional efforts are not likely to be left ignored. The residents may benefit from capacity building in MH practice. Results show that many are open to having avenues of learning and practicing, but also, that it is difficult to find additional time. A balance has to be created between providing experience without further adding to their workload.

Drawing from the information generated from the focused group discussions surrounding the capacity building program, making MH a convenient part of the usual consult may be

helpful, akin to the HEADSSS (Home, Education, Activities, Drugs, Suicidality, Sexuality, and Safety) in adolescents. The utility of cascading it down to the level of medical students, similar to the adolescent interview, was also emphasized. This agrees with literature that integrating MH in pediatrics requires exposure in medical school and residency, as well as the availability of back-up and consultation from child and adolescent psychiatry. (10)

It is also significant to note that only around two-thirds of the pediatric residents felt that medical school helped them with the MH dimension of clinical practice, so there is still much to be improved in the medical curriculum. The advantage of this would be that MH would become part of primary care, rather than “yet another subspecialty” that pediatric trainees must learn in addition to their myriad of rotations. This strengthens views that MH is part of primary pediatric care. For interventions, it was discussed that it may be more practical to start application of MH practice into special populations integrally encountered in various subspecialties such as abused children, chronically ill children, emergency consults for suicide attempts, and in the adolescent clinic.

Although not necessarily a long-term solution, workshops were also deemed feasible at this time, strengthening the hands-on application of clinical skills in handling patients with psychiatric conditions as well as mechanisms for feedback from psychiatry. Ideally these programs can be integrated in the clinics. In the US, one model involved hiring a dually-trained pediatrician and child psychiatrist who initially educated the pediatricians, performed patient consultations with them in a once-every-two-weeks MH clinic, and eventually allowed the pediatricians to do the consultations alone while being available for questions as needed. This yielded to 11% to 37% increase in MH diagnoses made by pediatricians. (11)

There are however no programs that train such dually-trained specialists in the Philippines. Another model used standard patient encounters with trained actors who simulated behavioral concerns, which were simultaneously interviewed by pediatric trainees and behavioral health trainees, to facilitate exposure to and exchange of differing techniques. This was also found to improve awareness of behavioral

health resources, confidence in using screening tools, and willingness to adjust future practice orientations. (12) Such methods of learning through actual clinical experience could guide future MH capacity building efforts.

In the focused group discussions, it was discussed that there were no MH competencies articulated in the professional association of pediatricians as of now. Also, it was not yet part of the residency curriculum of the hospital, but rather incorporated in relevant rotations. Moving forward, these efforts can ideally be institutionalized by professional policy for uniformity, sustainability, and continuity.

Limitations and Recommendations

The limitations of the study were that convenience sampling was used and the turnout was only around 50%. There may have been selection bias in such that participants were those who were more inclined toward MH practice. Results may also not be directly applicable to other pediatric residency programs in the country; the unique factors of the hospital of study were the availability of child psychiatry services, being a major subspecialty referral center, and its location in the urban center. Findings are expected to change in non-specialty rural hospitals without proximate access to child psychiatry services. It is recommended that the study be expanded to multiple centers in the Philippines, using formal sampling methodology and validated instruments.

Future studies can also go beyond descriptive methodology by comparing changes pre- and post- intervention (e.g., a workshop or liaison program) using statistical analysis. Factors that increase or decrease actual engagement or outcomes like psychiatric diagnoses, psychotropic prescription, and the like could then be determined and explored.

Therefore, for the hospital of study, the collaboration may go directly to knowledge and skills enhancement, rather than focusing on baseline attitudes. To close the gap and bridge the above discrepancy, specific recommendations can include the following:

1. Knowledge and skills regarding diagnosing and managing non-neurodevelopmental psychiatric conditions can be enhanced through various means, with emphasis on going beyond detection as a point of emphasis.
2. The following can be focused on in training, as they attained the lowest ratings: using screening tools, basic psychotropic prescription, diagnosing anxiety and behavioral addictions, and managing psychosis and trauma.
3. Mental health can be incorporated in routine health interviews in a time-efficient manner as time constraint was the most common limiting factor. This can be initiated earlier in general medical education.
4. Child protection and adolescent medicine rotations for all pediatric residents can be maximized as they were deemed very helpful in learning MH. A child and adolescent psychiatry rotation can be offered for those who are interested.
5. A capacity building project for MH practice can be initiated since more training was most identified as a possible support.
6. Further collaborations beyond workshops and seminars such as having a shared pediatric MH clinic and integrating principles of mental health in pediatric training curricula.

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