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Original scientific paper

Clinical pharmacist interventions in patients with mental health disorders

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Abstract

Despite positive evidence for the impact of clinical pharmacy interventions on patients' health outcome, the benefits of clinical pharmacist placed within multidisciplinary psychiatric team are still not recognized in our country. The aim of the present study was to highlight the role of clinical pharmacists in our healthcare system and evaluate the extent to which they contribute in reducing the incidence of medication-related problems (MRPs). The study included total of 82 patients hospitalized at the Department of Psychiatry at the Prilep General Hospital it the period from October 2022 to October 2023. MRPs were recognized in 70 (85.36%) patients. MRPs categories associated with medication selection (34.74%) and medication safety (16.43) followed by drug monitoring (14.55%) and patient compliance (14.08%) were found most prevalent. Clinical pharmacist made 213 recommendations (3.04 per patient). Most frequently recommended clinical interventions referred to: monitoring of laboratory parameters (9.86%), adherence to the pharmacotherapy (8.45%), prevention of use of too many medications for non-existing indication(s) or for a certain indication (7.98%) and recommendations for temporary or permanent discontinuation of medication (7.51%). Nearly 58% of all clinical pharmacist interventions aimed at preventing complications and morbidity that could arose from MRPs, of which 35% were graded as major in severity. The psychiatrists accepted 90.61% (193 of 213) of the suggested recommendations. Our findings highlight the opportunity for more targeted approaches to identifying and managing MRPs in tertiary care where tailored clinical pharmacist-led interventions may be of value. Implementation of clinical pharmacist led services, such as medication therapy management (MTM), in routine clinical practice can have a positive impact on the efficient and safe use of medicines in this patient's group.

Key words: clinical pharmacist, intervention, mental health disorders

Introduction

Mental health disorders, including neurodevelopmental disorders, schizophrenia, bipolar disorder, depressive disorders, anxiety disorders, obsessive-compulsive disorder, trauma and stressor-related disorders, dissociative disorders, feeding and eating disorders, substance use disorders, developmental and behavioral disorders and many others, affect around 450 million people in the world, causing considerable morbidity and mortality (around 14% of all deaths globally) and being first of all global burden of disease based on disability adjusted life years (around 7%) and all years living with disability (19-32%) (Alshammari et al., 2023; Blum et al., 2022; Javedh. et al., 2020; Regier et al.,

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2013). Pharmacotherapy remains the cornerstone for the management of psychiatric illness, which exposes patients with mental health illness at increased risk of MRPs, significantly contributing to preventable patient harm and global healthcare expenditure (Jeun et al., 2024).

In this line, provision of optimal care for patients with mental health disorders faces many challenges and obstacles, starting from barriers for not seeking help from healthcare providers to not having access to adequate integrated mental health care services and lack of mental healthcare workers. Involvement of pharmacists in mental health care service delivery can help to overcome lot of these obstacles, considering their different roles in the prevention, care and management of mental health conditions, including treatment optimization. The benefits of pharmacists in treatment optimization have been clearly demonstrated across a range of healthcare settings, but mostly in the hospital inpatient setting (El-Den et al., 2021; Werremeyer et al., 2020). Provision of safe and effective pharmaceutical care is extremely challenging for several reasons: (i) many psychotropic medications have a narrow-therapeutic index, require therapeutic monitoring and pharmacogenetic testing and manifest high potential for interactions; and (ii) patients diagnosed with mental illness are often treated with multiple medications, have a need for frequent visits and hospitalizations, refuse often to seek help and grow old, and with that, the possibility for co-morbidities requiring additional medications and potential for drug-drug and drug-disease interactions increases.

The role of pharmacists in optimization of health outcomes and alleviation of harmful medication effects in patients with mental health disorders can be performed by diverse clinical interventions, from obtaining patient data through evaluation of these data to planning, performing and documenting all necessary activities. The clinical interventions are essential processes in which the (clinical) pharmacist identifies MRPs and give recommendations aimed to prevent or solve them. The clinical interventions also create pathway to other clinical pharmacy services such as therapeutic medication monitoring (individualization of dosage regimen), information services, etc. They can be reactive (as a response to MRP) and proactive (when a pharmacist identifies the factors that affect the choice of medication and informs the patient and/or the designated physician). The potential benefits of the clinical pharmacist interventions include: better control of symptoms and therapeutic outcome, improved adherence to the proscribed therapy, decreased frequency of adverse effects, avoidance of MRPs, decreased number of hospitalizations and shorter hospital stays, and cost reductions. The (clinical) pharmacists can contribute not only to care and management of mental health conditions, but also to the prevention of these conditions by education and counselling, prevention of addictions and overdose, early detection and triage and inter-professional collaboration (Davis et al., 2020; El-Den et al., 2021; Ng. et al., 2022; Rubio-Valera et al., 2014; Stuhec et al., 2023; Wali et al., 2018).

Although positive evidence of the benefits associated with integrated clinical pharmacy services for patients with mental illness (drug-drug interactions and medical adherence) are confirmed in large number of studies (Ho et al., 2024; Ng et al., 2022; Werremeyer et al., 2020), clinical pharmacists are still not a persistent part of multidisciplinary psychiatric teams across Europe (Stuhec et al., 2023). This potentiates their underutilization and reduces their effectiveness and opportunities for pharmacist-led interventions to benefit patient care. The requirements for establishing mental health clinical pharmacy services across Europe are strengthened by the Resolution CM/Res (2020)/3, which includes a legal framework for 39 European member states for the promotion and implementation of the concept of pharmaceutical care and related services in health systems at national level.

The aim of the presented study was to assess the impact of clinical pharmacist within multidisciplinary psychiatric team in a tertiary mental health hospital setting in our country. Essentially, the hypothesis that the (clinical) pharmacists are well-trained for providing clinical interventions was tested. In general, the study was conducted to highlight the vital role of clinical pharmacists in the healthcare system and to evaluate the extent to which they contribute to reducing the incidence of MRPs.

Material and methods

Clinical setting and study population

The study was conducted at the Department of Psychiatry at the Prilep General Hospital in the Republic of Macedonia, with 27 hospital beds, in which patients with severe mental illness, adults, geriatrics, children and adolescents are treated. The study was approved by the Institutional Review Board and the Ethical Committee of the University “Ss Cyril and Methodius”, Faculty of Pharmacy in Skopje, Republic of Macedonia (No. 02-878/3). The study population included any psychiatric patient admitted to the hospital regardless the mental disorder, with and without co-morbidities, who provided written informed consent within 72 hours of admission.

Study design and duration

The study was conducted over 12-month period, from October 2022 to October 2023. The clinical pharmacist was delegated from the central hospital pharmacy to assist the medical team in providing optimal pharmacotherapy by reviewing the patient paper-based and electronic records, identifying potential and actual MRPs and providing clinical interventions.

MRPs were characterized in six general categories: (i) medication selection; (ii) dosage regimen; (iii) compliance; (iv) monitoring; (v) providing drug information, education

and counselling; (vi) medication safety; and (vii) other. The severity of MRPs was classified in the following categories: (i) minor (not harmful for the patient, require monitoring); (ii) moderate (they can cause temporary harm, require adequate intervention); major (they can cause temporary harm leading to hospitalization or permanent damage, near to death condition or death); (iv) other (related to drug administration and pharmacoeconomy), as determined in the paper of Mubarak Al Rahbi et al. (2014).

Clinical interventions performed based on the identified MRPs included: (i) change in medication (recommending proper medication for a given indication, detecting and preventing from adverse interactions, recommending appropriate dosage form or brand, approving off-label, detecting non-adequately treated condition and need for preventive treatment use, etc.); (ii) dosage regimen adjustment (recommending dose and frequency of administration and administration pathway, giving dosing instructions); (iii) detecting and solving non-compliance; (iv) recommending adequate monitoring; (v) performing activities related to patient education and counselling and providing drug information for healthcare givers; (vii) provision of medication safety (recommending dose adjustment, temporary or permanent discontinuation of medication, safer medication, preventing from medication allergy, etc.). The reasons for the clinical interventions were also categorized as: (i) to prevent complications and morbidity; (ii) to rationalize the treatment; (iii) to improve medication adherence; (iv) to decrease costs; and (v) other.

The identified MRPs as well as the recommended clinical pharmacist interventions were discussed with the clinical team during the daily routine rounds (one per day). Based on the acknowledged MRPs and positively accepted recommended interventions by the medical team, the average response rate was calculated. The records related to the clinical interventions were made concisely, but all the details were included, and for recording the SOAP (subjective, objective, assessment, plan) format was used. During medication review the clinical pharmacist had an access to the several databases such as Drugdex®, UpToDate®, Medscape®, PubMed® and Drugs.com. Adequate medication lists were used (e.g., PRISCUS, Beers-criteria, STOPP/START-criteria) by which the risk for using potentially inappropriate medications was minimized. For all patients, master lists of subjective and objective monitoring parameters were created, noting all the reasons for monitoring any given parameter.

Data collection

For assessment of MRPs and planning and performing clinical interventions, patient specific data were collected, including demographic data (age, sex, BMI, ethnicity), social status (education and professional occupation, health insurance), life-style and habits (smoking, alcohol and substance abuse, physical and social activity, food restrictions, use of food supplements, dietetic stimulants and suppressants), medical history (if relevant, condition/disease, surgical intervention), actual health status (co-morbidities, vital signs, baseline lab investigations, immunization status), medication history and actual pharmacotherapy (controlled and non-controlled medications, dosage regimens, indications, duration of treatment, reason for discontinuation, outcome), adverse reactions (medication, dosage regimen, time of onset in respect to medication treatment, description, treatment and outcome of reaction). The clinical pharmacist interventions were documented and evaluated and the acceptance rate by the physicians was assessed.

Analysis of data

The data from the interventions were recorded, entered into Microsoft Excel [Microsoft Corporation. (2018), retrieved from https://office.microsoft.com/excel] and analyzed and categorized. They are presented in percent and numbers. An intervention falling in more than one category was considered only once (in one category).

Results and discussion

The study included a total of 82 patients. MRPs were recognized in 70 (85.36%) patients (27 men and 43 women). More than half of the patients (60%) were older than 50 years, and nearly 95% had a BMI below 30 kg/m². A majority of the patients were diagnosed with recurrent depressive disorder, followed by mental and behavioral disorder (due to alcohol abuse) and lived with their families. During hospitalization, patients used a mean of 8.17 medications (3.48 psychotropic and 4.75 non-psychotropic ones) (Table 1). Approximately 90.12% of all evaluated medications were controlled ones (prescribed by designated physicians) of whom 42.47% were psychotropic (antipsychotics / psycholeptics / psychoanaleptics (ATC N03, N05 and N06, dominantly antiepileptics, anxiolytics and antidepressants). Most of the non-psychotropic medications were recommended for treatment of cardiovascular disorders (40%; renin-angiotensin inhibitors, beta-blocking agents, calcium-channel blockers, diuretics, peripheral vasodilators, lipid-modifying agents, antithrombotic agents and other cardiac preparations), followed by medications for treatment of alimentary tract and metabolism disorders (30%, functional gastrointestinal disorders, acid-related disorders, bile and liver therapy, antidiarrheals and other preparations).

A total of 213 MRPs were identified during patient medication review, giving a mean of 3.04 MRPs per patient (3.29 per male and 2.88 per female) (Table 2). No significant difference was seen between the number of presented MRPs in patients regarding their demographic and clinical characteristics. Clinical pharmacist gave recommendation for all of the identified MRPs of whom

Table 1. Demographic data, diagnoses and medications

Characteristics	N (%)
Gender	
Male	27 (38.57)
Female	43 (61.43)
Age (yrs.)	
12-25	3 (4.29)
26-40	9 (12.86)
41-50	16 (22.86)
> 50	42 (60.00)
Body mass index	
< 30 kg/m^2	67 (95.71)
> 30 kg/m^2	3 (4.29)
Ethnicity	
Macedonian	56 (80.00)
Albanian	3 (4.29)
Turkish	1 (1.43)
Serbian	/
Roma	7 (10.00)
Bosnian	3 (4.29)
Living status	
Alone	8 (11.43)
With family	62 (88.57)
With friends	/
Educational level	
No education	5 (7.14)
Secondary school	32 (45.71)
Bachelor/diploma	28 (40.00)
Master/PhD diploma	5 (7.14)
Diagnosis	
Schizophrenia	5 (7.14)
Acute and transient psychotic disorders	4 (5.71)
Bipolar affective disorder	9 (12.86)
Depressive disorder	5 (7.14)
Recurrent depressive disorder	15 (21.43)
Mixed anxiety disorders	11 (15.71)
Reaction to severe stress	4 (5.71)
Specific personality disorders	1 (1.43)
Schizoaffective disorder	1 (1.43)
Mental disorder (due to brain damage and dysfunction and physical disease)	2 (2.86)
Mental and behavioral disorders (due to use of alcohol)	13 (18.57)
Total number of medications (controlled)	
Psychotropic	24 (75.00)
Non-psychotropic	8 (25.00)
Total number of medications (non-controlled)	
Psychotropic	/
Non-psychotropic	49 (100.00)
Mean number of medications per patient	
Total	8.17
Males	8.30
Females	8.09
Mean number of medications per patient	
Psychotropic/all patients	3.48

Psychotropic/male	2.85
Psychotropic/female	3.87
Non-psychotropic/all patients	4.75
Non-psychotropic/male	4.95
Non-psychotropic/female	4.31
Psychotropic medications	
Antipsychotics/psycholeptics (ATC N03)	
Antiepileptics (ATC N03A)	
benzodiazepine derivatives (ATC N03AE)	1
carboxamide derivatives (ATC N03AF)	2
fatty-acid derivatives (ATC N03AG)	1
others (ATC N03AX)	2
Psycholeptics (ATC N05)	
Antipsychotics (ATC N05A)	
phenothiazines with aliphatic side chain (ATC N05AA)	2
butirophenone derivatives (ATC N05AD)	1
diazepines, oxazepines, thiazepines, oxepines (ATC N05AH)	2
benzamides (ATC N05AL)	1
lithium (ATC N05AN)	1
other antipsychotics (ATC N05AX)	2
Anxiolytics (N05B)	
benzodiazepine derivatives (ATC N05BA)	5
Hypnotics and sedatives (ATC N05C)	
benzodiazepine related drugs (ATC N05CF)	1
Psycholeptics/Psychoanaleptics (ATC N06)	
Antidepressants (ATC N06A)	
non-selective monoamino reuptake inhibitors (ATC N06AA)	2
selective serotonin reuptake inhibitors (ATC N06AB)	4
other antidepressants (ATC N06AX)	3
Anti-dementia drugs (ATC N06D)	
anti-cholinesterases (ATC N06DA)	1

46.95% were concrete (existing) and the rest were potential (preventable) patient-specific problems. The most common medications to cause MRPs were antypsychotics (N=47; 26.26%) followed by antidepressants (N=36; 20.11%), anxiolytics (N=25; 13.97%), antiepileptics (N=17; 9.50%), antihypertensive medications (N=11; 6.14%), antiemetics (N=10; 5.59%) and other medications (N=33; 18.43%).

The two most prevalent types of identified MRPs were associated with: medication selection (34.74%) and medication safety (16.43) followed by drug monitoring (14.55%) and patient compliance (14.08%). Accordingly, most frequently recommended clinical interventions referred to: monitoring of laboratory parameters (9.86%) and identification of non-adherence (8.45%) in advance to prevention of use of too many medications for non-existing indication(s) or for a certain indication (7.98%) and recommendation for temporary or permanent discontinuation of medication (7.51) and notably, prevention of clinically significant adverse interactions and activities related to patient education and counselling (7.04%). MRPs that would potentially require interventions in term of identification of incorrect medication for an indication, change in formulation and/or brand, change of administration pathway or potential medication allergy were not identified. Nearly 57.75% (123 of 213) of all clinical pharmacist interventions aimed at preventing complications and morbidity of MRPs of which 35% were classified as major in severity (Table 3).

The psychiatrists accepted 90.61% (193 of 213) of the recommendations suggested by the clinical pharmacist, (mean of 2.75 changes per patient), approving also the content of education and counselling of the patients (related to behavior changes, therapy adherence, appropriate drug use and management of the specific disease).

Overall, the objective of this study was to investigate the impact and the contribution of clinical pharmacist in the improvement of medication therapy management for patients with mental disorders in a psychiatric hospital setting. E*valuated outcomes* include the number and nature of MRPs identified by means of a clinical pharmacist-conducted medication review (MR) as well as implementation rate of interventions proposed to solve MRPs. We present for the first time an overview of pharmacotherapy gaps in patients with mental illness in Macedonia as an argument for the necessity of development and promotion of advanced clinical pharmacy mental health care services in our country.

Table 2. Identified medication-related problems and performed interventions

Characteristics	N (%)
Medication selection	**34.74**
Recommending proper medication (incl. switching)	8 (3.75)
Recommending medication cessation (Preventing from use of too many medications)	17 (7.98)
Detecting indication without medication coverage / need for additional drug	14 (6.57)
Identifying non-detected indication with a need for medication	11 (5.16)
Preventing from wrong medication for an indication	/
Identifying and preventing from clinically significant adverse interactions	15 (7.04)
Recommending appropriate dosage form	/
Detecting and preventing from use of contraindicated medication	7 (3.29)
Recommending change in formulation and/or brand	/
Detecting need for a preventive medication	
Approving off-label use	2 (0.94)
Dosage regimen	**7.98**
Recommending dose regimen (dose and frequency of administration)	7 (3.29)
Recommending (change in) administration pathway	/
Giving correct or clear dosing instructions	5 (2.35)
Detecting non-adherence to dosage regimen	5 (2.35)
Compliance	**14.08**
Identifying non-adherence	18 (8.45)
Giving clear instructions and recommending medication adherence tools	12 (5.63)
Monitoring	**14.553**
Recommending monitoring of laboratory parameters	21 (9.86)
Recommending monitoring of clinical parameters (signs and symptoms)	10 (4.69)
Medication safety	**16.43**
Recommending dose adjustment	11 (5.16)
Recommending safer medication	8 (3.76)
Recommending temporary or permanent discontinuation of medication	16 (7.51)
Preventing from medication allergy	/
Providing drug information, education and counselling	**12.21**
Responding to patient request for education and counselling	15 (7.04)
Responding to health care giver request for drug information	10 (4.69)
Responding to request of health care giver for disease management advice	1 (0.47)
Other	/

The mean number of medications used during hospitalization and the mean number of the prescribed psychiatric drugs (8.17 and 3. 48 per patient, respectively) was similar to the number found in other studies (Carmona-Huerta et al., 2019), suggesting high prevalence of polypharmacy in hospitalized psychiatric patients. The present study, based on everyday tertiary care practice, shows that the MRPs are frequent among patients with mental health disorders. The observed number of identified MRPs (3.04) was in the range of 2.5–10 MRPs found in general population of elderly patients in primary care setting (Lenander et al., 2018) and comparable with the number of MRPs previously found in psychiatric patients in everyday tertiary practice (4.2) (Stuhec et al., 2021).

Polypharmacy identified in our patient population is in trend with the high frequency of identified general MRPs categories in terms of medication selection (34.74%) and medication safety (16.43), which reasonably led to the problems associated with medication monitoring (14.55%) and are causally related with the observed non-compliance (14.08). These overall findings are in agreement with the data from previously published studies (Carmona-Huerta et al., 2019; Lucca et al., 2015), where polypharmacy decreases tolerability and treatment adherence in psychiatric patients.

The pharmacists in the present study proposed many interventions on a wide range of identified MRPs. Recommendation for monitoring of laboratory parameters (9.86%) was the most common pharmacist intervention based on the patient specific MRP. This is of great importance taking into account that the laboratory monitoring of mood stabilizers is highly suggested, but only one-third to one-half of patients taking a mood stabilizer are appropriately monitored (Horvath and Scott, 2022).

Interventions regarding identification of non-

adherence was the second most frequently recommended intervention (8.45%). This percentage is smaller in comparison to the reported in similar research settings, which could be explained by the detailed patient education and counselling by the pharmacist on the importance of medication adherence before initiating medication treatment, but also by the fact that noncompliance was voluntary self-reported MRP by the patient during his/her hospitalisation and not objectively diagnosed problem by the clinician and in this line differences in healthcare settings and the methodological design of the study in which the rate of non-adherence was evaluated. In this regard, non-adherence among patients taking antipsychotics is reported to be 28-52% for major depressive disorder, 20-50% for bipolar disorder, 20-72% for schizophrenia, and 57% for anxiety disorders. Approximately 25% of patients stopped their prescribed antipsychotic medication within 3 months after hospital discharge, 43% within 1 year and about 75% discontinue their medication within 2 years (Lieslehto et al., 2022; Lucca et al., 2015). Still, as seen in the present study, most of the authors (Barrett et al., 2020; Lieslehto et al., 2022; Pauly et al., 2018; Syrnyk and Glass, 2023) report for non-adherence being first or second most common reason for clinical pharmacist intervention. Although we did not evaluate the reasons for non-adherence in our patient population, in line with the published data (Mert et al., 2015; Noland et al., 2024), we assume that patients' distress associated with side effects and disturbing side effects affecting quality of life as well as fear of potential side effects, too many prescribed medications and complicated dosing schedule, lack of symptoms and impression that the problem is solved, mistrust, concerns related to potential medicine-dependence are among the contributing factors. Medication non adherence could be also explained by non-understanding the need for medication, not-knowing and understanding the safety profile. In this line, our results confirm pharmacist valuable role in process of optimization of medication treatment and increasing medication adherence by obtaining education and counseling upon patient request (7.04%) (El-Den et al., 2020).

With the high number of used drugs per patient, unnecessary drug treatment is an expected and common problem. Recommendation for medication cessation in order to prevent use of too many medications (7.98 %) was the third most prevalent intervention to identified MRPs, in advance to the recommendations for temporary or permanent discontinuation of medication (7.51%). Other studies also showed that cessation of medication was the most common recommendation following a clinical pharmacist MR (Alaa Eddine et al., 2023; Ng et al., 2022). This is of particular importance considering that international guideline recommendations advise for reasoned and conciliatory prescription of psychiatric medicines and increased need for de-prescribing of unnecessary ones (Jerjes et al., 2024).

The implementation rate of pharmacist-recommended interventions was in the range of those observed in similar research settings (93.7%) (Stuhec et al., 2021). In general, implementation rates are found to be generally higher when pharmacists had more clinical experience, had access to patients' medical records and when a patient interview was part of the review process. Higher rate of implementation is reported in studies focusing on selected MRPs or studies in which only a limited number of interventions are proposed also report (de Grégori et al., 2020; Hailu et al., 2020; Lankford, et al., 2021). The observed implementation rate in our study can be associated with some of these factors.

The prevalence of identified MRPs with high and moderate severity in our study was higher, but comparable to the one reported by other authors in similar research setting (35.2% and 43.2% vs. 28.0% and 39.6%, respectively) (Collins et al., 2023). The observed differences in severity ratings could be attributed to varying degrees of experience in conducting medication reviews and evaluation of potential clinical significance of MRPs as well as experience of using the classification system for severity grading (Basger et al., 2014; 2015; Linden-Lahti et al., 2023).

Table 3. Severity of identified medication-related problems and reasons for clinical pharmacist intervention

Severity	**N (%)**
Minor	46 (21.60)
Moderate	92 (43.19)
Major	75 (35.21)
Other	
Reasons	
Prevented complications and morbidity	123 (57.75)
Rationalization of treatment	40 (18.78)
Improving medication adherence	50 (23.47)
Decreased costs	/
Other	/

Strengths of this research include prospective data collection and inclusion of consecutive admissions, that enabled optimal measurement of MRPs, and minimized sampling bias. Yet, we report several weaknesses that can limit the value of the results - it is a single center study; furthermore, the cohort size was underpowered to perform sub-group analysis and the follow up effect of the accepted pharmacist interventions was not evaluated. Nevertheless, overall results of this study point to the possible aspects of improvement in clinical practice in our country and advise that effective strategies to advance medication use in this specific patient population, should be highly prioritized.

Implementation of clinical pharmacist led services, such as medication therapy management (MTM), in routine clinical practice can have a positive impact on the efficient and safe use of medicines in this patient's group. Considering all this, a primary area that could be targeted is pharmacist-guided drug monitoring and patient education and counseling in order to prevent complications and morbidity and improve medication adherence. In addition, pharmacist led provider education could be used to emphasize the importance of medication therapy management as a clinical pharmacy service for optimizing medication use and improving patient care with the focus of patients with mental health disorders (Lucca et al., 2015; Masnoon et al., 2017).

Conclusion

The identified MRPs and proposed interventions augment the role of clinical pharmacist as a valuable member of mental healthcare team. The present study provides evidence-based recommendations that could facilitate implementation of the clinical pharmacy services in routine practice, and hence, improve the quality and effectiveness of health services for patient with mental health disorders in our healthcare system. Additional implementation research studies are planned to confirm the clinical benefits and evaluate the cost-effectiveness associated with the integration of clinical pharmacist in multidisciplinary team at psychiatric hospitals in Macedonia.

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Резиме

Интервенции на клинички фармацевти кај пациенти со нарушувања на менталното здравје

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Клучни зборови: клинички фармацевт, интервенција, нарушувања на менталното здравје

И покрај позитивните докази за влијанието на клиничко-фармацевтските интервенции врз исходот по здравјето на пациентите, придобивките од клиничкиот фармацевт во мултидисциплинарниот психијатриски тим сè уште не се препознаени во нашата земја. Целта на оваа студија беше да се истакне улогата на клиничките фармацевти во нашиот здравствен систем и да се оцени степенот до кој тие придонесуваат во намалувањето на инциденцата на проблеми поврзани со лекови. Студијата опфати вкупно 82 пациенти хоспитализирани на Одделот за психијатрија при Општата болница во Прилеп, во периодот од октомври 2022 до октомври 2023 година. Проблемите поврзани со лекови беа препознаени кај 70 (85,36%) пациенти. Најраспространети беа категориите на проблеми поврзани со изборот на лек (34,74%) и безбедноста на лековите (16,43%), следени од категориите мониторинг на лековите (14,55%) и придржување на пациентот кон пропишаната фармакотерапија (14,08%). Клиничкиот фармацевт препорача 213 интервенции (3,04 по пациент). Најчесто препорачаните клинички интервенции се однесуваа на: следење на лабораториските параметри (9,86%), придржување кон фармакотерапијата (8,45%), спречување на употреба на премногу лекови за непостоечки индикации или за одредена индикација (7,98%) и препораки за привремено или трајно прекинување на третманот со лекот (7,51%). Скоро 58% од сите интервенции на клиничкиот фармацевт беа насочени кон спречување на компликации и морбидитет кои може да произлезат од проблеми со лековите, од кои 35% беа оценети како многу сериозни. Психијатрите прифатија 90,61% (193 од 213) од препораките. Наодите ја истакнуваат можноста за понасочени пристапи во идентификувањето и управувањето со проблеми поврзани со лековите во терциерната нега, каде што интервенциите од клиничките фармацевти може да бидат од значајна корист. Воведувањето на клиничко-фармацевтски услуги, како што е мониторингот и управувањето со терапија со лекови, во рутинската клиничка пракса може да има позитивно влијание врз ефикасната и безбедна употреба на лековите кај пациентите со нарушено ментално здравје.