ACHSM Asia-Pacific Journal of Health Management

RESEARCH ARTICLE

TELE-MEDICINE EFFECT ON PSYCHIATRIC PATIENT'S EXPERIENCE IN A UAE OUTPATIENT DEPARTMENT

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ABSTRACT

BACKGROUND:

Mental health disorders affect approximately one in eight individuals globally, with anxiety and depression prevailing. Tele-mental health (TMH), including telepsychiatry, telepsychology, and tele behavioral health, has emerged as a promising solution to accessibility issues and stigma, especially post-COVID-19.

OBJECTIVES:

This study aims to explore the impact of Tele-medicine on psychiatric patients' experiences in outpatient settings, focusing on satisfaction, perceived stigma, compliance, and service preferences.

METHODS:

A comparative cross-sectional design enrolled 232 psychiatric patients from the Dhafra Family Medicine Center, Abu Dhabi, between June and July 2023. Participants were randomly assigned to Tele-medicine (n=122) or in-person consultations (n=110). Data were collected using a Telepsychiatry Services Survey and analyzed using SPSS.

RESULTS:

This research examines the influence of telemedicine on the experiences of psychiatric patients, showcasing notable disparities between groups. Specifically, individuals engaged in tele-mental health services demonstrated significantly elevated satisfaction levels (M=68.22±11.16) compared to those attending in-person consultations (M=58.68±14.22), alongside notably reduced perceptions of stigma (M=7.56±2.10 vs. M=10.35±1.77) and stronger preferences for services (M=13.52±1.32 vs. M=12.12±2.28), all with $p<0.001$.

CONCLUSION:

Tele-medicine significantly enhances psychiatric outpatient care experiences, addressing barriers like stigma and accessibility, and improving satisfaction and compliance.

KEYWORDS
mental health, telemedicine, outpatient care, patient satisfaction, stigma, patient compliance, preferences, psychiatric patients, comparative cross-sectional design, community health

INTRODUCTION

Mental health disorders, defined as a significant impairment in an individual's intellect, emotional control, or behavior, often resulting in distress, functional disability, or self-harm risk [1]. The prevalence of mental health issues globally is staggering, affecting approximately one in eight individuals, or 970 million people worldwide [2]. Among these conditions, anxiety and depressive disorders prevail.

Despite numerous prevention and treatment strategies, many individuals with mental health conditions encounter barriers in accessing services. Stigmatization, discriminatory practices, and human rights violations pose significant obstacles to receiving proper care [1], leading to social exclusion and hindering treatment [3]. These challenges encompass emotional, cognitive, and behavioral aspects, addressed through pharmaceutical and psychosocial support [4].

A systematic review spanning 2005 to 2015 identified various factors contributing to medication non-adherence among individuals with mental health conditions [5]. Tele-medicine or Telehealth, as defined by the Health Resources and Services Administration [6], emerges as a promising solution to bridge the accessibility gap in mental healthcare. Its application to severe mental illnesses has shown viability, acceptability, and effectiveness comparable to in-person care [7], potentially reducing healthcare costs and enhancing resource accessibility [8].

Tele mental health (TMH) refers to the use of Telehealth in mental healthcare, which encompasses telepsychiatry, telepsychology, and tele behavioral health [9]. Applications of current TMH include provider collaboration, education, treatment, monitoring, and mental health assessment [10]. It can be provided by various professionals, including psychologists, psychiatrists, nurse practitioners, counselors, and social workers [10]. TMH has been demonstrated to help address geographic obstacles to mental health treatments by extending the reach of the current mental health providers. The evolution of (TMH) encompasses various modalities, including individual therapy, psychopharmacologic treatment, and mobile applications, addressing a spectrum of mental health issues [11]. Numerous studies have demonstrated its effectiveness across diverse conditions [12-19], further highlighted by the COVID-19 pandemic's risks to traditional consultations [11].

Psychiatric patients encounter multifaceted challenges including stigma, limited accessibility, and treatment compliance variations. Telemedicine offers promise in addressing these barriers, yet its correlation with various factors remains inadequately explored [20]. Understanding its impact on patient satisfaction, stigma, service preferences, and compliance in outpatient department (OPD) settings is crucial.

This research aims to fill the gap in understanding telemedicine's effects on psychiatric patient experiences, particularly in the UAE. By exploring satisfaction, stigma, service preferences, and compliance, it can shape telemedicine practices, improve mental healthcare delivery, reduce stigma, and enhance patient satisfaction.

This study investigates telemedicine efficacy in psychiatric follow-up appointments in OPD settings, assessing satisfaction, stigma, service preferences, and compliance. It aims to discern significant differences in these factors among patients with varying socio-demographic characteristics. The study objectives include examining differences between telemedicine and in-person visits on satisfaction, stigma, service preferences, and compliance.

METHODS

STUDY DESIGN AND SAMPLE

This comparative cross-sectional study aimed to assess the effectiveness of Tele-medicine visits for psychiatric patients in outpatient departments (OPD). The study was conducted at the psychiatry clinic within the Dhafra Family Medicine Center (DFMC) outpatient department, located in Al Dhafra Region, Madinat Zayed, Abu Dhabi, United Arab Emirates. The target population comprised all psychiatry clinic patients, with the accessible population consisting of DFMC psychiatry clinic patients or their caregivers who visited it during the data collection period from June to July 2023.

POPULATION AND SAMPLING STRATEGY

Convenience sampling was utilized to recruit participants, with inclusion criteria encompassing patients over 18 years who visited the psychiatry clinic, proficiency in Arabic or English, and the ability to understand survey questions. Exclusion criteria included first-time visitors and individuals with cognitive impairments or language barriers hindering questionnaire comprehension. The sample size was determined using the formula: $n = [z^2 * p * (1 - p)] / e^2$, with adjustments made for potential data issues, resulting in a final sample size of 240 patients.

DATA COLLECTION TOOLS

The primary data collection instrument utilized in this study was the Client Satisfaction and Experience Survey for Telepsychiatry Services. Bilingual survey (Arabic and English language). This survey was meticulously crafted to comprehensively assess patients' perceptions and experiences regarding telemedicine visits for psychiatric follow-up appointments. Adapted from established tools developed by (21-23), the questionnaire underwent rigorous validation processes to ensure its reliability and validity. The survey consisted of 32 questions categorized into four domains:

1. Socio-demographic Variables: This domain encompassed seven questions aimed at capturing essential demographic information, including age, gender, education level, employment status, and marital status.
2. Patient Satisfaction: The second domain included 18 questions designed to gauge patients' satisfaction levels with telemedicine visits. These questions were measured on a 5-point Likert scale, ranging from "strongly disagree" to "strongly agree." Patients were asked to provide feedback on various aspects of their telemedicine experience, such as the quality of communication with healthcare providers, the convenience of scheduling appointments, and overall satisfaction with the service received. Total satisfaction scores were calculated based on the sum of responses to the 18 satisfaction-related questions. Scores were categorized into two levels: low satisfaction (score < 50th percentile) and high satisfaction (score > 50th percentile).
3. Stigma Levels: The third domain comprised three questions intended to assess patients' perceptions of stigma associated with receiving psychiatric care through telemedicine. Like the patient satisfaction domain, these questions were measured on a 5-point Likert scale, with responses ranging from "strongly disagree" to "strongly agree". Total stigma levels were determined by summing responses to the three stigma-related questions. Similar to satisfaction scores, stigma levels were categorized into low stigma (score < 50th percentile) and high stigma (score > 50th percentile).
4. Service Preferences: The fourth domain included four questions aimed at exploring patients' preferences regarding the mode of healthcare delivery for psychiatric follow-up appointments. Patients were asked to indicate their level of agreement with statements related to their preference for telemedicine visits versus in-person appointments, as well as factors influencing their choice. Total service preference scores were calculated by summing responses to the four service-related questions. Scores were categorized into two levels: low preference (score < 50th percentile) and high preference (score > 50th percentile).

Prior to full-scale data collection, a pilot study was conducted to evaluate the feasibility, usability, and readability of the survey instrument. Overall, the Client Satisfaction and Experience Survey for Telepsychiatry Services served as a robust tool for gathering comprehensive data on patients' perspectives and preferences regarding telemedicine visits for psychiatric follow-up appointments. Through meticulous development, validation, and refinement processes, the survey instrument provided valuable insights into the effectiveness and acceptability of telemedicine services in the psychiatric care setting.

ETHICAL CONSIDERATIONS

Ethical approval was obtained from the Institutional Review Board (IRB) at Al al Bayt University and the Al Dhafra Hospital. Informed consent was obtained from all participants, ensuring comprehension of study objectives, voluntary participation, and confidentiality maintenance. Measures were implemented to mitigate participant discomfort or anxiety.

DATA COLLECTION PROCEDURE

After obtaining ethical approval, the principal investigator initiated contact with the director of the Dhafra Family Medicine Center (DFMC) outpatient department to facilitate access to potential participants and obtain permission to conduct the study on-site. A meeting was arranged to discuss the study's purpose, procedures, and ethical considerations with relevant stakeholders.

Psychiatry clinic patients scheduled for follow-up appointments at the DFMC outpatient department were identified as potential study participants. Eligibility criteria, including age, language proficiency (Arabic, English), and appointment type (Tele-medicine or in-person), were applied to screen patients. Those meeting the inclusion criteria were invited to participate in the study.

Prior to data collection, participants were provided with detailed information about the study objectives, procedures, potential risks, and benefits. Informed consent was obtained from willing participants, either through written consent forms for in-person participants or via digital consent forms for Tele-medicine participants, which were sent through messaging platforms such as WhatsApp.

Participants who provided consent were administered the Client Satisfaction and Experience Survey for Telepsychiatry Services. For Tele-medicine participants, the survey was delivered electronically, allowing them to complete it remotely at their convenience. In-person participants received hard copy surveys and were guided through the questionnaire by trained research personnel.

Data collection sessions were conducted during weekdays from Monday to Friday over a specified period (June to July 2023) to accommodate the availability of participants. To minimize bias, data collection sessions were scheduled at various times throughout the day to capture a diverse range of patients.

Participants were assured of the confidentiality and anonymity of their responses. Each participant was assigned a unique identification number to anonymize their data. Measures were taken to ensure that participants completed the survey in a private setting to maintain confidentiality.

Throughout the data collection process, quality assurance measures were implemented to ensure the integrity and validity of the data. Research personnel were trained to administer the survey consistently and address any participant queries or concerns. Additionally, periodic checks were conducted to verify the accuracy and completeness of the collected data.

Completed surveys were collected, coded, and entered into a secure electronic database for storage and analysis. Strict data security protocols were followed to protect participants' confidentiality and comply with data protection regulations. Access to the dataset was restricted to authorized research personnel only. Continuous monitoring and follow-up were conducted to track participant responses, address any issues or discrepancies, and ensure adherence to ethical guidelines throughout the study period. Any concerns raised by participants were promptly addressed to maintain trust and compliance.

By adhering to a systematic and ethical data collection procedure, the study was able to gather comprehensive and reliable data on patients' experiences and preferences regarding Tele-medicine visits for psychiatric follow-up appointments. This rigorous approach ensured the validity and integrity of the study findings, contributing valuable insights to the field of telepsychiatry and healthcare delivery.

STATISTICAL ANALYSES

Data analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 28. Initially, descriptive statistics provided a snapshot of participant demographics and key variables. Then, inferential tests like t-tests and ANOVA were used to compare outcomes between Tele-medicine and in-person attendance groups, examining factors like satisfaction, stigma perception, and service preferences. Correlation analyses explored relationships between variables, while regression analysis investigated how demographic factors influenced outcomes. Rigorous checks ensured the validity of findings, with significance set at 0.05. Overall, the analysis shed light on Tele-medicine's role in psychiatric care.

RESULTS

SOCIODEMOGRAPHIC CHARACTERISTICS

A total of 232 psychiatric patients participated in the study. Among them, 52.6% (n=122) engaged through telemedicine, while 47.4% (n=110) attended in-person psychiatric clinics. Most participants were female (56.9%, n=132), predominantly from Madinat Zayed (74.1%, n=172). The age distribution varied, with the highest proportion (38.8%, n=90) falling in the 31-43 years age group. Most participants were married (61.2%, n=142), had a secondary education level or lower (44.4%, n=103), and were employed (58.2%, n=135), with a monthly income exceeding 21,000 AED* (39.7%, n=92) (Table 1).

TABLE 1: PSYCHIATRIC PATIENTS' SOCIO-DEMOGRAPHICAL CHARACTERISTICS N=232

Variable	Category	N (%)
Groups	Tele-medicine	122 (52.6%)
	In-person clinic	110 (47.4%
Gender	Female	132 (56.9%)
	Male	100 (43.1%)
Address	Madinat Zayed	172 (74.1%)
	Other towns	60 (25.9%)
Age groups	18-30years	76 (32.8%
	31-43years	90 (38.8%)
	44-56years	39 (16.8%)
	>57years	27 (11.6%)
Marital status	Single	60 (25.9%)
	Married	142 (61.2%)
	Others (divorce/widow)	30 (12.9%)
Education level	Primary	34 (14.7%)
	Secondary	69 (29.7%)
	College/university	109 (47.0%)
	Postgraduate	20 (8.6%)
Occupation	Not working	97 (41.8%)
	Working	135 (58.2%)
Monthly income	10.000 AED or less	78(33.6%)
	11.000-20.000 AED	62 (26.7%)
	21.000 AED or more	92 (39.7%)

* 1 AED = 0.2723 USD, 1,000 AED equals approximately 272.29 USD

Based on the latest reports, the **average national income in the UAE** varies by emirate and profession. Here are the key figures:

- **Dubai**: 15,700 AED/month → approx. **190,000 AED/year**
- **Abu Dhabi**: 14,900 AED/month → approx. **178,800 AED/year**
- **Sharjah**: 12,800 AED/month → approx. **153,600 AED/year**
- **Northern Emirates**: 11,200 AED/month → approx. **134,400 AED/year** [30].

Across all sectors, the **average monthly salary in the UAE** typically ranges between **12,000 to 20,000 AED**, depending on industry, experience, and location [31].

N: frequency

%: percentages

PATIENT SATISFACTION

Independent T-tests were performed to assess differences in satisfaction levels between telemedicine and in-person psychiatric appointments (Table 2). Telemedicine participants reported significantly higher satisfaction in several domains: ease of appointment booking (p = 0.006), clarity of communication with psychiatrists (p = 0.002), and overall experience (p = 0.011). However, satisfaction with waiting times did not differ significantly between the two groups (p = 0.056).

TABLE 2: MEAN DIFFERENCE OF SATISFACTION SCORE BASED ON PSYCHIATRIC PATIENTS' GROUPS (IN-PERSON, N=110) AND (TELE-MEDICINE, N=122)

No	Test	Item description	Groups	Mean ±SD	p-value
1	**Independent T-test**	It was easy to book my in-person psychiatry appointment	In-person	3.39±.99	0.006
		It was easy to book my Tele psychiatry appointment.	Tele-medicine	3.75±.97	
2	**Independent T-test**	During my in-person psychiatry appointment, I was able to see the psychiatrist clearly.	In-person	2.94±1.32	<0.001
		During my Tele psychiatry appointment, I was able to see the psychiatrist clearly.	Tele-medicine	3.64±.98	
3	**Independent T-test**	During my in-person psychiatry appointment, I was able to hear the psychiatrist clearly	In-person	3.52±1.10	<0.001
		During my Tele psychiatry appointment, I was able to hear the psychiatrist clearly.	Tele-medicine	4.01±.76	
4	**Independent T-test**	I am confident that the psychiatrist and my health care providers are working as a team.	In-person	3.31±1.12	<0.001
		I am confident that the psychiatrist and my health care providers are working as a team.	Tele-medicine	3.79±.87	

5	**Independent T-test**	I feel that there was an adequate amount of time allotted for the in-person psychiatry appointment.	In-person	3.12±1.40	<0.001
		I feel that there was an adequate amount of time allotted for the Tele psychiatry appointment.	Tele-medicine	3.76±.99	
6	**Independent T-test**	I believe Tele psychiatry visit is just as effective as an in-person psychiatry appointment.	In-person	3.10±1.41	<0.001
		I believe Tele psychiatry is just as effective as an in-person psychiatry appointment.	Tele-medicine	3.83±1.00	
7	**Independent T-test**	I was able to get an in-person appointment through psychiatry sooner than a tele psychiatry appointment	In-person	3.10±1.26	<0.001
		I was able to get an appointment through Tele psychiatry sooner than an in-person psychiatry appointment.	Tele-medicine	3.70±.92	
8	**Independent T-test**	I felt that confidentiality was protected throughout my in-person psychiatry appointment.	In-person	3.55±1.07	<0.001
		I felt that confidentiality was protected throughout my Tele psychiatry appointment.	Tele-medicine	4.00±.78	
9	**Independent T-test**	The psychiatrist understood my concerns.	In-person	3.61±1.05	0.002
		The psychiatrist understood my concerns	Tele-medicine	3.98±.73	

10	**Independent T-test**	The psychiatrist treated me with courtesy and respect	In-person	3.73±.91	<0.001
		The psychiatrist treated me with courtesy and respect.	Tele-medicine	4.14±.67	
11	**Independent T-test**	The psychiatrist explained my diagnosis in a way that I could understand.	In-person	3.62±1.10	<0.001
		The psychiatrist explained my diagnosis in a way that I could understand.	Tele-medicine	4.06±.71	
12	**Independent T-test**	The psychiatrist involved me in decisions about my treatment plan.	In-person	3.18±1.36	<0.001
		The psychiatrist involved me in decisions about my treatment plan.	Tele-medicine	3.90±.91	
13	**Independent T-test**	The psychiatrist explained the benefits and risks of any medications he/she recommended.	In-person	3.35±1.22	<0.001
		The psychiatrist explained the benefits and risks of any medications he/she recommended.	Tele-medicine	3.90±.80	
14	**Independent T-test**	I am confident that I will be able to follow the psychiatrist's recommendations.	In-person	3.20±1.37	0.004
		I am confident that I will be able to follow the psychiatrist's recommendations.	Tele-medicine	3.65±.97	
15	**Independent T-test**	I understand what to do if I have a mental health emergency following this appointment.	In-person	3.02±1.43	0.003
		I understand what to do if I have a mental health emergency	Tele-medicine	3.51±1.05	

		following this appointment.			
16	**Independent T-test**	I experienced a significant improvement in my mental health while I was waiting for my in-person psychiatry appointment.	In-person	3.51±1.12	0.027
		I experienced a significant improvement in my mental health while I was waiting for my Tele psychiatry appointment.	Tele-medicine	3.80±.82	
17*	**Independent T-test**	I experienced a significant decline in my mental health while I was waiting for my in-person psychiatry appointment.	In-person	2.01±1.41	<0.001
		I experienced a significant decline in my mental health while I was waiting for my Tele psychiatry appointment.	Tele-medicine	3.06±1.26	
18	**Independent T-test**	Overall, I am satisfied with the psychiatry appointment.	In-person	3.49±1.33	<0.001
		Overall, I am satisfied with the Tele psychiatry appointment.	Tele-medicine	3.84±1.07	
	Independent T-test	Total satisfaction mean score	In-person	58.68±14.22	0.030
			Tele-medicine	68.22±11.16	<0.001

STIGMA PERCEPTION

Stigma scores were significantly lower in the telemedicine group across all measured items: discomfort discussing emotions, feelings of embarrassment or shame, and concerns about others discovering their treatment ($p < 0.001$). The mean stigma score for telemedicine participants was notably lower ($M = 7.56$, $SD = 2.10$) compared to the in-person group ($M = 10.35$, $SD = 1.77$), with a large effect size ($d = 1.434$, 95% CI [1.144, 1.722]). These findings suggest that telemedicine substantially reduces perceived stigma associated with mental health care.

TABLE 3: MEAN DIFFERENCE OF STIGMA SCORE BASED ON PSYCHIATRIC PATIENTS' GROUPS (IN-PERSON, N=110) AND (TELE-MEDICINE, N=122)

No	Test	Item description	Groups	Mean ±SD	p-value
1	independent t-test	Dislike of talking about my feelings, emotions or thoughts.	In-person	3.69±0.71	<0.001
			Tele-medicine	2.55±0.88	
2	independent t-test	Feeling embarrassed or ashamed.	In-person	3.45±0.93	<0.001
			Tele-medicine	2.55±0.95	
3	independent t-test	Concerned that people I know might find out.	In-person	3.20±1.07	<0.001
			Tele-medicine	2.46±1.01	
	independent t-test	Total stigma mean score	In-person	10.35±1.77	<0.001
			Tele-medicine	7.56±2.10	

SERVICE PREFERENCE ANALYSIS

Analysis of service preferences, assessed via a 5-point Likert scale across four items, revealed a significant inclination toward telemedicine. Independent t-tests showed higher scores in the telemedicine group for convenience, comfort with video transmission, reduced concerns about internet confidentiality, and lower preference for in-person visits. The overall mean preference score was significantly greater in the telemedicine group ($M = 13.52$, $SD = 1.32$) than in the in-person group ($M = 12.12$, $SD = 2.28$), with $p < 0.001$. The effect size was medium (Cohen's $d = 0.753$, 95% CI [0.486, 1.018]), indicating a substantive difference in service preference between modalities.

TABLE 4: MEAN DIFFERENCE OF SERVICE PREFERENCES SCORE BASED ON PSYCHIATRIC PATIENTS' GROUPS (IN-PERSON, N=110) AND (TELE-MEDICINE, N=122)

No	Test	Item description	Groups	Mean ±SD	p-value
1	independent t-test	Tele-medicine visits are more convenient (save time, save money, suitable for my health/mental health condition	In-person	2.69±0.96	<0.001
			Tele-medicine	3.53±0.91	
2*	independent t-test	Lack of comfort with the technology or video visit	In-person	3.05±0.98	<0.001
			Tele-medicine	3.61±0.80	
3*	independent t-test	Concerns about confidentiality over internet connection	In-person	2.94±0.97	<0.001
			Tele-medicine	3.74±0.69	
4	independent t-test	I prefer in-person psychiatry clinic appointments.	In-person	3.45±0.80	<0.001
			Tele-medicine	2.65±0.87	

	Total service preferences mean score	In-person	12.12±2.28	<0.001
		Tele-medicine	13.52±1.32	

* Reversed items

COMPLIANCE RATE

Compliance rates were significantly higher among telemedicine patients compared to those attending in-person psychiatric clinics, as shown in Table 5. In June, telemedicine attendees had a compliance rate of 75.9% versus 58.06% for in-person patients, with a small effect size (h = 0.38). Similarly, in July, compliance was 80.0% for the telemedicine group compared to 60.71% for the in-person group (h = 0.43). These findings highlight the effectiveness of telemedicine in enhancing patient adherence to scheduled appointments.

TABLE 5: PROPORTION DIFFERENCE IN PATIENTS' COMPLIANCE BASED ON PSYCHIATRIC PATIENTS' GROUPS.

In-person	Check-in	No show	Total/ real	Tele/ check-in	No show	Total/ tele	Z value	p-value
June	108	78	186	63	20	83	2.8	0.005
July	68	44	112	40	10	50	2.41	0.016

DISCUSSION

This study compared patient experiences in outpatient mental health care via telemedicine versus in-person sessions, focusing on stigma, appointment compliance, satisfaction, and service preferences. Results showed higher satisfaction and lower perceived stigma among telemedicine users. Patients preferred telepsychiatry for its convenience, privacy, and comfort with technology. Telemedicine also improved appointment attendance, highlighting its potential to enhance access, engagement, and continuity of care, especially for those facing logistical barriers consistent with previous studies [22, 24, 25, 26, 27].

IMPLICATIONS FOR PRACTICE AND POLICY

The findings of this study have important implications for mental health practice and policy. First, they support the integration of telemedicine into mental healthcare delivery to meet increasing demand and overcome barriers to traditional service delivery. Second, they underscore the role of telepsychiatry in addressing stigma-related obstacles to care and promoting accessibility and privacy protections. Third, they emphasize the importance of tailoring telemedicine platforms to accommodate diverse patient needs and preferences, including demographic factors like age and education. Finally, they highlight the potential of telemedicine to improve appointment compliance and treatment outcomes, particularly in populations facing logistical or social barriers to clinic visits. These implications are consistent with recommendations by [29] regarding the adoption and normalization of telehealth into everyday care by nursing staff.

LIMITATIONS

Despite its significant contributions, this study is not without limitations. The cross-sectional design limits the ability to infer causal relationships between telepsychiatry and patient outcomes over time it would be better to establish directions through longitudinal randomized trials that track multiple exposures. The study was conducted at one site (Dhafra Family Medicine Center, Abu Dhabi) the findings may not generalize to other UAE regions, rural populations or different healthcare systems. In terms of analysis, simple descriptive comparisons were carried out without taking possible confounding variables into account. More complex modeling with important covariates would help separate the relationships between the intervention and the outcome.

Short data collection window: Only two months (June–July 2023). This timeframe does not account for seasonal, policy, or service delivery variations that may influence results. Future research should address these limitations through longitudinal studies.

Data collection tool is adapted from other tools, local cultural adaptation needs to be clearly demonstrated; stigma domain is limited as 3-item measure oversimplifying the construct; service preference was based on only 4 questions which may not capture patient decision-making, and might fade the measurement tool, future studies must include further detailed sections for the stigma and preferences parts, and further validation.

Self-reported data may be subject to biases such as social desirability or recall inaccuracies. Furthermore, generalizability may be limited by the convenience sampling that is concentrated in a single geographic area. Representativeness would be improved by more extensive multi-site sampling. Sample characteristics restrict its applicability to other demographic groups or geographical areas. Additionally, the study focused on adult outpatients, limiting its applicability to younger populations or inpatient settings. more diverse sampling methods, and broader population coverage.

CONCLUSION

In conclusion, this study provides valuable insights into the impact of telemedicine on patients' experiences in outpatient mental health care, highlighting its potential to enhance satisfaction, lower perceived stigma concerning discomfort discussing emotions/thoughts, embarrassment/shame, and concerns over others discovering their mental health issues, improve service preferences, and promote appointment compliance. By addressing barriers to traditional service delivery and tailoring interventions to meet diverse patient needs- cultural and contextual factors, family dynamics, cultural stigma, and digital literacy- the policy makers and researchers can shape telemedicine use in the UAE, telepsychiatry offers a promising avenue for expanding access to high-quality mental health services. Policymakers and practitioners should embrace telemedicine as a vital tool for improving mental healthcare delivery in the digital era, ensuring equitable access and optimal treatment outcomes for all individuals in need of support, policy initiatives should support awareness-raising campaigns about accessibility and privacy protections in telepsychiatry. System-wide patient experiences could be further improved by tailored telemedicine modalities that take demographic variables like age or education into consideration. Therefore, maximizing population reach could involve implementing more flexible platforms that accommodate different generations comfort levels and digital literacy.

Clinicians must be trained in adaptable telepsychiatry delivery modalities that meet patient needs as well. Telehealth integrated policy reform that addresses long in-person delays could improve treatment outcomes and lower the risk of disengagement These findings underscore the importance of continuing efforts to integrate telemedicine into mental healthcare practice and policy, with careful consideration of demographic factors and patient preferences.

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