## **Original Article**

## Pharmacists' Knowledge, Attitudes and Practices Towards People with Mental Health Problems: A Cross-Sectional Study

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#### **Abstract**

Background: In many mental health disorders medications remain the main method of treatment. With the increasing burden of mental disorders, worldwide, pharmacists can play an important role in supporting people with mental health problems, as they interact with them daily. However, personal and practical obstacles may prevent complete commitment.

**Objective:** The purpose of this study was to investigate the knowledge, attitudes and practices of Greek pharmacists towards people with mental health problems who visit their pharmacy.

Methodology: The approach was based on a quantitative survey of primary data, with a structured questionnaire distributed to a random sample of 155 pharmacists in different regions of Greece.

Results: More than half of the pharmacists (68.4%) responded that they played a role in mental health care. mainly by referring patients to mental health professionals (62%) and counseling patients on psychotropic medicines (53%). The vast majority of them (92.3%) did not have specialized training in mental illness and only 37.4% reported sufficient knowledge of current medications for mental illness. Barriers, aside from the lack of specialized training, were the lack of time for counselling patients (57.5%) and the lack of a private designated pharmacy space for counseling, either in person or by telephone (71%). Better communication between physicians and pharmacists (95.5%) was also reported as an important facilitator.

Conclusions: Most of the pharmacists agreed that they should strive to be active supporters of recovery efforts made by people with mental health problems. Continuous training and education for mental health problems and counselling skills as well as collaboration with the multidisciplinary team in the community is important for effective support.

Key-words: pharmacists; knowledge; attitudes; practices; mental health problems; mental health disorders

#### Introduction

Mental health problems remain the leading cause of morbidity and disability, globally (The World Bank, 2016). Regardless the increased prevalence and burden of disease. due to social stigma many people with mental health problems do not seek treatment (Rubio-Valera, Chen & O'Reilly, 2014). There is an increasing responsibility for health professionals to develop therapeutic alliances with patients to positively impact their health care.

For many mental disorders, such as depression, bipolar disorder and schizophrenia, medicationsalong with psychotherapy- remain the most common choice for the disorders' management (Young 2008; APA 2010). About one in five in the United people States use both pharmacotherapy and psychotherapy for mental health problems (Giannetti et al., 2018; Rubio-Valera Chen & O'Reilly, 2014). Pharmacists, due to their easy accessibility often interact with people with mental health problems. Recently, in many countries, the role of the pharmacist has been expanded in order to more effectively treat chronic diseases, such as mental illness (Schindel et al., 2017). As primary health care professionals. pharmacists can effectively contribute to the management of common mental illnesses, due to their position in local communities (Mossialos et al., 2015). According to recent studies, consumers develop a relationship of trust with their pharmacist, feel the pharmacy as a safe place to discuss their concerns about mental health (Giannetti et al., 2018; Esmalipour, Salary & Shojaei, 2021).

Well-trained pharmacists can be equipped with skills and knowledge to recognize early symptoms of some types of mental illness, act as a liaison with the appropriate health care or treatment provider and closely monitor patient's medication adherence. Pharmacists can influence mental health prognosis by advising patients on the use of medicines, the side effects, how long it may take to see full therapeutic effects and the expected duration of treatment (Bell et al., 2005). Although it seems quite obvious that counselling is within pharmacists' responsibilities however, it is documented that it is not feasible to spend the time needed for advising due to the increased workload and that most of the time is dedicated in dispensing medicines (Lea, Corlett & Rodgers, 2012; Alkhateeb et al., 2015; Gregório, Cavaco & Lapão, 2017). Regarding pharmacists' attitudes and practices towards mental illness, a recent study observed a discomfort on counselling and provision of pharmacy services compared to other diseases that pharmacists felt more confident to provide advices and pharmaceutical care (Morral & Morral, 2016). A possible explanation could be the lack of knowledge due limited education on mental health issues and lack of experience on how to support people with mental health problems (Walters et al., 2012). In Greece, there is no evidence on how pharmacists who work in the community address the aforementioned issues. Therefore, the aim of the present study was to examine the knowledge, attitudes and practices of Greek pharmacists towards people with mental health problems.

## Methodology

Data collection: The present cross-sectional survey collected data between March and April 2019 via an anonymous, structured questionnaire to outline the knowledge, attitudes and practices towards mental illness from a random sample of 155 pharmacists in different regions of Greece. The questionnaire, which was developed by the research team based on the literature (Medical Outcomes Trust, 1997), was translated from English into Greek language using both backward and forward translations. Before distribution, the questionnaire was piloted on 30 pharmacists, who were not included in the final sample, so as to clarify any misunderstandings. The final version was administered both as a hard copy and electronically. The online distribution allowed the participation of a broader range of participants even those residing in remote areas.

Study questionnaire: The questionnaire was based on the Giannetti et al (2018) survey and it was divided into four parts: (a) socio-demographic information, (i.e. gender, age, education, any lifelong education on mental disorders (i.e. seminars or post graduate studies), years of working experience (b) closed-ended questions about knowledge and attitudes towards mental illness, the degree of involvement in the provision of care to people with mental health problems, (c) comfort level, confidence in their knowledge, willingness and interest to provide mental health services and (d) beliefs about mental illness.

Ethical Considerations: The study was carried out in accordance with the updated Declaration of Helsinki (2013).The questionnaire with personal identifiable anonymous no information. The participants were primarily informed about the aim of the study and their participation was voluntary. An informed consent was obtained prior to their participation in the study.

Data Analysis: Concerning descriptive statistics. continuous variables are presented as the mean (SD), whereas categorical variables are presented as absolute (N) and relative frequencies (%). After checking for continuous variables' normality of distribution, the Students' t-test and Mann-Whitney test for parametric and non-parametric correlation analyses between categorical and continuous variables was performed, respectively. A cutoff value of 5% (p<0.05) was set to demonstrate the level of statistical significance. Finally, statistical analysis was carried out using the SPSS software version 19.

#### **Results**

### Respondents' socio-demographic characteristics

All the participants had a BSc Pharmacy degree and a relatively small proportion had previously received specialized training and continuing education (7.7 % and 18.1%, respectively) on mental illness. Approximately, more than half of the participants indicated having personal experience with mental health problems (themselves or their relatives). (**Table 1**).

Moreover, lack of specific area in the pharmacy for patient counseling was prevailed (71.0%).

## **Knowledge, attitudes and Practices**

Regarding knowledge, attitudes and practices, 68.4% reported that they have a role in mental health care delivery, although nearly 62% preferred to refer patients to mental health professionals. Only 37.4% reported that they had adequate knowledge on medication treatment for mental illness and the majority (85.8%) considered important to have a continuous training on the management of mental health problems (**Table 2**).

# Attitudes towards mental health problems and provision of mental health services

Large proportion of the participants (87.7%) agreed in supporting individuals with mental illness and, in general, their attitude towards the disease was positive. Even though they were willing to participate more actively in the treatment and the counselling however, they did not feel very comfortable and very confident in the provision of mental health services. Moreover, such pharmacists were very interested in discussing with patients about their treatment, any possible side effects they have observed or even contacting the physician about the treatment (Tables 3 and 4).

Regarding the obstacles faced for effective provision, most pharmacists reported that people with mental health problems were well informed by their physicians, they had no access to medical records, they had no specific guidelines by the physicians on the disease management and due to lack of time it is not possible to support people with mental health problems. Moreover, lack of specific area in the pharmacy for patient counseling was prevailed (71.0%).

**Table 1:** Socio-demographic characteristics among pharmacists

	N (%)
Age in years. mean (SD)	25-35 (40.6)
Sex (male)	68 (43.9)
Pharmacy degree attained	
BSc	106 (68.4)
MSc	47 (30.3)
PhD	2 (1.3)

Years working in pharmacy	11-20 (27.7)
Working status	
Full-time	51 (32.9)
Part-time	12 (7.7)
Pharmacy Director	8 (5.2)
Pharmacy Owner	84 (54.2)
Specialized training in mental illness (Yes)	12 (7.7)
Continuing education related to mental illness (Yes)	28 (18.1)
Personal experience in mental illness (Yes)	64 (41.3)
Estimated weekly prescription medicines for mental health problems (Mean)	20 (61.3)
Working class of people with mental health problems visiting pharmacy	
Lower class	43 (27.7)
Middle class	107 (69.0)
Upper class	5 (3.2)

Table 2: Knowledge and practices among pharmacists

Knowledge	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	N (%)	N (%)	N (%)	N (%)	N (%)
Adequate knowledge on medication	-	27 (17.4)	70 (45.2)	58 (37.4)	-
therapy for mental illness					
Importance of lifelong learning on mental health	-	4 (2.6)	18 (11.6)	133 (85.8)	-
It is unethical to tell the patient about the purpose of psychotropic drug	-	24 (15.5)	52 (33.5)	79 (51.0)	-
Practices (Yes vs No)					N (%)
Role in mental health care delivery					106 (68.4)
Counselling on psychotropic medication					
Monitoring/assisting people with mental health problems about their medications					41 (26.5)
Counselling on medications' side effects					62 (40.0)
Monitoring of specialized products for mental illness					30 (19.4)
Recommending/advocating for psychotropic therapy changes to optimize cost or formulation					25 (16.1)
Recommending medication switches or augmentation of psychotropic therapy due to adverse effects/					20 (12.9)
Screening patients for depression or other mental illness					17 (11.0)
Referring patients to mental health professionals in the community					

Table 3: Attitudes regarding mental health problems among pharmacists

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	N (%)	N (%)	N (%)	N (%)	N (%)
Mental illness is a real disease	-	2 (1.3)	6 (3.9)	147 (94.8)	-
Anyone can suffer from mental illness	-	8 (5.2)	13 (8.4)	134 (86.5)	-
Most mental illness problems stem from negative life events	-	26 (16.8)	61 (39.4)	68 (43.9)	-
Mental illness is common in older patients	-	54 (34.8)	61 (39.4)	40 (25.8)	-
Patients with mental illness need to pull themselves together to get over it	-	47 (30.3)	41 (26.5)	67 (43.2)	-
Most patients with mental illness get	-	127 (81.9)	23 (14.8)	5 (3.2)	-

better without treatment					
Patients with mental illness put	-	65 (41.9)	46 (29.7)	44 (28.4)	-
unnecessary strain on pharmacists					
I believe that a person with mental	-	10 (6.5)	30 (19.4)	115 (74.2)	-
illness is just as intelligent as a person					
without mental illness					
I believe that a person with mental	-	57 (36.8)	62 (40.0)	36 (23.2)	-
illness is as trustworthy as a person					
without mental illness					
I believe that mental illness is a sign of	-	84 (54.2)	47 (30.3)	24 (15.5)	-
personal weakness		()	5.4.4.4.A.	44 (8 5 5)	
I believe that a person with mental	-	50 (32.3)	64 (41.3)	41 (26.5)	-
illness can be as productive as a person					
without mental illness		20 (24.5)	55 (25.5)	(2 (40 0)	
I would consider the opinions of a	=	38 (24.5)	55 (35.5)	62 (40.0)	-
person with mental illness are as					
seriously as I would consider the					
opinions of individuals without mental					
illness		2 (1.2)	17 (11 0)	127 (97.7)	
I believe that pharmacists should make		2 (1.3)	17 (11.0)	136 (87.7)	
an effort to be active supporters of the					
recovery efforts being made by					
individuals with mental illness					

Table 4: Provision of pharmacists on mental health services (comfort/confidence/willingness/interest)

Comfort	Very comfortable	Comfortable	Somewhat comfortable	Not comfortable
Comfort	N (%)	N (%)	N (%)	N (%)
Talking to a patient about medication for a mental illness	23 (14.8)	98 (63.2)	30 (19.4)	4 (2.6)
Asking the patient about their goals for therapeutic outcomes	22 (14.2)	88 (56.8)	39 (25.2)	6 (3.9)
Asking the patient about side effects of his/her mental illness medication	28 (18.1)	87 (56.1)	34 (21.9)	6 (3.9)
Asking the patient what he/she knows about the mental illness medication	24 (15.5)	76 (49.0)	43 (27.7)	12 (7.7)
Asking the patient about therapeutic response to their medication	36 (23.2)	88 (56.8)	26 (16.8)	5 (3.2)
Talking to a physician about any concerns regarding	34 (21.9)	60 (38.7)	40 (25.8)	21 (13.5)
patient's mental illness medication				
Confidence	Very confident	Confident	Somewhat confident	Not confident
	confident N (%)	N (%)	confident N (%)	confident N (%)
Confidence  Talking to a patient about medication for a mental illness	confident		confident	confident
	confident N (%)	N (%)	confident N (%)	confident N (%)
Talking to a patient about medication for a mental illness Asking the patient about their goals for therapeutic	confident N (%) 10 (6.5)	<b>N (%)</b> 93 (60.0)	confident N (%) 50 (32.3)	confident N (%) 2 (1.3)
Talking to a patient about medication for a mental illness Asking the patient about their goals for therapeutic outcomes Asking the patient about side effects of his/her mental	confident N (%) 10 (6.5) 9 (5.8)	<b>N</b> (%) 93 (60.0) 91 (58.7)	confident N (%) 50 (32.3) 50 (32.3)	confident N (%) 2 (1.3) 5 (3.2)
Talking to a patient about medication for a mental illness Asking the patient about their goals for therapeutic outcomes Asking the patient about side effects of his/her mental illness medication Asking the patient what he/she knows about the mental	confident N (%) 10 (6.5) 9 (5.8) 14 (9.0)	<b>N</b> (%) 93 (60.0) 91 (58.7) 104 (67.1)	confident N (%) 50 (32.3) 50 (32.3) 33 (21.3)	confident N (%) 2 (1.3) 5 (3.2) 4 (2.6)

patient's mental illness medication

Willingness	Very willing N (%)	Willing	Somewhat willing	Not willing
Winnightss	11 (70)	N (%)	N (%)	N (%)
Talking to a patient about medication for a mental illness	48 (31.0)	97 (62.6)	8 (5.2)	2 (1.3)
Asking the patient about their goals for therapeutic outcomes	42 (27.1)	83 (53.5)	24 (15.5)	6 (3.9)
Asking the patient about side effects of his/her mental illness medication	50 (32.3)	76 (49.0)	26 (16.8)	3 (1.9)
Asking the patient what he/she knows about the mental illness medication	38 (24.5)	68 (43.9)	42 (27.1)	7 (4.5)
Asking the patient about therapeutic response to their medication	46 (29.7)	91 (58.7)	16 (10.3)	2 (1.3)
Talking to a physician about any concerns regarding patient's mental illness medication	44 (28.4)	57 (36.8)	40 (25.8)	14 (9.0)
	Very	Interested	Somewhat	Not
Interest	interested		interested	interested
	N (%)	N (%)	N (%)	N (%)
Talking to a patient about medication for a mental illness	40 (25.8)	101 (65.2)	11 (7.1)	3 1.9
Asking the patient about their goals for therapeutic outcomes	38 (24.5)	90 (58.1)	24 (15.5)	3 1.9
Asking the patient about side effects of his/her mental illness medication	56 (36.1)	79 (51.0)	17 (11.0)	3 1.9
Asking the patient what he/she knows about the mental illness medication	35 (22.6)	82 (52.9)	33 (21.3)	5 3.2
Asking the patient about therapeutic response to their medication	54 (34.8)	84 (54.2)	14 (9.0)	3 (1.9)
Talking to a physician about any concerns regarding	50 (32.3)	71 (45.8)	28 (18.1)	6 (3.9)

#### Discussion

patient's mental illness medication

This is the first study exploring knowledge, attitudes and practices towards people with mental health problems among pharmacists in Greece. Lack of specific area in the pharmacy for counseling (either in person or via phone call), limited knowledge on the management of mental illness and the need for lifelong training on the certain subject were evident. Even though pharmacists were willing to support people with mental health problems, they felt more comfortable to refer them to mental health professionals. Additionally, participants highlighted the lack of sufficient mental health guidelines and the limited time for counselling were addressed as main barriers to support people with mental health problems. In recent years, pharmacists interact almost daily with their customers-patients (Gregório, Cavaco, & Lapão, 2017). The results of the present study regarding pharmacists'

willingness and practices in the provision of therapeutic treatment are in line with a systematic review which concluded that their contribution can improve medication adherence among people with mental health problems (Bell et al., 2005). However, this involvement need to be continuous, multifaceted and tailored-made according to the type of the disease and the patient's needs (Chong, Aslani & Chen. 2011). Multidisciplinary collaboration between community professionals seems to play a critical role in the management of mental illness (Xyrichis & Ream, 2008). Therefore, within the framework of multidisciplinary community healthcare. pharmacists can identify problems related to medication therapy (Moczygemba et al., 2011). Regardless of the high prevalence of mental health disorders (WHO, 2019), still remains a social stigma (Rubio-Valera, Chen & O'Reilly, 2014; National Institute of Mental Health, 2017; Rickles, Wertheimer, & Huang, 2019). Healthcare

professionals' knowledge, attitudes and practices are key elements for minimizing stigma and social marginalization among people in need (Riffel & Chen, 2019). As documented in recent study (Giannetti et al., 2018), pharmacists in the present study reported positive attitudes among people with mental health problems. It was also observed that lack of adequate knowledge on counselling and specific instructions about treatment was a barrier to the effective provision for people with mental health problems. These results are supported by recent evidence suggesting the need for continuous training on mental health issues (Murphy et al., 2014; Giannetti et al., 2018). Lack of education during undergraduate studies on the provision of primary mental healthcare and the psychology of mental illness was reported by pharmacy students (Aaltonen et al., 2010). Communication skills for counselling need to be incorporated in the undergraduate training for pharmacists so as to pharmaceutical care to people with mental health problems (Liekens et al., 2012). It is also documented that, participation of welltrained mental health consumer educators in the training of undergraduate pharmacy students is an effective method for increasing knowledge and improving their attitudes and behaviors towards mental illness (O'Reilly et al., 2010; Wheeler et al., 2014). Moreover, continuous training on the disease course and possible medication outcomes could improve pharmacists' role on the disease treatment (Scheerder et al., 2009). Lack of specific place in the pharmacy for counseling was evident which discourages both pharmacists and people with mental health problems to have a more private discussion on issues related to their disease. Similarly, lack of privacy consists a serious obstacle to the effective interaction between pharmacists and consumers (O'Donnell, Brown & Dastani, 2006; Hattingh et al., 2016).

**Limitations:** Regarding the limitations of the study, the small number of participants does not allow for generalizations to other similar study groups. However, the study sample was retrieved from different locations (including rural and urban areas) which provides a regional variation.

**Conclusion:** Pharmacists, as part of a multidisciplinary community healthcare team, can

play a role in the treatment of people with mental health problems. Continuous training and education for mental health problems and counselling skills as well as collaboration with the multidisciplinary team in the community is important for effective support. Further research on the implementation and evaluation of the effectiveness of mental health programs among pharmacists should be conducted.

#### References

- Aaltonen, S., Laine, N.P., Volmer, D., Gharat, MS., Muceniece R., Vitola A., et al. (2010). Barriers to medication counselling for people with mental health disorders: a six country study. Pharm Pract, 8(2),122-31.
- Alkhateeb, F.M., Attarabeen, O., Latif, D., & Deliere, R. (2015). Workload perceptions of Pharmacists: Part of changing a national trend. Soc Pharm J,1,e104.
- American Psychiatric Association (APA) (2010). Practice guideline for the treatment of patients with major depressive disorder. Available at: https://psychiatryonline.org/pb/assets/raw/sitewide/practice\_guidelines/guidelines/mdd.pdf Accessed 06 April 2022.
- Bell, S., McLachlan, A. J., Aslani, P., Whitehead, P., & Chen, T. F. (2005). Community pharmacy services to optimise the use of medications for mental illness: a systematic review. Australia and New Zealand Health Policy, 2(1), 29.
- Chong, W. W., Aslani. P., & Chen. T. F. (2011). Effectiveness of interventions to improve antidepressant medication adherence: a systematic review. International Journal of Clinical Practice, 65(9):954-975.
- Esmalipour, R., Salary, P., & Shojaei, A. (2021). Trust-building in the Pharmacist-patient Relationship: A Qualitative Study. Iranian Journal of Pharmaceutical Research, 20(3),20-30.
- Giannetti, V., Caley, C. F., Kamal, K. M., Covvey, J. R., McKee, J., Wells, B. G., & Vadagam, P. (2018). Community pharmacists and mental illness: a survey of service provision, stigma, attitudes and beliefs. International Journal of Clinical Pharmacy, 40(5),1096-1105.
- Gregório, J., Cavaco, A. M., & Lapão, L. V. (2017). How to best manage time interaction with patients? Community pharmacist workload and service provision analysis. Research in Social and Administrative Pharmacy, 13(1),133-147.
- Hattingh, H. L., Emmerton, L., Ng Cheong Tin, P., & Green, C. (2016). Utilization of community pharmacy space to enhance privacy: a qualitative

- study. Health expectations: An International Journal of Public Participation in Health Care and Health Policy, 19(5),1098-1110.
- Lea, VM., Corlett, S.A., & Rodgers, R.M. (2012). Workload and its impact on community pharmacists' job satisfaction and stress: a review of the literature, Int J Pharm Pract 20(4),259-271.
- Liekens, S., Smits, T., Laekeman, G., & Foulon, V. (2012). Pharmaceutical care for people with depression: Belgian pharmacists' attitudes and perceived barriers. International Journal of Clinical Pharmacy, 34(3),452-459.
- Medical outcomes Trust (1997). Trust introduces new translation criteria. Trust Bulletin. 5,1-4. Available at: http://www.outcomestrust.org/bulletin/0797blltn.htm Accessed 06 April 2022
- Moczygemba, L.R., Goode J.V., Gatewood, S.B., Osborn, R.D., Alexander, A.J., Kennedy, A.K., Stevens, L.P., & Matzke, G.R. (2011). Integration of collaborative medication therapy management in a safety net patient-centered medical home. J. Am. Pharm. Assoc.,51,167-172.
- Morral, K. & Morral, J. (2016). "A survey of community pharmacists' attitudes towards mental illness". Journal of Public Mental Health, 15 (2),93-102.
- Mossialos, E., Courtin, E., Naci, H., Benrimoj, S., Bouvy, M., Farris, K., ... & Sketris, I. (2015). From "retailers" to health care providers: transforming the role of community pharmacists in chronic disease management. *Health policy*, 119(5), 628-639.
- Murphy, A. L., Gardner, D. M., Kutcher, S. P., & Martin-Misener, R. (2014). A theory-informed approach to mental health care capacity building for pharmacists. International journal of mental health systems, 8(1), 46.
- National Institute of Mental Health (2017). Major depression. Available at: www.nimh.nih.gov/health/statistics/major-depression.shtml Accessed 06 April 2022.
- O'Donnell, D. C., Brown, C. M., & Dastani, H. B. (2006). Barriers to counseling patients with obesity: a study of Texas community pharmacists. Journal of the American Pharmacists Association, 46(4),465-471.
- O'Reilly, C.L., Bell, J.S. & Chen, T.F. (2010). Consumer-led mental health education for pharmacy students. Am J Pharm Educ, 10;74(9), 167.
- Rickles, N., Wertheimer, A., & Huang, Y. (2019). Training Community Pharmacy Staff How to Help

- Manage Urgent Mental Health Crises. Pharmacy (Basel, Switzerland),7(3),133.
- Riffel, T., & Chen, S.P. (2019). Exploring the Knowledge, Attitudes, and Behavioural Responses of Healthcare Students towards Mental Illnesses-A Qualitative Study. International journal of environmental research and public health, 17(1), 25.
- Rubio-Valera, M., Chen, T., & O'Reilly, C. (2014). New roles for pharmacists in community mental health care: a narrative review. International Journal of Environmental Research and Public Health, 11(10), 10967-10990.
- Scheerder, G., De Coster, I., & Van Audenhove, C. (2009). Community pharmacists' attitude toward depression: a pilot study. Res Social Adm Pharm,5(3),242-52.
- Schindel, T. J., Yuksel, N., Breault, R., Daniels, J., Varnhagen, S., & Hughes, C. A. (2017). Perceptions of pharmacists' roles in the era of expanding scopes of practice. *Research in Social and Administrative Pharmacy*, *13*(1),148-161.
- The World Bank (2016). Out of the Shadows: Making Mental Health a Global Priority. Available at: tps://www.worldbank.org/en/events/2016/03/09/out-of-the-shadows-making-mental-health-a-global-priority Accessed 06 April 2022.
- Walters, C., Raymont, A., Galea, S., & Wheeler A. (2012). Evaluation of online training for the provision of opioid substitution treatment by community pharmacists in New Zealand. Drug and Alcohol Review 31(7),903-910.
- Wheeler, A., Mey, A., Kelly, F., Hattingh, L., & Davey, A. (2014). Education and training for community pharmacists in mental health practice: how to equip this workforce for the future. The Journal of Mental Health Training. Education and Practice, 9(3),133-144.
- World Medical Association Declaration of Helsinki (2013). Ethical Principles for Medical Research Involving Human Subjects. JAMA,310(20),2191-2194.
- WHO (2019). Mental health: Fact sheet. Available at: https://www.euro.who.int/\_\_data/assets/pdf\_file/000 4/404851/MNH\_FactSheet\_ENG.pdf Accessed 06 April 2022.
- Xyrichis, A. & Ream, E. (2008). Teamwork: a concept analysis. Journal of Advanced Nursing, 61,232-241.
- Young, L. T. (2008). What is the best treatment for bipolar depression? Journal of Psychiatry & Neuroscience, 33(6),487-488.