Pharmaceutical Telemonitoring for Patients With Psychiatric Disorders: Implementation Description

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Abstract
Telecare has exhibited efficacy in managing various chronic clinical conditions and presents potential in the surveillance of patients with psychiatric disorders, an area necessitating further investigation. Herein, we delineate an adjunct for pharmacotherapeutic oversight of individuals with psychiatric disorders receiving care at a public mental health outpatient facility. This manuscript serves as an implementation dossier detailing the progression of a preliminary trial. The non-probabilistic sample consisted of 21 patients, monitored between January 2022 and October 2022. Predominantly, schizophrenia constituted the primary psychiatric disorder among the cohort, accounting for 61.9% of cases. Across 79 remote consultations, averaging 3.8 consultations per patient, text messages constituted 52% (41/79) of the interactions. Throughout the telemonitoring process, diligent monitoring of patients' self-reported concerns was facilitated, permitting pharmaceutical interventions encompassing health advisories (52.7%) and recommendations for therapeutic adjustments (34.4%). Consequently, telemonitoring yielded an augmented pharmaceutical support framework for psychiatric patients, thereby presenting a plausible avenue for enhancing accessibility within public healthcare institutions.

Keywords: Pharmacotherapeutic Follow-up; Telemonitoring; Pharmaceutical Interventions; Mental Health

INTRODUCTION

The paradigm of social distancing necessitated by the COVID-19 pandemic prompted a restructuring of clinical pharmaceutical services, notably accentuating the adoption of telepharmacy. [1] Governed by guidelines set forth by the World Health Organization and the Federal Pharmacy Council of Brazil, [2-3] this modality of service delivery has demonstrated efficacy in managing various chronic conditions, albeit with a dearth of evidence regarding its application in psychiatric disorders. [4]

Approximately one billion individuals are estimated to be afflicted with mental disorders worldwide, including mood disorders (e.g., depression and bipolar disorder) and schizophrenia, which manifest as significant sources of morbidity on a global scale. [5-6] Depression retains its status as a foremost disorder with profound societal impact, while schizophrenia and bipolar disorders, while less prevalent, exhibit substantial prevalence rates and disability burdens. [6]

In Brazil, these global trends are mirrored, with the nation ranking second in the Americas for depression cases, affecting 5.8% of the populace, trailing only the United States at 5.9%. [7] Additionally, Brazil registers the highest prevalence of anxiety worldwide, impacting 9.3% of its population. [7] Nevertheless, epidemiological investigations concerning other disorders such as schizophrenia are scant in Brazil, with the bulk of publications focusing on hospitalization profiles. [8]

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These statistics underscore the magnitude of Brazil's mental health challenges, particularly in terms of accessing specialized services. Confronted with a landscape characterized by stigma and inadequately equipped healthcare services, pharmaceutical telemonitoring emerges as a promising strategy to bridge this gap and broaden the scope of care.

Within the framework of the Unified Health System (SUS), the implementation of pharmaceutical telemonitoring holds potential to yield myriad benefits for patients, including bolstering treatment adherence, identifying and monitoring drug interactions and adverse effects, and facilitating pharmaceutical interventions. [1,3] These endeavors align with the SUS objectives, which are oriented toward enhancing accessibility, fostering healthcare equity, and elevating service quality for the populace. [9]

Consequently, the present study aims to delineate the implementation of telemonitoring to support pharmaco-therapeutic oversight for patients grappling with psychiatric disorders under the care of a public mental health institution.

MATERIAL AND METHODS

Study Design and Setting

This observational study employs a cross-sectional design and was conducted at a secondary care outpatient center in Brazil. The center specializes in providing public health services for individuals afflicted with chronic, severe, and persistent mental disorders. It caters to a population of approximately 2.600 patients and operates with a multidisciplinary team comprising nurses, pharmacists, occupational therapists, psychologists, and psychiatrists.

DOI: https://doi.org/10.24926/iip.v15i3.6218

The implementation of the service was conceived based on the identification of patients' needs to maintain continuous monitoring between in-person consultations. Consequently, the necessary resources were determined, including specific forms, technological tools, mental health protocols, and guidelines to standardize the services. To test the proposed model, a pilot study was conducted, the results of which are presented in this paper.

Approval for this study was secured from the Research Ethics Committee of the Federal University of Bahia (Protocol nº. 3,978,405/2020).

Pharmacotherapeutic Monitoring Pilot Project

The pharmacotherapy monitoring initiative was implemented as a pilot study in the clinic and was developed in three distinct phases: an initial face-to-face consultation, a telemonitoring phase, and a final face-to-face consultation, conducted by a pharmacist. Telemonitoring was integrated into the pharmacotherapeutic monitoring service with the objective of conducting monthly consultations to sustain communication and engagement with patients between in-person visits, primarily due to the constraints imposed by social restrictions stemming from the coronavirus pandemic.

Upon selection based on inclusion criteria and appointment scheduling, patients commenced pharmacotherapeutic monitoring, adapted from guidelines outlined by the Ministry of Health [9] (Figure 1) and utilizing a pharmaceutical form tailored to the research context (refer to supplementary data).

During the initial phase, a comprehensive anamnesis was conducted, encompassing clinical and sociodemographic data pertaining to the patients. Two standardized questionnaires were administered: the General Anxiety Disorder-7 (GAD-7) [10-11] and the Patient Health Questionnaire-9 (PHQ-9), [12-13] to assess patients' symptoms of anxiety and depression, respectively. Subsequently, monitoring transpired remotely via telephone calls, video calls, or text messages through the WhatsApp application, tailored to each patient's preferences and accessibility.

The telemonitoring approach encompassed monitoring facets pertinent to pharmacotherapy, emphasizing medication utilization in terms of safety and efficacy, alongside the implementation of pharmaceutical interventions when deemed necessary, in accordance with the definitions of the Ministry of Health. This monitoring protocol encompassed the collation of self-reported complaints from patients, their families, or caregivers, in line with previous studies. [14-15]

Assessment of Patients' Experience

Patients' experiences were evaluated by documenting complaints such as sleep and eating disturbances, social interactions, signs of persecution, delusions, hallucinations, and grandiose delusions. Furthermore, patients were queried regarding the presence of any adverse reactions or symptoms experienced after medication intake in the past month, encompassing manifestations such as dizziness, generalized pain, gastrointestinal issues, or involuntary movements, among others.

The records of the appointments were duly documented in the patients' medical records, and the continuity of care was ensured by scheduling future appointments after each telemonitoring session.

Eligibility Criteria and Recruitment

Patients were recruited through active search initiatives (patients with low medication adherence, complaining of adverse reactions, polypharmacy or misunderstanding about medication use) and referrals from healthcare professionals, adhering to specified inclusion criteria: willingness to participate in the study, age exceeding 18 years, and polypharmacy (defined as the prescription of more than four medications), with suspected adverse reactions or self-reported poor adherence to therapy. Patients lacking the necessary technological resources for remote care or exhibiting ineffective communication during care provision were excluded from the study. Consequently, out of the initially recruited 27 patients, five were excluded due to inadequate resources for remote care, and one withdrew from the research, resulting in a final sample size of 21 patients, among whom only 10 completed their last consultation.

Data Analysis

Data collection took place from January 2022 to October 2022, drawing from medical and pharmaceutical records, which were subsequently collated into an Excel® database. Investigated variables encompassed the sociodemographic profile of patients (including gender, age bracket, educational attainment, marital status, occupation, and psychiatric diagnosis), the nature of care received, self-reported patient complaints, classification of pharmaceutical interventions, and GAD-7 and PHQ-9 scores.

Descriptive statistics, comprising absolute and relative frequencies, were employed for data analysis, illustrated through descriptive graphs. A paired t-test was used to assess whether there was a significant difference between the GAD-7 and PHQ-9 scores before and after the intervention, assuming a 95% significance level. For this purpose, the Microsoft Excel resource was used.

Intervention Characterization

The results of telemonitoring were outlined based on the ability to monitor patient self-reported complaints, the categorization of innovative pharmaceutical interventions during the period (health counseling, therapeutic adjustments, referrals, and monitoring), and the comparison of GAD-7 and PHQ-9 scores

DOI: https://doi.org/10.24926/iip.v15i3.6218

between the initial period (pre-intervention) and the final period (post-intervention).

RESULTS

General Characteristics of the Sample

The study encompassed 21 participants, with a notable predominance of females, comprising 61.9% of the cohort, in contrast to 38.1% of males. The most prevalent age bracket fell between 40 and 49 years, accounting for 38.0% of the sample. In terms of educational attainment, the majority of respondents (52.4%) indicated completion of secondary education. Regarding marital status, 66.7% reported being single, while 61.9% indicated unemployment (refer to Table I).

In the context of patient diagnoses, the predominant condition observed was schizophrenic disorder, accounting for 38% of the evaluated individuals. Subsequently, bipolar affective disorder was identified as the current diagnosis in 24% of patients, while depressive disorder was noted in 14% of cases.

Implementation Characterization

A total of 79 remote consultations were conducted, averaging 3.8 consultations per patient. Average below expectations, as the intention was to provide table services. Among these interactions, 52% (41/79) comprised text-based exchanges, 43% (34/79) were conducted through voice calls, and 5% (4/79) utilized video calls. The average duration of voice calls was 15.2 minutes (±7.08), ranging between 4 and 27 minutes.

Intervention Characterization

Through remote monitoring, the primary self-reported complaints of patients were assessed in terms of frequency. Notably, negative symptoms (12.6%) emerged as the most frequently reported complaints, encompassing tendencies toward social isolation, diminished interest in usual activities, neglect of personal hygiene, and lack of motivation. Positive symptoms (10.2%) predominantly manifested as hallucinations and delusions.

Anticholinergic effects, including constipation and blurred vision, accounted for 11.5% of the combined complaints. Meanwhile, extrapyramidal reactions (8.0%) primarily involved involuntary movements. Additionally, over 20.0% of the complaints included headaches, joint pain, nausea, and weight gain, as detailed in Table II.

In terms of pharmaceutical interventions executed during the study period, a total of 131 interventions were documented, translating to an average of 6.2 interventions per patient (±2.9). These interventions were classified as follows: health counseling, constituting 52.7% of the total; modification or suggestion of therapeutic adjustments, accounting for 34.8%; and referrals to other healthcare services, comprising 9.2%, as illustrated in Figure 2. More specifically, the interventions encompassed the provision of general health advice (22.1%), guidance on non-pharmacological measures (17.6%), suggestions for medication discontinuation (16%), provision of advice pertaining to specific treatments (13%), referrals to other healthcare services (9.2%), recommendations for initiating new medications (6.9%), and medication substitutions (6.9%).

Regarding symptoms of anxiety and depression, notable reductions in severity were observed by the study's conclusion. The average GAD-7 and PHQ-9 scores decreased, indicative of diminished symptom severity. The average GAD-7 score (n=10) decreased from [12.4 ± 4.40 to 7.0 ±4.76, (p = 0,004)] while the PHQ-9 score (n=10) decreased from [13.9 ± 5.22 to 11.6 ± 5.19, (p=0,181)]. The classification of anxiety severity transitioned from moderate to mild. Figure 3 illustrates these scores before and after telemonitoring.

DISCUSSION

The current study investigated the expansion of pharmaceutical care through telemonitoring, elucidating its capacity to identify and address signs, symptoms, and adverse reactions associated with psychotropic medication use in patients with psychiatric disorders. The study observed the feasibility of monitoring patients diagnosed with bipolar affective disorder, schizophrenia, and schizoaffective disorder, collectively representing approximately 70% of the patient cohort (Table I). These disorders are categorized as major psychiatric conditions, often necessitating frequent medical consultations. [16]

Analysis revealed negative symptoms, anticholinergic effects, and dizziness as prevalent adverse reactions, aligning with prior research on telemonitoring in patients using psychotropic drugs, which reported mood changes, sleep disturbances, nausea, and vomiting[17]. Monitoring such reactions is crucial for ensuring medication safety. [18]

Pharmaceutical interventions have primarily focused on health education, encouraging non-pharmacological practices. This aligns with other studies that have demonstrated increased physical activity, reduced alcohol consumption, and a decrease in body mass index with telemonitoring services, highlighting their beneficial impact. [19-20]

Additionally, comparison of anxious and depressive symptoms between initial and final consultations indicated a reduction in symptom severity. Although the remote system was not utilized, a study found that the involvement of the pharmacist enabled the reduction of anxiety and depression symptoms in psychiatric patients in primary care. [21] Given the complexity of psychiatric disorders, screening for anxiety and depression is pivotal for optimizing pharmaceutical management and care strategies.

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Telepharmacy, especially in the field of psychiatry, has a significant impact on cost reduction. By facilitating telemonitoring, it eliminates the need for frequent travel to in-person appointments, which reduces expenses on transportation and time lost in transit for patients. Moreover, by promoting continuity of care and treatment adherence, telepharmacy helps avoid hospitalizations and psychiatric emergencies, which are often costly. [1] Preventive activities and effective symptom management, enabled by remote monitoring, also contribute to the overall cost reduction by preventing complications that would require more intensive and expensive interventions. [1,22] Additionally, telepharmacy allows for a more efficient distribution of healthcare resources, enabling professionals to attend to a larger number of patients in a more timely and economical manner, benefiting both healthcare systems and the patients themselves. [22-23]

Nevertheless, barriers to telemonitoring democratization persist, particularly related to access to digital technologies and patient proficiency[23]. Despite challenges, studies underscore the importance of enhancing treatment adherence and maintaining counseling, medication reviews, and care plans, especially during the COVID-19 pandemic. [24-26] The accessibility of digital means was responsible for 5 patients discontinuing their participation in the study and may have influenced the frequency of visits by other patients. Furthermore, psychiatric conditions such as mood fluctuations and tendencies towards isolation may have contributed to a higher rate of attrition in attendance.

This approach has the potential to enhance pharmacotherapeutic monitoring and improve health outcomes for users of psychiatric outpatient services within the SUS framework. It aligns with public managers' aspirations to comprehensively address service demands and optimize health resources. [25]

This study presented limitations regarding the sample size; however, due to its descriptive nature aimed at reflecting on the implementation and structuring of services, the results were relevant to the local context. Additionally, it is important to highlight that, during the study period, the clinic underwent strikes, replacements of the medical team, and pharmaceutical consultations were conducted in the context of the coronavirus pandemic. Future studies could be encouraged to assess patient satisfaction with pharmaceutical services and their economic impact.

CONCLUSION

Telemonitoring made it possible to carry out pharmaceutical interventions, monitor the use of medications and maintain follow-up, allowing patients psychiatric to maintain care at home. Despite the benefits, further research is needed to evaluate the economic impacts, sustainability and clinical benefits over time.

Acknowledgements

Graduate Program in Pharmaceutical Sciences – PPGFARMA, at the State University of Bahia – UNEB; Faculty of Pharmacy of the Federal University of Bahia – UFBA; Aristides Novis Mental Health Center – CeSMAN.

Funding

None was provided.

Conflicts of Interest

The authors declare no conflict of interest.

Author Contributions

All authors participated in the design and outline of the study, analysis and interpretation of the data, drafting and reviewing the manuscript, and approved the final version.

Disclaimer: The statements, opinions, and data contained in all publications are those of the authors.

REFERENCES

1. Alhmoud E, Al Khiyami D, Barazi R, Saad M, Omari AA, Awaisu A. et al. Perspectives of clinical pharmacists on the provision of pharmaceutical care through telepharmacy services during COVID-19 pandemic in Qatar: A focus group. PLoS ONE. 2022;17:e0275627.

2. WHO. World Health Organization – WHA Resolution. WHA Resolution 58.28 on Health: [accessed November 14, 2022]. Available at: http://www.who.int/healthacademy/media/WHA58-28-en.pdf .

3. CFF. Resolução Nº 727, de 30 de junho de 2022 - DOU - Imprensa Nacional, https://in.gov.br/web/dou (accessed 4 May 2023).

4. Raso MG, Arcuri F, Liperoti S, Mercurio L, Mauro A, Cusato F. et al. Telemonitoring of Patients With Chronic Traumatic Brain Injury: A Pilot Study. Front Neurol. 2021;12:598777.

5. OPAS/OMS. Organização Pan-Americana da Saúde. Relatório da OMS destaca déficit global de investimentos em saúde mental, 2021. Disponível em: <https://www.paho. org/pt/ noticias/8-10-2021-relatorio-da-oms-destaca-deficit-global-investimentos-em-saude-mental>. Acesso em: 14 abr. 2022.

6. GBD 2019 Mental Disorders Collaborators. Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet Psychiatry 2022;9:137–150.

7. WHO. World Health Organization. WHO records increase in cases of depression around the world; In Brazil there are 11.5 million people. [Internet]. Brasília (DF): United Nations

8. Carteri RB, Oses JP, Cardoso TDA, Moreira FP, Jansen K & Silva RAD. A closer look at the epidemiology of schizophrenia and common mental disorders in Brazil. Demen & Neuropsychol, *14*(3), 283–289.2020.

9. Brasil. Ministério da Saúde. Secretaria de Ciência, Tecnologia e Insumos Estratégicos. Departamento de Assistência Farmacêutica e Insumos Estratégicos. Capacitação para implantação dos serviços de clínica farmacêutica / Caderno 2. 2014.
https://bvsms.saude.gov.br/bvs/publicacoes/cuidado_farmaceutico_atencao_basica_saude_2.pdf.
Acessado em 03/03/2023.

10. Kroenke, K; Spitzer, RL.; Williams, JBW; *et al* . Anxiety Disorders in Primary Care: Prevalence, Impairment, Comorbidity, and Detection. Annals of Internal Medicine, vol. 146, no. 5, p. 317, 2007.

11. Spitzer, RL.; Kroenke, K; Williams, JBW; *et al* . A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. Archives of Internal Medicine , vol. 166, no. 10, p. 1092, 2006.

12. Santos, IS.; Tavares, BF; Munhoz, TN.; *et al* . Sensitivity and specificity of the Patient Health Questionnaire-9 (PHQ-9) among adults in the general population. Public Health Notebooks , v. 29, no. 8, p. 1533–1543, 2013.

13. Spitzer, RL. Utility of a New Procedure for Diagnosing Mental Disorders in Primary Care: The PRIME-MD 1000 Study. JAMA , vol. 272, no. 22, p. 1749, 1994.

14. Gandhi TK, Burstin HR, Cook EF, Puopolo AL, Haas JS, Brennan BA. et al. Drug complications in outpatients. J Gen Intern Med. 2000;15:149–154.

15. Hakkarainen, KM, Andersson Sundell, K, Petzold, M., & Hägg, S. Prevalence and perceived preventability of self-reported adverse drug events – a population-based survey of 7099 adults. PLoS ONE. 2013;8(9):e73166.

16. Díaz Zuluaga AM, Duica K, Ruiz Galeano C, Vargas, C, Agudelo-Berruecos Y, Ospina S. et al. Evaluación e intervención socioocupacional en pacientes con TAB y esquizofrenia, dentro del programa de intervención multimodal PRISMA. Rev colomb psiquiatr. 2018;47(1):4–12.

17. Bhat S, Kroehl ME, Trinkley KE, Chow Z, Heath LJ, Billups SJ. et al. Evaluation of a Clinical Pharmacist-Led Multidisciplinary Antidepressant Telemonitoring Service in the Primary Care Setting. Popul Health Manag. 2018;21(5):366–372.

18. Semahegn A, Torpey K, Manu A, Assefa N, Tesfaye G, Ankomah A. et al. Psychotropic medication non-adherence and its associated factors among patients with major psychiatric disorders: a systematic review and meta-analysis. Syst Rev. 2020;9(1):17.

19. Aggio CDM, Marcon SS, Galdino MJQ, Martins EAP, Lopes GK, Haddad MCFL. Efetividade do gerenciamento clínico por telemonitoramento para beneficiários com doenças crônicas na saúde suplementar. Saud Pesq. 2022;15(1):1–14.

20. Li H, Zheng S, Li D, Jiang D, Liu F, Guo W. et al. The Establishment and Practice of Pharmacy Care Service Based on Internet Social Media: Telemedicine in Response to the COVID-19 Pandemic. Front Pharmacol 2021;12:707442.

21. Harms M, Haas M, Larew J, et al. Impact of a mental health clinical pharmacist on a primary care mental health integration team. *Ment Health Clin* 2018; 7: 101–105.

22. Connolly SL, Miller CJ, Lindsay JA, et al. A systematic review of providers' attitudes toward telemental health via videoconferencing. Clinical Psychology: *Science and Practice*; 27. Epub ahead of print June 2020. DOI: 10.1111/cpsp.12311.

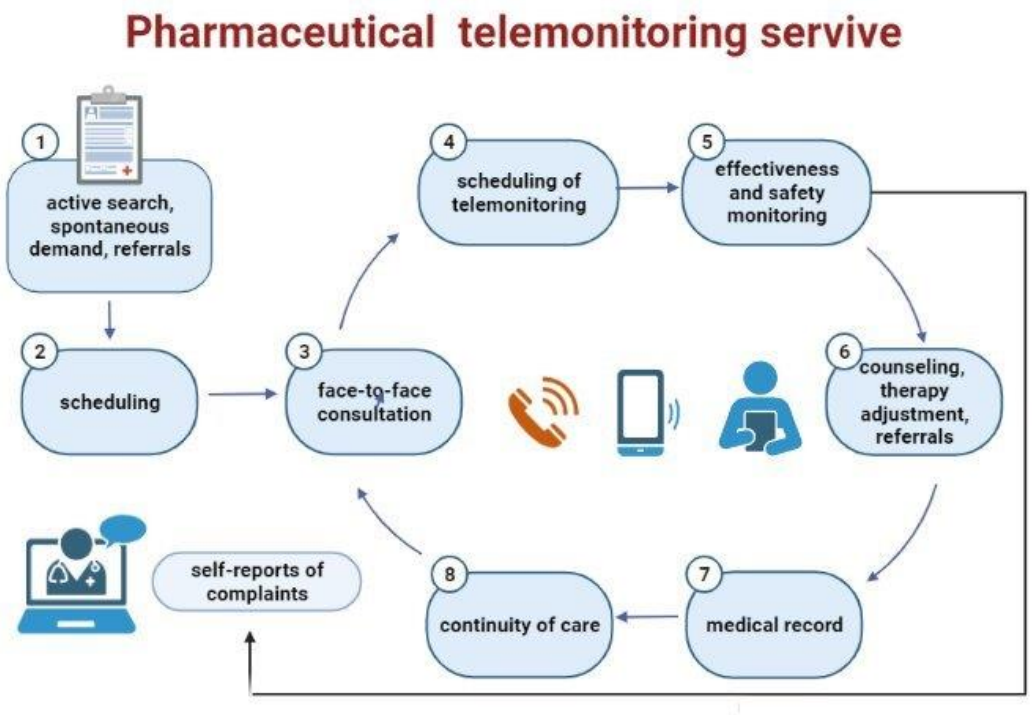
23. Merchant R, Torous J, Rodriguez-Villa E, et al. Digital technology for management of severe mental disorders in low-income and middle-income countries. Current Opinion in Psychiatry 2020; 33: 501–507.

24. Nieves JE, Stack KM, Cruz M. Telepharmacy in mental health outpatient case management. Journ Pharm Technol, *23*(5), 281–283.2007.

25. Riaz S, Eltorki Y, Mahran I, et al et al. Telepharmacy at Mental Health Services: A new approach to medication therapy management during COVID-19. JACCP. 5(7), 729–786.2022.

26. Zanotto BS, Bittencourt GC, Tortato C, et al. Lean Healthcare applied toward turning a Pharmacy Service Patient Centered. Rev Cien Saud, 32(2). 66–76.2020.

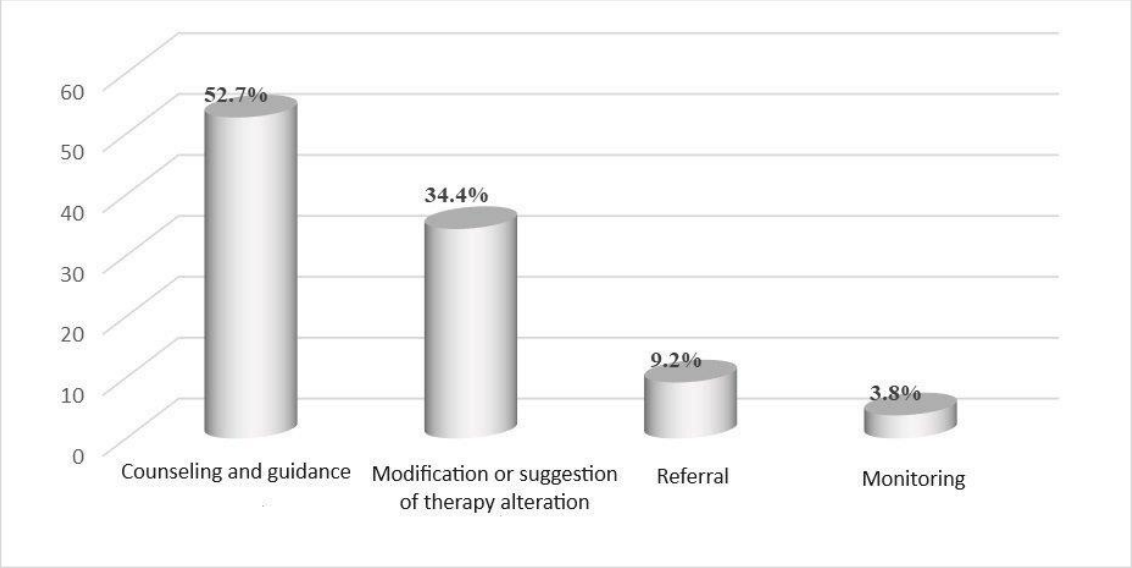
FIGURE 1 - Flow for remote care conducted during the pilot in pharmacotherapeutic monitoring in a public psychiatric outpatient clinic.



1. patients were selected by active search, referred by other professionals or by spontaneous demand; 2. they were then scheduled; 3. for an initial in-person consultation and 4. subsequently scheduled for subsequent consultations via telemonitoring; 5. during remote consultations, the safety and effectiveness of psychotropic therapy were monitored (by obtaining self-reports of complaints); 6. in parallel, it was possible to provide guidance, therapeutic adjustments and referrals to other clinical services; 7. consultations were recorded in medical records; 8. Continuity of care was provided through successive consultations.

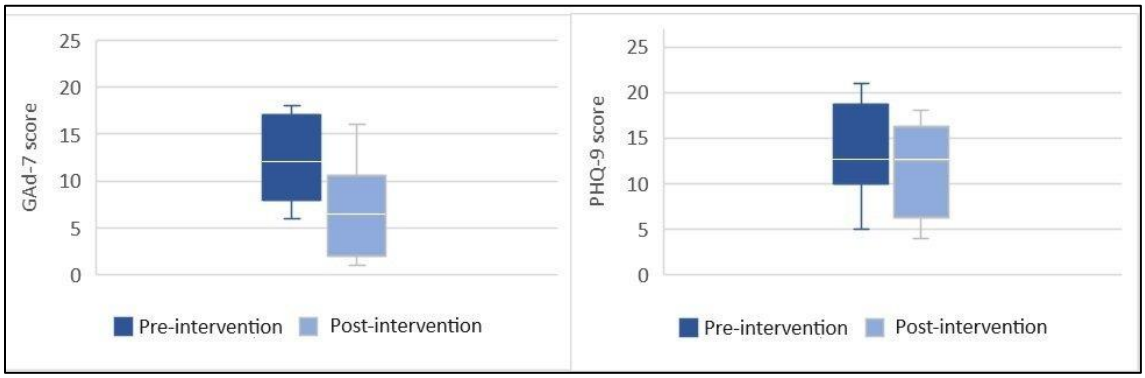
DOI: https://doi.org/10.24926/iip.v15i3.6218

FIGURE 2 - Distribution of pharmaceutical interventions carried out during the study period (N=21).



Counseling was directed towards promoting encouragement for physical exercise and healthy eating, as well as motivating adherence to medication therapy. Therapy adjustment suggestions included increasing/reducing doses, discontinuing/adding medications, and/or replacing therapy. Referrals were made to other clinical services such as psychology, nutrition, and cardiology. Monitoring involved tracking signs/symptoms and adverse reactions.

FIGURE 3: GAD-7 and PHQ-9 scores before and after telemonitoring intervention (N=10).



Legend: GAD-7: minimal anxiety (0-4); mild anxiety (5-9); moderate anxiety (10-14) and severe anxiety (15-21). PHQ-9: minimal depression (0–4); mild depression (5–9); moderate depression (10–14); moderately severe depression (15–19) and severe depression (20–27).

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TABLE I - Sociodemographic profile of patients (N=21) who underwent telemonitoring during the pilot in Pharmacotherapeutic Monitoring carried out in an outpatient Mental Health center.

VARIABLES		n	%
Sex	Feminine	13	61.9
	Masculine	8	38.1
Age group	18 - 29 years old	3	14.3
	30 - 39 years old	3	14.3
	40 - 49 years old	8	38.0
	50 - 59 years old	6	28.6
	≥ 60 years	1	4.8
Education	Incomplete elementary education	4	19.0
	Complete primary education	2	9.5
	Complete high school	11	52.4
	Incomplete higher education	1	4.8
	Complete higher education	3	14.3
marital status	Single	14	66.7
	Married	5	23.8
	Divorced	1	4.8
	Widower	1	4.8
Occupation	Employee	8	38.1
	Unemployed	13	61.9
Psychiatric diagnosis	Schizophrenia disorder	8	38.0
	Bipolar affective disorder	5	24.0
	Depressive disorder	3	14.0
	No diagnosis	2	10.0
	Schizoaffective disorder	2	9.0
	Post traumatic disorder	1	5.0

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TABLE II : Main complaints reported by patients during remote care.

SELF-REFERRED COMPLAINTS	n	%
Negative symptoms	11	12.6
Anticholinergic effects	10	11.5
Dizziness	9	10.3
Positive symptoms	9	10.3
Extrapyramidal reactions	7	8.0
Somnolence	7	8.0
Mood change	6	6.9
Insomnia	5	5.7
Others	23	26.4
Total	87	100.0

Negative symptoms: social isolation, apathy, affective dullness; positive symptoms: hallucinations, delusions, disordered thinking; anticholinergic effects: dry mouth, constipation, urinary retention.

DOI: https://doi.org/10.24926/iip.v15i3.6218

Prefeitura Municipal de Salvador
Secretaria Municipal de Saúde
Centro de Saúde Mental Aristides Novis- CeSMAN
SERVIÇO DE CLÍNICA FARMACÊUTICA

TELEMONITORAMENTO

Paciente :_____ Data: _____

( ) Ligação telefônica ( ) Mensagem de texto ( ) Chamada de vídeo

ALGUM DOS SEUS MEDICAMENTOS INCOMODOU VOCÊ? [ ] Não [ ] Sim
Se SIM, por favor, liste os nomes dos medicamentos e o quanto eles o(a) incomodam:

_____ ( ) Muito ( ) Um pouco ( ) Muito pouco ( ) Nunca
_____ ( ) Muito ( ) Um pouco ( ) Muito pouco ( ) Nunca
_____ ( ) Muito ( ) Um pouco ( ) Muito pouco ( ) Nunca
_____ ( ) Muito ( ) Um pouco ( ) Muito pouco ( ) Nunca

De que forma incomoda?
_____

APRESENTA OU APRESENTOU ALGUM DOS SINTOMAS A SEGUIR NO ÚLTIMO MÊS? [ ] Não [ ] Sim

[ ] Dor de cabeça
[ ] Sonolência excessiva
[ ] Tontura/desequilíbrio
[ ] Problema sexual
[ ] Coceira/urticária
[ ] Problema gastrointestinal
[ ] Incontinência/problema urinário
[ ] Dor muscular
[ ] Problema na visão
[ ] Fadiga/cansaço
[ ] Movimentos involuntários

APRESENTA OU APRESENTOU ALGUM DESTES SINAIS/SINTONAS NO ÚLTIMO MÊS? [ ] Não [ ] Sim

[ ] Problema de sono
[ ] Mudança no apetite
[ ] Irritabilidade
[ ] Nervosismo
[ ] Tendência ao isolamento
[ ] Sinais de perseguição
[ ] Delírio
[ ] Alucinação
[ ] Apatia
[ ] Autonegligência
[ ] Mudança no humor

NO MOMENTO QUAL A SUA QUEIXA?
_____
_____

SEGUIU COM AS ORIENTAÇÕES DA CONSULTA ANTERIOR? ( ) SIM ( ) NÃO. SE NÃO, REFERIR O MOTIVO**:**
_____
NOVOS PRF, LISTE:
_____

EVOLUÇÃO:
_____

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