PJP

ORIGINAL RESEARCH

KNOWLEDGE, ATTITUDE AND PRACTICES OF PSYCHIATRISTS TOWARDS TELEPSYCHIATRY IN A TERTIARY GOVERNMENT HOSPITAL DURING THE COVID-19 PANDEMIC: A CROSS-SECTIONAL STUDY

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ABSTRACT

OBJECTIVES: The main objective of the study was to determine the knowledge, attitudes, and practice of psychiatrists and psychiatrists in training towards telepsychiatry in a tertiary training hospital.

METHODOLOGY: At the University of the Philippines - Philippine General Hospital (UP-PGH), a prospective, descriptive, observational, cross-sectional study was undertaken. Participants included psychiatrists and psychiatrists in training linked with the research site under the UP-PGH who consented to participate in the study.

RESULTS: There were a total of 58 psychiatrists and psychiatrists in training who responded to the survey respondents of the study, with the median age being 33 years (range: 29 to 45), more than a third (36.21%) belonged to the 26-30 years group, and most (56.9%) were female. The majority of respondents correctly identified the best definition of telemedicine (72.41%), that instant laboratory workups were not included (89.66%), that only doctors with a valid Philippine Professional Regulation license could practice (96.55%), that telemedicine services were unavailable in the Philippines (63.795%), and that clinic operations management was not a required competency (81.03%). More than a third “strongly agreed” that they would be more likely to continue utilizing telepsychiatry even after the COVID-19 pandemic (37.93%), more than half “strongly agreed” that telemedicine and telepsychiatry should be conducted all in the interests of advancing the health of individuals and their communities (60.34%).

CONCLUSION: Telepsychiatry could enhance access to trained mental health experts. Even though it is still developing, the current technology is appropriate for most clinical purposes. Many telepsychiatry applications have been identified, and many more are now available to both patients and providers. Consumers, service providers, and the government must campaign to overcome most implementation difficulties. Telepsychiatry can connect mental health professionals with people that lack access to treatments. Telepsychiatry's system-level use of measurement-based, standardized, and evidence-based methods helps bridge the gap between research and practice.

KEYWORDS: P*sychiatry, Telemedicine, Telepsychiatry, COVID19, Pandemic*

Telepsychiatry, a subset of telemedicine, is described as the delivery of psychiatric services to patients via information and communication technology from a distance1. Many health-care systems around the world were obliged to move all or almost all visits to telepsychiatry as a result of the COVID-19 pandemic, which coincided with a considerable regulatory relaxation2. This once-in-a-lifetime scenario presented a once-in-a-lifetime opportunity to qualitatively analyze mental health care practitioners' attitudes and opinions in a variety of clinical settings. Telepsychiatry was used by the majority of professionals, resulting in a shift in their knowledge and attitudes.

A cross-sectional study done by Khan 3 et. al., in which they assessed the knowledge, attitudes and practices of healthcare professionals working in the Mental Health Services towards telepsychiatry, showed that the majority of respondents (n = 188; 84 %) knew that telepsychiatry was currently being used around the globe during COVID-19 pandemic. In the same study, 51 respondents (22 %) believed telepsychiatry decreased patient satisfaction, whilst 93 respondents (41%) felt telepsychiatry had little impact on cost, access and stigma. They also observed that 95% of the respondents believed that telepsychiatry decreased infection risk, 85% felt it was the best mode of service delivery and 80% considered it equally or more effective than conventional practice or face-to-face consultation 3.

On the other hand, challenges in telepsychiatry were reported as follows: building rapport (n = 154; 69 %), assessing non-verbal cues and body language (n = 187; 84 %), and maintaining privacy (n = 102; 56 %) 3.

However, another cross-sectional study done by Dai4 et. al. in 2021 showed that the basic awareness and background knowledge regarding telemedicine existed among their healthcare professionals. It was seen that a majority of participants had high scores for awareness, knowledge, and attitude toward telemedicine but a mere 39.53% scored high for skills related to telemedicine4. A majority of the respondents had no knowledge of the existence of telemedicine practice guidelines and very few had seen or read them. A majority of the respondents were keen to attend a course or training to enhance their understanding and practice of telemedicine.

Therefore, they recommended that it should be a requirement among healthcare providers to train and educate them on the skills and provisions of the telemedicine practice guidelines to ensure optimal use of telemedicine and to avoid medico-legal issues4.

Furthermore, as we transition to multidisciplinary care due to the emergence of COVID-19 pandemic, the opinions and attitudes of other professionals beyond just physicians are important. For telemedicine, specifically telepsychiatry, to reach its full potential, it is essential to establish and evaluate the knowledge, attitudes and practices of mental healthcare providers towards this technology. The positive acceptance and subsequent success of any new technology primarily depend on factors like knowledge and understanding of the new concept by users, skills required for its successful implementation, and a working environment conducive to the adoption of new technology. Thus, for telepsychiatry to be successfully implemented into the Philippine healthcare sector, studies need to be done to establish the knowledge, attitude, and practices regarding telemedicine among healthcare professionals.

Objectives of the Study

The main objective of this study was to determine the knowledge, attitudes, and practice of psychiatrists and psychiatrists in training towards telepsychiatry in a tertiary training hospital. The specific objectives were to describe the demographic profile of the psychiatrists and psychiatrists in training affiliated in the research locale; assess the level of knowledge and attitudes of the respondents towards telepsychiatry; and describe the behavior and practices of the respondents towards telepsychiatry.

METHODOLOGY

Study Design & Study Population

The study was a prospective, descriptive, observational cross-sectional study conducted at the UP-PGH. The participants of the study included the Psychiatrists and the Psychiatrists in training affiliated in the research locale under the Department of Psychiatry and Behavioral Medicine including the resident physicians in training, fellows and consultants who consented to participate in the study. Data collection was carried out from March 1, 2022 to April 30, 2022.

nclusion and Exclusion Criteria

The study included residents, fellows and consultants who were part of the Department of Psychiatry & Behavioral Medicine of UP-PGH since 2020. Any psychiatrist or psychiatrist in training who did not consent for accomplishing the online survey was excluded, as well as those who have not been conducting Telepsychiatry sessions.

Sample Size Calculation

For content validity, it is advisable to involve 10 experts. If two rounds of Content Validity Index (CVI) assessment are intended, it is suitable to commence with a large sample in the first round, for instance, including 8 to 12 experts5. In the case of face validity, it is recommended to engage with 10 experts. A minimum of 10 experts is considered acceptable for this type of assessment5.

Since there were only around 70 psychiatrists under the UP-PGH Department of Psychiatry & Behavioral Medicine, total enumeration would ensure comprehensiveness.

A minimum of 55 psychiatrists was required for this study based on the proportion of psychiatrists who answered that telepsychiatry can be used alongside face-to-face interviews at 5% level of significance, a finite population correction equal to 70, and a desired width of confidence interval of 10%. The following sample size formula with finite population correction was used:

$$n \geq \text{deff} \times \frac{N \times P \times (1-P)}{\frac{d^2}{Z^2_{1-\alpha/2}}(N-1) + P(1-P)}$$

Legend:

n = minimum sample size

P = proportion

d = desired width of confidence interval (precision of + 05) =

0.10 Z1-α/2 = specified size at critical region (α=0.05) = 1.96 deff = design effect = 1

Data Collection

Survey Development

The initial list of questions corresponding to the constructs of knowledge, attitudes and practice was generated through literature review of studies that covered these constructs as well as Telepsychiatry Guidelines from the American Psychiatric Association6 and the Philippine Psychiatric Association7. The items selected covered demographic data, experience with telepsychiatry and knowledge, attitudes, and practices related to the topic.

Questionnaire Validation

Content Validity

A minimum of 10 experts were requested to review the proposed questionnaire. These experts were asked the following questions based on the Consensus-based Standards for the selection of health status Measurement Instruments (COSMIN) criteria for content validity. This was developed in an international Delphi study to evaluate the methodological quality of studies on measurement properties of health-related patient reported outcomes (HR-PROs) (Table 1):

Table 1. Content validation

Item	Question
Relevance	
1	Are the items relevant for the construct of interest?
2	Are the items relevant for the target population of interest?
3	Are the items relevant for the context of use of interest?
4	Are the response options appropriate?
5	Are there other issues that need to be addressed?
Comprehensiveness	
6	Are there any missing key concepts on adoption for this research paper?
Comprehensibility	
7	Are the instructions clear and understandable?
8	Are the questions clear and understood as intended?
9	Are the items appropriately worded (i.e., neutral and non-offensive)?
10	Do the response options match the questions?

Content validity index was determined both qualitatively and quantitatively. To calculate for the content validity index (CVI), the forms were formatted as in Table 2.

Table 2. Draft content validity questionnaire

	Item Relevance Rating			
Sample Items	Not Relevant	Somewhat Relevant	Quite Relevant	Highly Relevant
Question 1	1	2	3	4
Question 2	1	2	3	4

For the Item-level content validity index (I-CVI) - the proportion of experts who agreed that the item was either quite or highly relevant, items with higher than I-CVI 0.80 were accepted, while those lower were subjected to discussion by the expert panel and the investigators.

Face Validity

Similarly, a minimum of 10 health care workers were recruited and reviewed the following:

1. Description of the survey questionnaire: Are the title and instructions clear and easy to follow?
2. For each item: The respondents were asked the following questions, using the "think aloud testing" technique:
    a. Do you have difficulty answering each question?
    b. If yes, how will you restate them?
    c. Are the responses difficult to understand?
    d. If yes, how will you restate them?
    e. Are the questions relevant to your condition?
    f. vi. Are the questions offensive/upsetting to you?
    g. vii. If yes, how will you restate them?

Feedback was organized according to themes. Major remarks regarding face validity was noted and modifications were applied to the draft survey.

Sampling Method & Randomization

Consecutive sampling was done until the minimum sample size was met.

Survey Deployment

After obtaining both the ethical approval from the Ethics Review Board of the UP Philippine General Hospital and a Permit to Conduct Research, data collection was initiated. The structured, self-administered online survey was sent through the official email addresses of the residents, fellows, and consultants of the Department obtained through the Administrative Assistants. Data was collected by the principal investigator alone. Participants were able to access the online study questionnaire by using the provided link. Settings in the URL links provided did not allow tracing and identification of respondents or collection of personal data. Participants interested to participate may proceed by using the link provided. Involvement of participants was fully voluntary. Informed consent was embedded in the online survey form obtained prior to answering of the questionnaire. Participation in the survey lasted around 20-40 minutes.

Data Management, Archiving, and Confidentiality

All participant information was kept in a secure office, with access available only to the primary investigator. Computerized study information was stored on a secured network with password access. All identifiable information and data were given a code number. A master list linking the code number and participant identity was kept separately from the research data. Only the primary investigator had access to the list. The research records will be stored for at least 5 years following completion of the study. Individually identifiable research data will not be shared with others outside of the research and analysis team.

The investigators and all key personnel completed the Good Clinical Practice (GCP) training on the responsible conduct of research with human data. Data monitoring also included the proper attainment of informed consent and adverse events. This information was reviewed on an ongoing basis throughout the study.

Plan of Analysis

Survey Proper

Descriptive statistics was used to summarize the general and clinical characteristics of the respondents. Categorical variables were reported as frequency and proportion. Shapiro-Wilk test was used to determine the normality assumption of continuous variables. Continuous quantitative data that met the normality assumption was described using mean and standard deviation while those that did not was described using median, range, or interquartile range. Appropriate figures were provided as necessary. For open-ended questions, responses were analyzed thematically.

STATA version 15.0 (StataCorp SE, College Station, TX, USA) was used for data analysis.

Ethical Considerations

The study adhered to the ethical considerations and ethical principles set out in relevant guidelines, including the Declaration of Helsinki, WHO guidelines, International Conference on Harmonization-Good Clinical Practice, Data Privacy Act of 2012, and National Ethics Guidelines for Health Research 2017. All participating patients enjoyed all rights guaranteed by the Constitution as well as those recognized under the United Nations Universal Declaration of Human Rights and the

Convention on the Rights of Persons with Disabilities and all other relevant international and regional human rights conventions and declarations on an equal and nondiscriminatory basis.

PGHREB Approval and Informed Consent

The study only commenced upon the approval of the University of the Philippines Manila Research Ethics Board (UPM-REB). No subject participated in this study without written documentation of informed consent. However, in general, if the information was obtained by means of a questionnaire, and adequate information had been given to the research participant, there was no need for a written informed consent (waiver of informed consent documentation), since answering the questionnaire implies consent7.

Recruitment

Recruitment followed the inclusion and exclusion criteria set by the researcher and should have given voluntary consent. All residents, fellows, and consultants who were part of the Department of Psychiatry and Behavioral Medicine, UP-PGH were sent an email by the investigator about the study, the objectives, methods, and information about the survey and a link to accomplish it. No breaches in privacy occurred. The internet access and other basic needs of the participating Psychiatrists and Psychiatrists in training were not provided. There were no incentives or compensation, monetary or in any other form, given to the participants.

Adverse Events or Risks

This study considerably involved no to minimal clinical risks because it only involved participants through answering surveys. There was no intervention involved that would divert the staff's attention from existing responsibilities nor would there be a risk to patient well-being and safety. Lastly, there were no other features of this study that suggested an increased level of risk to patients, providers, or institutions, compared with the patient safety activities that were not currently implemented. Hence, there was none to minimal risk that patients would experience a worsening of their health status due to the conduct of this research8. However, the possibility of clinical risks should always be assessed thoroughly and completely, hence the proposal was submitted to the UPM-REB.

Societal Benefits & Funding

The results and analysis from this study has potential societal benefits, which will directly or indirectly benefit the participants through health systems delivery strengthening or improvements in implementation or policy change to address the access of patients to Psychiatry in the Philippines.

This research's funding was provided for by the principal investigator.

RESULTS

Survey Proper

There were a total of 58 psychiatrists and psychiatrists in training who responded to the survey with median age being 33 years (range: 29 to 45), more than a third (36.21%) belonging to the 26-30 years' group, and most (56.9%) being female. Majority reside in Metro Manila (91.23%) while only 5 or 8.77% lived outside Metro Manila. Almost a fourth lived alone (24.14%). (Table 3)

Some respondents were residents (39.66%), and half were consultants, with a third practicing for less than 5 years (36.71%). All respondents practice telepsychiatry, with majority starting during the pandemic (94.83%). In a month, almost half of the respondents spent 13 to 24 hours doing telepsychiatry (46.55%). Majority of the respondents did not report receiving formal training for telepsychiatry (89.66%). (Table 3)

For questions on knowledge of telemedicine, majority of the respondents were able to correctly choose what the best definition of telemedicine was (72.41%), that instant laboratory work-ups were not included (89.66%), that only doctors with a valid Philippine Professional Regulation license could practice (96.55%), who cannot avail of telemedicine services in the Philippines (63.795), how clinic operations management is not a required competency (81.03%), and how obtaining informed consent when able is not a minimum competency. (Table 4)

Majority of the respondents were able to answer "true" when asked about how "public facing" apps should not be used in telemedicine care (93.1%), and how consent should be obtained (98.28%). Most respondents answered "true" when asked if a blank wall with a neutral color would maintain a professional ambiance. More than half answered "true" when asked if communication between the doctor and patient

Table 3. Demographic characteristics of psychiatrists and psychiatrists in training (n=58)

	Frequency (Interquartile Range)	Percentage (%)
Age (years)		
26 – 30	21	36.21
31 – 35	14	24.14
36 – 40	7	12.07
41 – 45	2	3.45
46 – 50	3	5.17
51 – 55	4	6.9
56 – 60	2	3.45
>60	5	8.62
Sex		
Male	25	43.1
Female	33	56.9
Current designation		
Resident	23	39.66
Fellow	6	10.34
Consultant	29	50
Number of years in private practice as a consultant	[n=28]	
<5	10	35.71
6 – 10	3	10.71
11 – 20	7	25
21 – 30	5	17.86
>30	3	10.71
City of current address	[n=58]	
Metro Manila	53	91.23
Outside Metro Manila	5	8.77
Current living arrangement		
Living alone	14	24.14
Living with parents	11	18.97
Living with partner/spouse	12	20.69
Living with partner/spouse and child/children	13	22.41
Living with roommate/s	5	8.62
Other	3	5.17
Practicing telepsychiatry		
No	0	0
Yes	58	100
Started practicing telepsychiatry		
During the pandemic only	55	94.83
Pre-pandemic	3	5.17
Duration of telepsychiatry practice (months)		
≤12	14	24.14
13 – 24	27	46.55
≥25	17	29.31
Received formal training for telepsychiatry		
No	52	89.66
Yes	6	10.34

is considered privileged and not inquired upon by courts. (Table 5)

Majority correctly answered “false” when asked if documentation of the session was no longer necessary (98.28%), and more than a third answered “false” when asked if individuals can file civil actions under the Data Privacy Act of 2012 (39.66%). It is worth noting that while majority answered “true” (94.83%) when asked if psychiatrists were obliged to give personal numbers, the correct answer was “false,” correctly answered by 3.

Around half of the respondents “agree” that most psychiatrists would see telepsychiatry as an acceptable method for conducting a psychiatric interview to be able to diagnose a patient (51.72%), give treatment to a patient (58.62%), and for conducting a psychotherapy session with a patient (60.34%). (Figure 1)

While more than a third “strongly agree” that they would be more likely to continue utilizing telepsychiatry even after the COVID-19 pandemic (37.93%), more than half “strongly agree” that telemedicine and telepsychiatry should be conducted all in the interests of advancing the health of individuals and their communities (60.34%). (Figure 1)

Respondents are split between “agreeing” (46.55%) and “strongly agreeing” (46.55) with telepsychiatry being an alternative to face-to-face psychiatric consultations. (Figure 1)

Around half of the respondents “agree” that they are confident in being adequately trained to conduct telepsychiatry sessions (43.1%), in telepsychiatry being enough for diagnosing a patient (46.55%), and for conducting psychotherapy sessions (51.72%). (Figure 2)

Table 4. Knowledge of psychiatrists and psychiatrists in training (N = 58)

	Frequency	Percentage (%)
Best definition of telemedicine Telemedicine is the delivery of health care services for diagnosis of disease and injuries	0	0
Telemedicine is the delivery of health care services for diagnosis of disease and injuries	5	8.62
Telemedicine is the delivery of health care services, where distance is a critical factor using information and communication technologies (Correct)	**42**	**72.41**
Telemedicine is the delivery of health care services for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities	11	18.97
Not included in the concept of telemedicine Diagnosis	0	0
Treatment and prevention of disease	1	1.72
Research and evaluation	5	8.62
Instant laboratory workup (Correct)	**52**	**89.66**
Can practice telemedicine in the Philippines Dr. W, a post-graduate intern, who is currently rotating with the Department of Internal Medicine	0	0
Dr. X who has a valid license from the Philippine Professional Regulation Commission (PRC) (Correct)	**56**	**96.55**
Dr. Y who has recently completed 5 years of medical school	1	1.72
Dr. Z who is currently residing in Bali, Indonesia	1	1.72
Cannot avail of telemedicine services in the Philippines Patient A, a Filipina, who is currently residing in Bali, Indonesia	0	0
Patient B, an OFW who is based in Saudi Arabia	0	0
Patient C, an American from Ohio	21	36.21
All of the above (Correct)	**37**	**63.79**
Telemedicine requires competency in the following areas except Digital communication	1	1.72
Clinic operations management (Correct)	**47**	**81.03**
Clinical acumen	3	5.17
Knowledge of technology and equipment to be used	7	12.07
Minimum competencies to practice telemedicine except Maintain mutual trust and respect between the patient and physician	3	5.17
Ensure confidentiality, privacy and data integrity	5	8.62
Obtain proper informed consent only when able (Correct)	**43**	**74.14**
Perform basic responsibilities of a physician	7	12.07

Table 5. Knowledge of psychiatrists & psychiatrists in training (N = 58)

	True		False	
	Frequency	**Percentage (%)**	**Frequency**	**Percentage (%)**
"Public facing" apps such as Facebook Live, Twitch or Tiktok should not be used to provide telemedicine care	**54**	**93.1**	4	6.9
Consent can be obtained, whether in a written format, electronically or voice recorded	**57**	**98.28**	1	1.72
Psychiatrists are not obliged to give out our personal numbers, as long as they provide a means to communicate with the patients between sessions, and to communicate clearly that emergencies will be attended to during the next telepsychiatry session	55	94.83	**3**	**5.17**
In order to maintain a professional ambience, a blank wall with a neutral color and the use of white light or daylight are preferred	**49**	**84.48**	9	15.52
Documentation of the session similar to the patient's chart/SOAP notes is no longer necessary during the pandemic	1	1.72	**57**	**98.28**
Communication between doctor and patient is generally considered privileged and should not be inquired upon even by the Courts	**32**	**55.17**	26	44.83
According to the Data Privacy Act of 2012[29], individuals or "any aggrieved party" may file civil actions for restitution in court but it does not provide for criminal sanctions for violations (i.e., fines and/or violations)	35	60.34	**23**	**39.66**

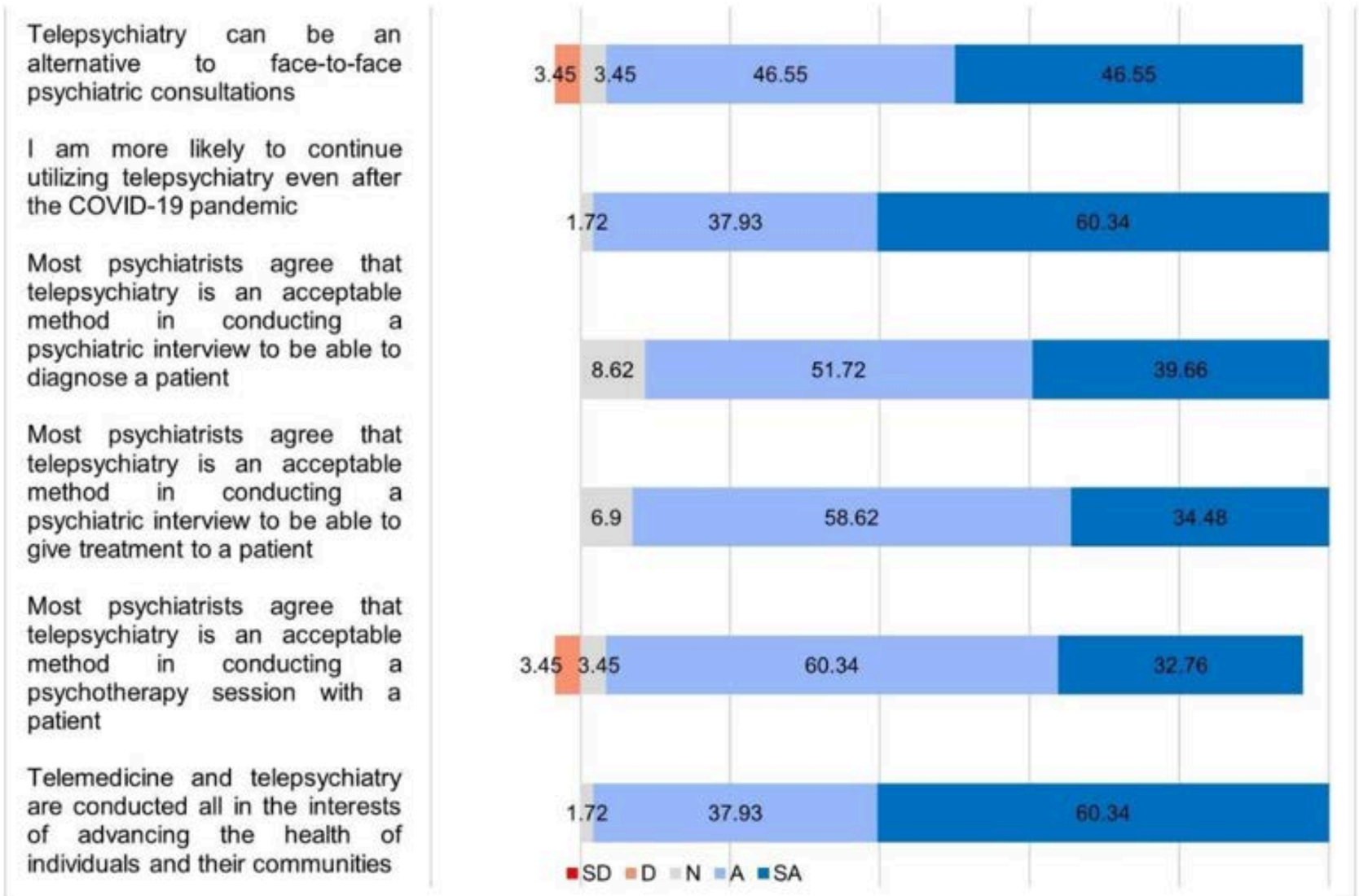

Figure 1. Attitudes of psychiatrists towards psychiatry

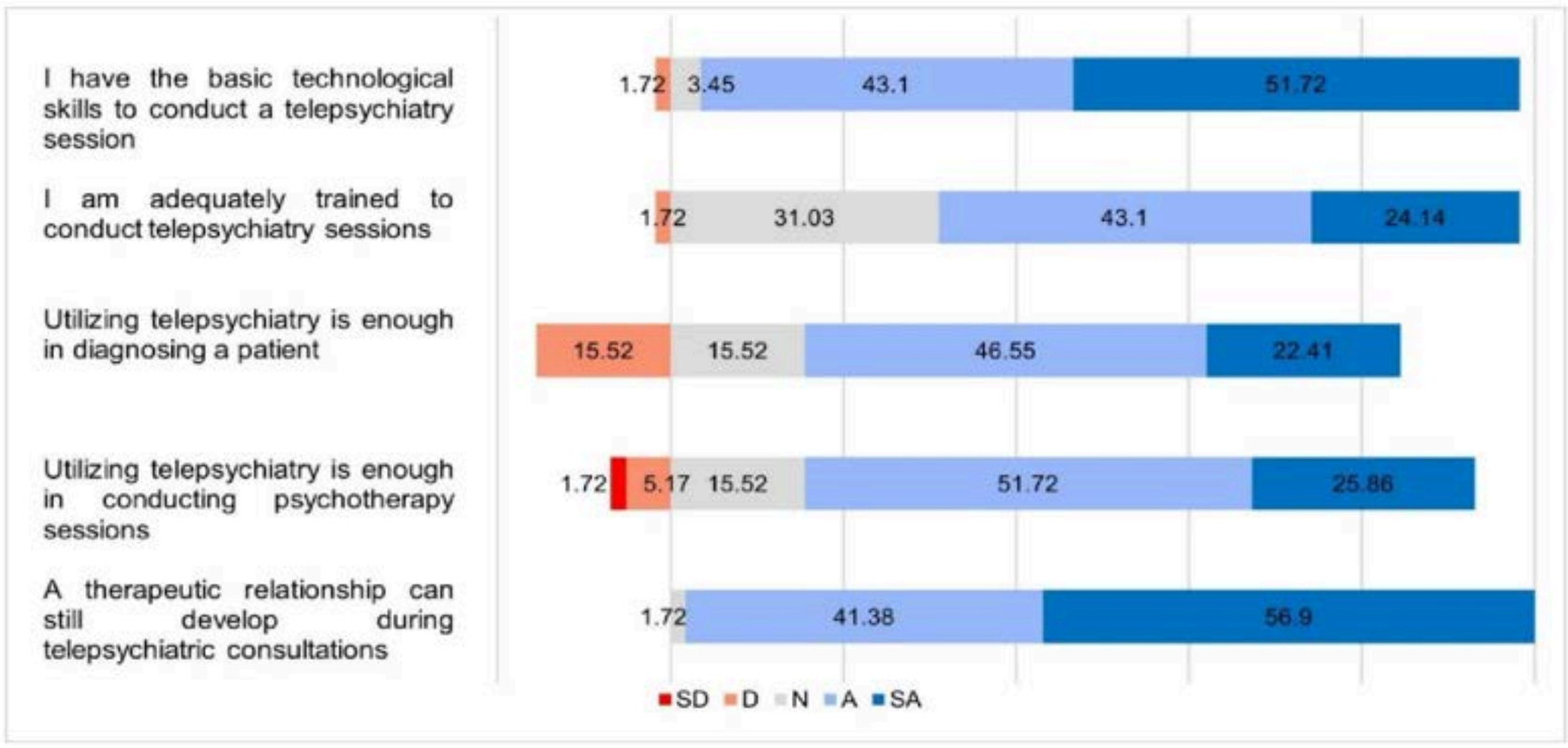

Figure 2. Attitudes and confidence towards telepsychiatry

Around half of the respondents “agree” that they are confident in being adequately trained to conduct telepsychiatry sessions (43.1%), in telepsychiatry being enough for diagnosing a patient (46.55%), and for conducting psychotherapy sessions (51.72%). (Figure 2)

More than half “strongly agree” that they are confident in having basic technological skills to conduct a telepsychiatry session (51.72%), and in still being able to develop a therapeutic relationship during telepsychiatric consultations (56.9%). (Figure 2)

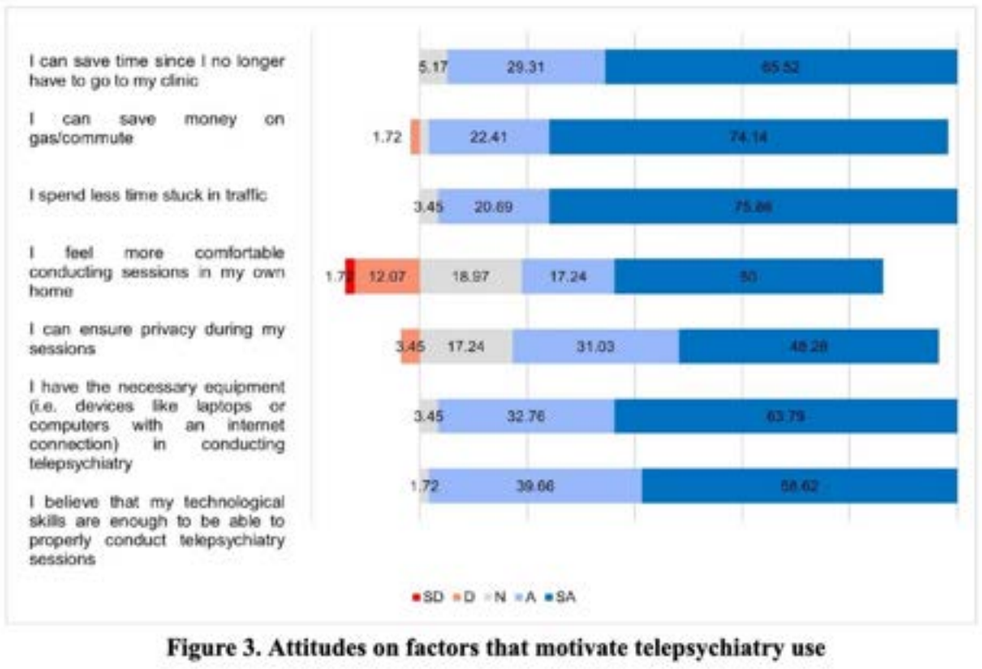

Figure 3. Attitudes on factors that motivate telepsychiatry use

When asked about factors that motivate telepsychiatry use, more than half of the respondents (65.52%) “strongly agree” about being able to save time since they no longer have to go to their clinics, and nearly three fourths "strongly agree” with being able to save money on gas/commute (74.14%) and spend less time stuck in traffic (75.86%). (Figure 3)

Around half “strongly agree” that they feel more comfortable conducting sessions in their own homes (50%), can ensure privacy during sessions (48.28%), have the necessary equipment in conducting telepsychiatry (63.79%), and believe that their technological skills are enough to be able to properly conduct telepsychiatry sessions (58.62%). (Figure 3)

Among all the listed telepsychiatry platforms, respondents use Viber (62.07%), Doxy.me (56.9%), and Zoom (48.28%) the most. (Table 6)

When asked about their practices on platform delivery, more than half said they used it for EMR (56.9%), while nearly three fourths said they did so for the setting of appointment dates (72.41%), issuance of prescriptions (70.69%), Issuance of laboratory requests (72.41%), and issuance of medical certificates or clinical abstracts (70.69%). Two thirds said that they did not do so for fees and payment schemes (65.52%). (Table 7)

Table 7. Practices on platform delivery (N = 58)

	No		Yes	
	Frequency	**Percentage (%)**	**Frequency**	**Percentage (%)**
Setting of appointment dates	16	27.59	**42**	**72.41**
Fees and payment schemes	**38**	**65.52**	20	34.48
EMR (electronic medical records)	25	43.1	**33**	**56.9**
Issuance of prescriptions	17	29.31	**41**	**70.69**
Issuance of laboratory requests	16	27.59	**42**	**72.41**
Issuance of medical certificates or clinical abstracts	17	29.31	**41**	**70.69**

When asked about what they do when encountering technical problems for almost 15 minutes during the session, half said that they would switch to another platform (51.72%). Majority of the respondents required patients to turn on their camera video (96.55%), likewise all see their patients with the video camera on. Around half said that they did not provide the patient with a teleconsultation summary afterwards (56.90%). Many respondents said they used email to send prescriptions to patients (63.79%) but provide a patient phone number for patients to reach them in between sessions (53.45%). (Table 8)

When asked how respondents ensured proper eye contact with their patients, respondents kept their screen at eye level by positioning the camera or screen or positioning where they aimed to look. Some respondents mention modifying and positioning the screen itself.

Respondents mentioned looking at the camera or the screen with the patient or taking time to do both. Other respondents mentioned making sure that both cameras were on and calling attention or instructing patients to focus. Some respondents say that proper eye contact is “difficult” and something that cannot be ensured. (Table 9)

Building the therapeutic alliance is done through different techniques. Respondents mention taking a non-judgmental, empathic, and supportive stance. In particular, others focus on building rapport during the first session, which is done through “empathic listening, being respectful and nonjudgmental.” Some respondents said that they focus on getting to “know the patient first,” and likewise start by

Table 8. Telepsychiatry practices

	Frequency	Percentage (%)
Solutions when encountering technical problems for almost 15 minutes during the session Attempt to troubleshoot	17	29.31
Switch to another platform	**30**	**51.72**
Cancel the session	0	0
Reschedule session to a later time or date	11	18.97
Requires patients to turn on their camera video No	2	3.45
Yes	**56**	**96.55**
Sees patients with camera video on No	0	0
Yes	**58**	**100**
Provide the patient with a teleconsultation summary afterwards No	**33**	56.90
Yes	25	43.10
Methods of sending prescriptions to the patients The e-prescription is sent via the platform I use	9	15.52
The e-prescription is sent via email	**37**	**63.79**
The e-prescription is sent via a messaging app (e.g. Viber, Telegram WhatsApp, etc.)	19	32.76
Methods on how patients can reach in between sessions The patient would need to wait for the next appointment	0	0
I give my personal number to my patients	8	13.79
I give my patient phone number to my patients	**31**	**53.45**
My patient can reach me through my secretary	17	29.31
Others – Email, Viber	8	13.79

Table 9. Codes within the categories of the methods of ensuring proper eye contact with the patient (open ended)

Keeping screen eye level ● Positioning the camera or screen at eye level ● Positioning where to look
Looking straight to the camera or screen ● Looking at the camera ● Looking at the screen or patient ● Looking at the camera and screen ● Mutual looking at the camera ● Appropriately looking at camera
Making sure camera is on for both patient and doctor ● Camera on ● Checking video
Instructing the patient or calling their attention ● Calling attention ● Giving instructions
Proper eye contact cannot be ensured
Having the video occupy the whole screen/modifying screen ● Positioning screen ● Modifying screen ● Positioning and modifying screen

introducing one's self first." Small talk is used as well. (Table 10)

Some respondents say that sessions are no different from pre-pandemic or in-person consults. During sessions, respondents maintain good eye contact, ensure the confidentiality of information, and make sure that their patients are comfortable through "building a safe space for the patient." Many respondents discussed proper communication and "active" or "attentive" listening, which is done by "allowing the patient to talk about his/her concern" and "showing genuine interest." Respondents use communication tools, such as the "psychiatric interview," "both verbal and nonverbal cues." "warm tone of voice and affect," "listening well," among others. (Table 10)

The history taking is done through the session, along with attending to their "most pressing concern." Psychotherapy techniques are used, therapy goals are set, and a thorough evaluation and summary of findings are made, along with a treatment plan. (Table 10)

Scheduling can be done by the patient, secretary, respondent, or a combination of the three. Respondents who inform their patients of the next session's date often do so during the session or before their session ends, which is similar to those who agree upon the date with their patients. Scheduling is often done using RADISH or the telepsychiatry platform. Communication with the patient is maintained through various messaging apps, SMS, and verbal reminders. (Table 11)

Respondents were asked about how they dealt with patients who needed to be referred for legal assistance, such as victims of violence against women. Respondents were asked about how they ensured that their endorsement was adequate, and that their patients were endorsed to the right offices. Many respondents said that they would send them to the Women's Desk, Child Protection Unit, and other appropriate services. Some would also prepare a clinical abstract or endorsement letter with clinic details. A respondent said that they would inform the patients of their "legal right and how they can avail of these services." Other respondents would "leave it to the patient" but provide documentations and advice as well on how to seek legal assistance. (Table 12)

Table 10. Codes within the categories of the methods on building the therapeutic alliance during the first telepsychiatry session with a new patient (open-ended)

Non-judgmental, empathic, and supportive stance • Being non-judgmental • Being empathic and supportive
Focusing on building rapport during the first session • Building rapport in general • Techniques for rapport
Ensuring confidentiality
Making sure the patient is comfortable • Ensuring comfort • Techniques for ensuring comfort
No difference from pre-pandemic sessions
Using small talk or talking about previous experiences with telemedicine
Getting to know the patient first
Introducing myself first
Maintaining good eye contact
Proper communication and listening • Communication and conversation • Listening • Attitudes • Communication techniques • Communication tools
Showing genuine interest and full engagement
Proceeding with history taking and attending to more pressing concern • History taking • Attending to concerns • Psychotherapy techniques • Psychiatric interview • Setting therapy goals • Thorough evaluation and summary of findings, management, treatment

Table 11. Codes within the categories of the processes of scheduling the next telepsychiatry sessions (open-ended)

Scheduling: Patient schedules session
Scheduling: Inform the patient of the date of the next session • In general • After the session • During the session
Scheduling: agreed upon with the patient • In general • After the session • During the session
Communication: messaging them verbally or via SMS or other messaging apps • Messaging apps • SMS • Verbal
Scheduling platforms • Manual • Using RADISH • Using the telepsychiatry platform
Informing the patient when the next session would be but scheduling is c/o secretary
Queued until with vacancy
Availability
Date is included in the prescription and instructions after the session

Table 12. Codes within the categories on the processes of dealing with a patient who needs to be referred for legal assistance; Process on making sure that your endorsement in adequate and that the patient is endorsed to the right office (open-ended)

Referral to the hospital's Women's Desk or Child Protection Unit in general / through a call, email or message / referral letter • In general • Documents prepared
Referral using the platform • Using the platform in general • Using the platform with endorsements
Referral outside
Advise them of their legal right to file a case and instruct them how they can avail of legal services
Advise a consult with a lawyer or public attorney
Instruct patient or advise patient on further action/s • Up to the patient • Give patient instructions/advice on documenting/reporting • Give patient instructions/advice on where to go
Non-acceptance of cases with legal implications
No experience yet or N/A • N/A • Not yet encountered • Do not know how
Other

More than half of the respondents (53.45%) obtain verbal informed consent. Majority only obtain consent on the first session (86.21%), which mostly includes the following: nature and purpose of the telemedicine/telepsychiatry consultation (94.83%), potential risks or limitations such as the inability to perform a physical examination, or technical problems that may arise in the session such as poor connection, device limitations, etc. (82.76%), and Data Privacy issues such as informing the patient if the session will be recorded (79.31%). (Table 13)

Table 13. Practices on informed consent

	Frequency	Percentage (%)
Methods of obtaining informed consent		
Written	16	27.59
Electronically or voice recorded	13	22.41
Verbal consent	**31**	**53.45**
Others	2	3.45
Timing of obtaining informed consent		
During the first session only	**50**	**86.21**
Every telepsychiatry session	8	13.79
Inclusions of informed consent		
Nature and purpose of the telepsychiatry consultation	**55**	**94.83**
Benefits (to ensure continuing care despite limitations of not being able to do face-to-face consultations)	45	77.59
Potential risks or limitations such as the inability to perform a physical examination, or technical problems that may arise in the session such as poor connection, device limitations, etc.	**48**	**82.76**
Price/fee for service and also, if the patient will be charged through a platform	18	31.03
Data Privacy issues (in compliance to the Data Privacy Act of 2012 or Republic Act 10173) such as informing the patient if the session will be recorded	**46**	**79.31**
Rights and Responsibilities of the Patient and of the Health Care Provider (Psychiatrist)	34	58.62
Means of Communications as Back-up or during Off-Hours	30	51.72
Others	5	8.62

Table 14. Practices on obtaining consent in telepsychiatry

	No		Yes		Not Applicable	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
Asking for contact details	4	6.9	**53**	**91.38**	1	1.72
Psychiatric interview	4	6.9	**54**	**93.1**	0	0
Documentation of session	7	12.07	**48**	**82.76**	3	5.17
Recording of session	7	12.07	**34**	**58.62**	17	29.31
Storing of records	14	24.14	**39**	**67.24**	5	8.62

When asked about practices on obtaining consent, majority of the respondents said that they did for the following: asking for contact details (91.38%), the psychiatric interview (93.1%), for documentation of sessions (82.76%), for recording of sessions (58.62%), and for storing of records (67.24%). (Table 14)

All respondents said they documented telepsychiatry sessions through note-taking. Among items listed, all respondents documented the date and time, subjective findings, objective findings, assessment, and plan. (Table 15)

Half of the respondents (51.72%) said that their initial consults usually last between 45 to 59 minutes, while half (50%) say follow-ups last for 30 to 44 minutes

In a day, majority of the respondents see 1 to 5 patients on their first consult (84.48%), while more than half (56.90%) do so for those on follow-up visits, and around a third see more than 5 for follow-up (36.21%). (Table 16)

Table 15. Practices on session documentation

	Frequency	Percentage (%)
Telepsychiatry sessions documented through note-taking		
No	0	0
Yes	**58**	**100**
Items included on session documentation		
Date and time	**58**	**100**
Duration of the session	24	41.38
Attendees present	42	72.41
Limitations and measures done (Stating if there are connectivity or technical problems that arose during the session, and what measures were done to address those)	32	55.17
Subjective findings	**58**	**100**
Objective findings	**58**	**100**
Assessment	**58**	**100**
Plan	**58**	**100**
Others	5	8.62

More than a fourth of respondents would be in formal or professional attire (27.59%) or smart casual (25.86%) during sessions. (Table 17)

Table 16. Practices during consultation session

	First time		Follow-up	
Usual duration of consult sessions	**Frequency**	**Percentage (%)**	**Frequency**	**Percentage (%)**
<30	0	0	**7**	**12.07**
30-44	5	8.62	**29**	**50**
45-59	**30**	**51.72**	18	31.03
60-74	**19**	**32.76**	4	6.9
≥75	**4**	**6.9**	0	0
Average number of patients seen through telepsychiatry in a day	**Frequency**	**Percentage (%)**	**Frequency**	**Percentage (%)**
0	**3**	**5.17**	0	0
1-5	**49**	**84.48**	33	56.90
>5	4	6.90	**21**	**36.21**
11–15	0	0	**3**	**5.17**
Depends	**2**	**3.45**	1	1.72

Table 17. Usual attire during sessions

	Frequency	Percentage (%)
Smart casual attire	15	25.86
Formal or professional attire	**16**	**27.59**
Usual pre-pandemic clinic attire	12	20.69
Any collared shirt/blouse	15	25.86

Table 18. Methods on dealing with a patient who expressed active suicidal ideations

	Frequency	Percentage (%)
Advise to go to the nearest ER and recommend admission	**36**	**62.07**
Inform family members or designated support person	**35**	**60.34**
Crisis intervention and ensuring safety plan is followed	8	13.79
Explore suicidality	10	17.24
Close follow up and monitoring	2	3.45
No experience yet	1	1.72
Others	3	5.17

When asked about how respondents would deal with a patient who expressed active suicidal ideations, more than half (62.07%) would advise patients to go to the nearest ER and would recommend admission. Many respondents (60.34%) would also inform the patient's family members or designated support person of their suicidal ideations. Some respondents said that they would explore the patient's suicidality (17.24%). (Table 18)

When asked how respondents would deal with a patient who expressed active homicidal ideations, half would advise the patient to go to the nearest ER and would recommend admission. Half of the respondents would also

inform their family members or designated support person. Some respondents (12.07%) say that this is similar to handling patients with active suicidal ideations.

Some respondents said that they would try to explore the nature, lethality, and plan (8.62%) while others would try to verbally de-escalate (3.45%) the patient. Two (3.45%) would also try to inform the potential victim. (Table 19)

Table 19. Methods on dealing with a patient who expressed active homicidal ideations

	Frequency	Percentage (%)
Advise to go to the nearest ER and recommend admission	**29**	**50**
Inform family members or designated support person	**29**	**50**
Inform potential victim	2	3.45
Verbal de-escalation	2	3.45
Explore the nature, lethality and plan	5	8.62
Opt to see the patient face to face	1	1.72
Similar with handling patients who have active suicidal ideations	7	12.07
No experience yet	2	3.45
Other	5	8.62

When respondents were asked about how they would refer patients to other specialties or services, almost half (44.83%) would do so through RADISH/OCRA, the hospital's EMR and scheduling platform. Some (15.52%) also mention including a referral letter sent through email and others messaging apps and platforms or providing the contact details of the specialist (12.07%). (Table 20)

Table 20 Process on referring the patient to other specialties/services

	Frequency	Percentage (%)
Using the RADISH/OCRA (hospital's EMR and scheduling platform)	**26 (44.83)**	**44.83**
Instructing the patient and asking them to choose the specialist	2 (3.45)	3.45
Instructing the patient and recommending specialist/s for consultations	5 (8.62)	8.62
Providing a referral letter, via email/messaging apps/platform	9 (15.52)	15.52
Giving contact details of specialist	7 (12.07)	12.07
Referral: via platforms (email, text, and/or other messaging apps) or secretary	4 (6.9)	6.9
Others	5 (8.62)	8.62

DISCUSSION

Despite telepsychiatry only being developed in the 1980s8, the provision of care through electronic means has become now more affordable as a result of advances in technology, which have also simplified and streamlined the communication process. The progression of technology over the course of the years has connected the vast majority of individuals in the Philippines, and the proliferation of social networking among Internet users is largely attributable to the Internet's influence.

The aim of the study is to investigate the knowledge, attitudes, and practice of tele-medicine in field of Psychiatry in a tertiary hospital. The outcomes of this investigation were very congruent with the findings of Glover9 et al. Their study explored the integration of telepsychiatry into postgraduate medical education, with findings that indicate positive outcomes, highlighting increased accessibility and flexibility for learners. Participants reported high satisfaction with telepsychiatry sessions, emphasizing its effectiveness in facilitating clinical education. The study suggested that telepsychiatry can enhance the overall educational experience for postgraduate medical students and trainees, providing a valuable avenue for connecting with mental health services and training opportunities. Their findings emphasized the prospective advantages associated with the integration of telepsychiatry into medical education curricula, akin to the outcomes observed in the present study.

Only three respondents reported formal training or didactics on telepsychiatry yet more than half of the respondents expressed an interest in telepsychiatry and considered it to be relevant. Despite this, the fact that telepsychiatry operations were documented and that observational opportunities existed is a very interesting development. In a 2011 study of 183 psychiatry residency programs in the United States, Hoffman and Kane2 discovered that relatively few schools offered a curriculum in telepsychiatry, despite the fact that 72 percent of resident respondents were interested and very interested in telepsychiatry. This was consistent with respondents' responses in previous research conducted by Glover9 and colleagues emphasizing the potential benefits of integrating telepsychiatry into medical education curricula. They conducted a survey of 485 resident and fellowship programs in psychiatry in the United States. Moreover, two-thirds of the 283 survey respondents were interested in telepsychiatry. Although only fifty percent of respondents had clinical experience to telepsychiatry, trainees saw telepsychiatry as a significant aspect of training. Over half of the respondents indicated that their training programs lacked any didactic instruction in telepsychiatry. Unsurprisingly, individuals with clinical experience expressed more interest in telepsychiatry. The majority of respondents reported a single encounter or less than six hours of telepsychiatry encounters with multiple patients. In contrast to the Glover9

report, the Hoffman and Kane2 survey only received a 25% response rate from program directors. Less than half of respondents reported that their program's residents were involved in telepsychiatry (formal curriculum or informal clinical experience), and only 26% reported having a formal curriculum in telepsychiatry. However, similar to the Glover9 study, rural programs were more likely to be exposed to telepsychiatry. Notably, the vast majority of program directors expressed interest in receiving a sample telepsychiatry curriculum.

The survey questions lacked discrimination between ongoing initiatives and those that had been completed in the past. A noteworthy observation is that a significant portion of respondents, who reported the presence of an initiative, likely derived their information from this institution. An intriguing discovery is that preceding the onset of the COVID-19 pandemic, young psychiatrists in the Philippines had already demonstrated an interest in telepsychiatry, recognizing its importance and utility10. Nevertheless, despite this inclination, only a minority believed that telepsychiatry should be integrated into the residency training curriculum, and less than half of the participants in Quiring's study expressed any concrete intention to incorporate it into their clinical practice10. In contrast, the current study, conducted during the pandemic, reveals a shift in perspective among psychiatrists and trainees, who now consider telepsychiatry an acceptable method for diagnosing and treating patients, as well as conducting therapy. Furthermore, a majority expressed a likelihood of continuing to utilize telepsychiatry post-pandemic, attributing this inclination to its accessibility and convenience.

Over half of respondents believed doctor-patient interaction is privileged and not susceptible to court examination. Most (98.28%) said "false" when asked whether session documentation was no longer necessary, and more than a third (39.5%) said "false" when asked if civil actions can be filed under the Data Privacy Act of 201211. Most psychiatrists (94.83%) said "yes" when asked if they had to offer personal phone numbers, while three said "false." The inaccuracies identified among respondents in the knowledge segment of the questionnaire predominantly pertained to legal considerations associated with telepsychiatry practice. This underscores the imperative for a structured training regimen encompassing comprehensive coverage of the legal intricacies and technical aspects inherent in conducting psychiatric sessions via virtual platforms.

Prior to the pandemic, when telepsychiatry was not deemed a requisite, Quiring's study indicated that, when queried about their willingness to utilize it, less than half of the respondents conveyed a readiness to do so, while nearly half remained indecisive10. This paradigm, however, underwent a notable shift during the pandemic, as evidenced by the present study, wherein a majority of respondents now assert that they possess adequate training to conduct telepsychiatry sessions and exhibit confidence in their fundamental technological competencies for such endeavors. Furthermore, a substantial majority expresses a keen interest in persisting with telepsychiatry beyond the pandemic, with many acknowledging its acceptability as an alternative method for conducting psychiatric interviews, diagnosing patients, administering treatment, and facilitating psychotherapeutic sessions.

Limitations & Recommendations

The findings of this research cannot be generalized or used as the basis for any kind of statistical test of correlation because fewer than a quarter of the people who were given the survey actually filled it out and answered the questions. This study collected its data over the course of just one week, and it relied entirely on responses to an online survey that was mostly distributed by directors of educational institutions. There is a possibility that some of the people who were sent the invitation message have not yet seen it, or that they have been too busy to pass it forward. Furnishing physical copies of the questionnaire could have been a viable alternative to mitigate potential bias against respondents with a preference for traditional methods, thus ensuring impartiality regardless of technological proficiency.

It is possible that the response rate was significantly impacted by the fact that the survey questionnaire was sent in two stages. Another possibility is to lengthen the time period during which we are collecting data and to think about doing the survey in person.

As a result, there would be an adequate amount of data to investigate the link between the various descriptive characteristics and exposure, interest, and intent to use of telepsychiatry, in addition to the connection between these three variables. In addition to this, increasing the number of psychiatrists to include all trainees is another way that this objective may be accomplished.

A more in-depth study analyzing the various factors influencing the utilization of telepsychiatry among all practicing psychiatrists in the country should be carried out in order to better capture the telepsychiatry landscape in the Philippines from the perspective of the providers. This will allow for a better understanding of the telepsychiatry landscape in the Philippines from the providers' point of view.

A key limitation of this study is, in a manner analogous to that of the study conducted by Glover9 et al., the absence of qualifying for the variable "interest level." Due to the fact that the same question was used for all three iterations of this variable, it was not possible to determine whether the respondent's interest level was pre-exposure, immediately post-exposure, or current. Despite the fact that this was taken into consideration, it was decided that no questions would be changed because doing so would have resulted in a more challenging survey, which might have dissuaded respondents from completing it. To address this, however, future studies can refine the variable measurement. Specifically, a longitudinal study design can be implemented to capture changes in interest levels over time, providing a more comprehensive understanding of how exposure influences interest. In addition, pilot testing can also be done to assess the feasibility of introducing additional questions or modifying existing ones to capture the temporal aspect of interest levels. This can help ensure that the refined survey remains manageable for respondents while addressing the limitation.

Despite the fact that this study had its limitations, it was the first research of its kind to be conducted in the Philippines. Because of the growing interest in telepsychiatry, a study such as this one could be the catalyst for more researches that could have an impact on the way telepsychiatry is taught, practiced, and even legislated.

Conclusion

In conclusion, this research aimed to comprehensively investigate the knowledge, attitudes, and practices of psychiatrists and psychiatrists in training towards telepsychiatry within a tertiary training hospital. The study unveiled valuable insights into the dynamics of telepsychiatry adoption, shedding light on the evolving perspectives of healthcare professionals before and during the COVID-19 pandemic. Notably, the findings highlighted a paradigm shift in the acceptance and utilization of telepsychiatry, with an increasing number of respondents expressing confidence in their training and technological competencies.

Despite the limited formal training reported by respondents, a significant interest in tele-psychiatry was observed, underscoring the need for structured educational programs encompassing legal intricacies and technical aspects. The observed discrepancies in knowledge regarding legal considerations emphasize the necessity for targeted training initiatives.

Furthermore, the study identified a substantial interest in continuing telepsychiatry beyond the pandemic, attributing this inclination to its perceived accessibility and convenience. This evolving perspective underscores the transformative potential of telepsychiatry in shaping the future landscape of psychiatric practice. The study emphasized that the creation of future psychiatric leaders who are knowledgeable and at ease with technology within the context of an integrated practice paradigm will offer stability to the field of Psychiatry.

In light of these findings, it is recommended that healthcare institutions consider incorpo-rating formal telepsychiatry training into residency programs to address knowledge gaps and enhance competence. This study contributes valuable insights to the ongoing discourse on telepsychiatry, emphasizing its evolving role in psychiatric education and practice, with implications for future healthcare policy and training initiatives.

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