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Research article

Community Pharmacists' Perception about Mental Healthcare and Barriers to providing Pharmaceutical Care Services to Patients with Mental Disorder in Ibadan, Nigeria

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ABSTRACT

Community pharmacists play a significant role by providing pharmaceutical care for patients with mental disorders. Mental disorder is a health priority in national health strategies around the world, including in Nigeria. However, personal perception and practice-related barriers may prevent full involvement. This study therefore aims to assess community pharmacists' perception and level of comfort towards mental healthcare, as well as the barriers in providing pharmaceutical care to patients with mental disorder in Ibadan. A cross-sectional study among 120 community pharmacists in Ibadan, using a self-administered questionnaire. Descriptive statistics including frequency and percentage were used to summarize the data. The majority (99; 82.5%) agreed they will deal with mentally ill patients, while 81 (67.5%) feel confident and comfortable to provide pharmaceutical care to patients with mental illness. Major barriers to pharmaceutical care cited includes inability to monitor outcomes as patients may never return to the pharmacy again (88; 73.3%) and having only limited patient information (85; 70.8%). This corresponds with the revelation that (88; 73.3%) believe that follow up for adverse drug related problem is not easy. About 23% community pharmacies do not stock psychotropic medication at all, mainly due to few requests and tough regulations of record keeping required by law. Despite willingness to provide services to patients with mental illness, reduced stockings of psychotropics and practice-related barriers prevent full participation of community pharmacists.

Keywords: *Community pharmacists; mental healthcare; pharmaceutical care; mental disorder; psychotropics*

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INTRODUCTION

Mental disorders are amongst the strongest predictors of suicide, with above 80% of patients committing suicide owing to being untreated at the time of their death (Nock et al., 2009). In concert with psychotherapy, pharmacotherapy is a vital treatment approach which is most dispensed by community pharmacists (Brooks, 2014). Community pharmacists (CPs) can play a significant role by providing pharmaceutical care (PC) services such as counselling, medication adherence, monitoring and solving drug related problems to mentally ill patients.

Globally, nearly one billion people live with a mental disorder (Rialda, 2021) . In Nigeria, there is an occurrence of aversive life situations in the society which frequently overwhelm the mental health and well-being of the populace. Such negative circumstances include high rate of poverty, high unemployment rate, insecurity, traumatic experiences, human right abuse, and a deep-rooted belief in supernatural affliction, among others (Awaritefe, 2017). About 50 million people are suffering from some sort of mental illness in Nigeria (Socrates, 2019). The prevalence of mental illness in Ibadan was reported to be about 20% in children and adolescent (Gureje et al., 1994) and approximately 33% in the elderly age group seen in primary care centers (Ejidokun et al., 2012).

Community based pharmacists are highly accessible to patients since they generally do not operate on an appointment schedule. The accessibility, knowledge and skills of community pharmacists can be leveraged upon to increase mental illness and addictions care in communities (Murphy et al., 2016a). Problems involving treatment optimization, treatment adverse effects, non-adherence, medication withdrawal, inappropriate poly-therapy (Murphy et al., 2016b), education of patients, early detection, collaboration in treatment, health wellbeing promotion policy development can be identified and improved (Murphy et al., 2016b), by the community pharmacists since patients visit pharmacy more often to refill their prescriptions than they visit physicians which is most often based on appointment.

The perception of the community pharmacist about mental health care may affect pharmacist's approach to pharmaceutical care and even stigmatization of patients (Murphy et al., 2016b). Several findings provide insight into

the stigma associated with mental illness and how this presents as a barrier to effective mental health management by community pharmacists, however positive relationships with knowledgeable staff are fundamental to reducing such stigma. Hence it is important for a community pharmacist to have the right perception of mental illness and its care.

Barriers to pharmaceutical care of patients with mental illness are wide ranged and has been documented to include staffing issues, poor perception of pharmacist, drug availability, noise, lack of time, knowledge, skills, and competence in management of mentally ill patients' communities (Murphy et al., 2016a).

The involvement of community pharmacists in providing services to patients with mental health has not been reported and evaluated in Nigeria, to the best of our knowledge. Thus, this study therefore aims to determine the involvement of community pharmacists in providing pharmaceutical care to patients with mental health disorder as well as assessing their perception about mental health care and the barriers to providing pharmaceutical care to patients with mental disorder.

MATERIALS AND METHODS

Study area: This study was a questionnaire-guided cross-sectional survey among community pharmacists practicing in Ibadan between May and July 2021. Eligible participants were registered community pharmacists practicing in Ibadan, who gave voluntary informed consent to partake in the study. Participating pharmacists must have had a minimum of one year's practice experience in a community pharmacy. Pharmacy students, interns, non-pharmacist attendants, and community pharmacists who were absent from their pharmacies during the study were excluded.

Study area: The study was conducted in Ibadan, the capital of Oyo State, southwestern Nigeria. Oyo State has a landmass of 27,249 square kilometers and is one of the 36 states of Nigeria. Ibadan has a population of 3.6 million inhabitants, while Oyo State has a population of 5.6 million (NPC, 2006). Community pharmacies and proprietary and patent medicine vendor stores are present throughout Ibadan. There are various types of community pharmacies in Ibadan and across Nigeria, most are retail, independent, supermarket type of pharmacies, with a few drug store and chain in-store pharmacies.

Sample Size Determination: The number of community pharmacy premises registered in Ibadan was obtained from the Pharmacists' Council of Nigeria, Ibadan, Oyo State chapter directory. Based on the estimated population of 140 registered pharmacy premises and using the assumption of 95% confidence level and 5% margin of error, a sample size of 104 was obtained using Yamane sample size formula (Yamane, 1967). Adjusting for a 10% non-response rate gave a target sample population of approximately 120.

Sampling and data collection procedure: A consecutive sampling technique/approach was used for participants' enrolment. Eligible community pharmacists were approached by visiting individual pharmacist in their respective pharmacy premises. The paper questionnaire was distributed to 120 community pharmacists. Objectives of the study were explained to every pharmacist after which voluntary informed consent was obtained to signify intention to participate in the study. The paper questionnaire was self-administered by all consented pharmacists and retrieved within 25–30 minutes of completion of the questionnaire. Anonymity and confidentiality of responses were assured, while participation was entirely voluntary. Measures were put in place to ensure that no pharmacist filled more than one questionnaire. This was achieved by coding each questionnaire administered to the pharmacist from each community pharmacy to avoid duplication. At least one pharmacist per community pharmacy premises completed the questionnaire on his/her own. The investigator collecting the data was given all the necessary training about the instrument and appropriate ways of approaching the pharmacists and gaining their permission to fill the questionnaire prior to the data collection process. There was no incentive provided to the respondents for participating in the study.

Data collection instrument, pretest and content validity: To obtain relevant information for this study a self-administered questionnaire was used. This questionnaire was developed by the investigators following extensive review of relevant literatures (Ginnatti et al., 2018, Yin et al., 2019) as well as employing previous experience of investigators. The review provided an insight to facilitate the development of the questionnaire. Pretest and content validation were carried out on the drafted questionnaire. The questionnaire consisted of six sections. Section a captured Socio-demographic characteristics, section b comprised of questions assessing the stocking and pharmaceutical care services, section c comprised of questions assessing perception of community pharmacists on stocking and not stocking psychotropic drugs, section d comprised of questions assessing perception of community pharmacists of patients with mental disorder, section e evaluates the level of comfort of community pharmacists in the management of mental disorders and section f evaluates the barriers to providing pharmaceutical care to patients with mental illness in community pharmacies. A pilot study was conducted with 15 participants from the sample population, where internal consistency was found to be demonstrated by a Cronbach alpha value of 0.72. The questionnaire was assessed for content validity by two clinical pharmacists in academia to ascertain the comprehensiveness of question items vis-à-vis the study objectives, as well as ensuring that there are no ambiguous questions or statements. Subsequently, the questionnaire was given to five community pharmacists randomly chosen within Ibadan to ascertain the ease of comprehension of the item-statements, these pharmacists were not included in the main study. Feedback from the pretest and content validation led to minor modifications of the drafted questionnaire.

Data Analysis: At the end of each day of the study, the administered questionnaires were crosschecked and coded serially. Data entering, cleansing and analysis was done using IBM SPSS (version 23). Descriptive statistics including frequency and percentage were used to summarize the data.

Community pharmacist's perceptions and level of comfort were presented descriptively in tables using mean and standard deviation.

Ethical Consideration: Ethics approval for the study was obtained from the University Institution Review Board with approval number UI/EC/21/0178.

RESULTS

Community pharmacists' demographics: Of the 130 questionnaires administered to the community pharmacists, 120 were filled given a response rate of 92.3%.

Table 1:
Demographic characteristics of respondents (n=120)

Variables n (120)		Frequency	Percentage (%)
Age (years)	20-29	51	42.5
	30-39	46	38.3
	40-49	7	5.8
	50-59	9	7.5
	60-69	5	4.2
	70-79	2	1.7
Sex	Male	70	58.3
	Female	50	41.7
Years of experience	<5	53	44.2
	5-10	37	30.8
	>10	30	25.0
Educational degree attained	Pharm D only	4	3.3
	B. Pharm only	116	96.6
Additional degree	Others (mph, PhD, MSc)	17	14.2
Years of working in community pharmacy	<5	68	56.7
	5-10	35	29.2
	>10	17	14.2
Role in pharmacy	Owner	34	28.3
	Superintendents	42	35.0
	Full time	35	29.2
	Locum	9	7.5
Type of pharmacy	Chain	20	16.7
	Independent	100	83.3
Specialised training in mental illness	Yes	12	10
	No	108	90
Personal history of mental illness	Yes	7	5.8
	No	113	94.2
History of mental illness in family member or close friends	Yes	16	13.3
	No	104	86.7
Knowledge level on mental illness	Good	35	29.2
	Fair	83	69.2
	Poor	2	1.7
Beliefs that one's opinions or beliefs would affect ability to provide pharmaceutical care	Definitely	53	44.2
	Probably	29	24.2
	Maybe	23	19.2
	Not at all	9	7.5
	Don't know	6	5.0

There was a slight male preponderance (70; 58.3%) with majority being with in the age range of 20-29 (51; 42.5 %). Most of the pharmacists had less than 5 years working experience as community pharmacists (53; 44.2%). Only a few have a personal history of mental illness (7; 5.8%). Majority having no specialized training in mental illness (108; 90%). A larger population of the pharmacists had fair knowledge on mental illness (83; 69.2%) and majority agreed that one's opinions or beliefs would affect ability to provide pharmaceutical care (53; 44.2%). See Table 1.

Stocking of psychotropic medications in community pharmacies: Most community pharmacies stock antidepressants, such as anxiolytic (103; 85.8%), benzodiazepines (99; 82.5%), amitriptyline (73; 60.8%), and drugs used for bipolar (87; 72.5%), while a few stocked bupropion (37; 30.8%) and duloxetine (47; 39.2%).

Table 2:
Stocking of psychotropic medications in community pharmacy (n=120)

variables n (120)		F	(%)
Stock psychotropics medication	Yes		
	No	92	76.7
		28	23.3
Frequency of prescription for psychotropics	Daily	24	20.0
	Once a week	35	29.2
	Once a month	34	28.3
	Once a year	4	3.3
	Never	6	5
Age group of majorities of prescription requests	18-29	16	13.3
	30-39	69	57.5
	40-49	27	22.5
	50-59	5	4.2
	60-69	2	1.7
	70-79	1	8
Average number of psychotropics sold in a month	0	6	5.0
	1	9	7.5
	2	22	18.3
	3	25	20.8
	4	15	12.5
	5	8	6.7
	>5	35	29.2
Antidepressants			
Benzodiazepines e.g. diazepam	Yes	99	82.5
	No	21	17.5
Anxiolytic e.g. bromazepam	Yes	103	85.8
	No	17	14.2
TCAs e.g. amitriptyline	Yes	73	60.8
	No	47	39.2
SNRIs e.g. duloxetine	Yes	47	39.2
	No	73	60.8
Bupropion	Yes	37	30.8
	No	83	69.2
Drugs for bipolar/maniac e.g. carbamazepine	Yes	87	72.5
	No	33	27.5

TCA- tricyclic antidepressant, SNRI-serotonin and norepinephrine reuptake inhibitors. F = Frequency; % = Percentage.

Just above one-quarter (35; 29.2%) of the pharmacies are selling >5 psychotropics medications monthly. About 23% of community pharmacies do not stock psychotropic medication at all. Details in Table 2.

Pharmaceutical care services provided by community pharmacists to patients with mental illness and disorders: Most provided pharmaceutical care services such as counselling (92; 76.2%), dispensing (91; 75.6%) and provision of drug information (65; 54.2%) and a few monitoring side effect (41; 34.2%), adherence (27.5; 27.5%), and drug related problems (26; 21.7%). See Table 3.

Perception of pharmacists on stocking or not stocking psychotropic drugs: Most pharmacists disagreed with the statement "I fear for my life and as a result I'd rather not deal with these patients (104; 86.7%) and "because mentally ill patients have unpredictable behaviors and are aggressive as such, I'd rather not deal with them (99; 82.5%). About half of the respondents (62; 51.7%) agreed that due to few requests they do not stock psychotropics medications. Details in Table 4.

Perception of pharmacist on patients with mental disorders and illness: Majority of the respondent agreed that mentally ill patients are stigmatized so they do not want to talk about their mental health symptoms (97; 80.8%) and they are not afraid of mentally ill patients (78; 65.0%). See Table 5.

Level of comfort of pharmacists in management of patients with mental illness: The respondents reported they feel comfortable asking patients for the reason for use of psychotropics and discussing their symptoms (89; 74.2%), feel confident and comfortable enough to provide pharmaceutical care (81; 67.5%) and have interest in providing pharmaceutical care to patients with mental disorders (78; 65.0%). As shown in Table 6.

Table 3:
Pharmaceutical care services provided by community pharmacists to patients with mental illness and disorders (n= 120)

Variables		F	(%)
Counselling	Yes	92	76.7
	No	28	23.3
Dispensing of drugs	Yes	91	75.8
	No	55	45.8
Provision of drug information	Yes	65	54.2
	No	55	45.8
Monitoring of side effect	Yes	41	34.2
	No	79	65.8
Monitoring of adherence	Yes	33	27.5
	No	87	72.5
Solving drug related problems	Yes	39	32.5
	No	81	67.5
Monitoring of drug related problems	Yes	26	21.7
	No	94	78.3
	None		
	Yes	8	6.7
	No	112	93.3
Frequency of providing counselling to patients or relatives of patients with mental disorders	Daily	14	11.7
	2-3 times daily	16	13.3
	Once a week	39	32.5
	Once a month	29	24.2
	Never	11	9.2

Barriers to providing pharmaceutical care to patients with mental illness in community pharmacies: The most frequently cited barriers are inability to monitor outcomes as patients may never return to the pharmacy (88; 73.3%), lack of easy follow up (88; 73.3%), patients may unexpectedly present with symptoms such as hostility, irritability etc. (80; 66.7%) limited patient information (85; 70.8%), and time as a constraint (70, 58.3%). See Table 7.

Table 4:
Perception of pharmacist on stocking or not stocking psychotropic drugs (n = 120)

Variables n=120	Mean±(SD)	Agree n (%)	Neutral n (%)	Disagree n (%)
I fear for my life and as a result I'd rather not deal with these patients	4.34±0.815	5 (4.2)	11 (9.1)	104 (86.7)
Fear of social drug related complications	3.63±1.053	19(15.8)	27(22.5)	74(61.7)
Because mentally ill patients have unpredictable behaviours and are aggressive and as such, I'd rather not deal with them	4.14±0.843	7(5.8)	14(11.7)	99(82.5)
Numerous legal issues	3.50±1.123	25(20.8)	27(22.5)	68(56.7)
Tough regulations of record keeping required by the law	3.32±1.152	34(28.3)	28(23.3)	58(48.3)
Few requests	2.78±1.182	62(51.7)	17(14.1)	41(34.2)
Determined by parent company, manager or boss	3.20±1.142	37(30.8)	32(26.7)	51(42.5)
Unfamiliar with psychotropic medications	4.11±0.915	9(7.5)	17(14.2)	94(78.3)

Table 5:

Perception of pharmacist on patients with mental disorders and illness (n= 120)

Variables n=120	Mean±(SD)	Agree n (%)	Neutral n (%)	Disagree n (%)
I find patients with mental disorders easily approachable	3.10(1.088)	41 (34.2)	26(21.6)	53(44.2)
Handling of patients with mental disorders is easier than patients with other diseases	3.81(0.919)	10(8.3)	22(18.4)	88(73.3)
Anybody can be mentally ill so it's nothing to be ashamed of	2.03(0.845)	100(83.3)	11(9.2)	9(7.5)
I am not afraid of mentally ill patients	2.32(0.889)	78(65.0)	30(25.0)	12(10.0)
Mentally ill patients are stigmatized so they don't want to talk about their mental health symptoms	2.08(0.922)	97(80.8)	11(9.2)	12(10.0)
All patients with mental disorders are potentially dangerous people so they should be avoided	3.91(1.004)	13(10.8)	21(17.5)	86(71.7)

Table 6:
Level of comfort of pharmacists in management of patients with mental illness (n = 120)

Variables n=120	Mean±(SD)	Agree n (%)	Neutral n (%)	Disagree n (%)
I find it easy to deal with relapse and non-adherence in patients	3.13(0.984)	31 (25.8)	45(37.5)	44(36.7)
I have an interest in providing pharmaceutical care to patients with mental disorders	2.32(0.907)	78(65.0)	29(24.2)	13(10.8)
I have enough knowledge and training on the pharmacotherapy of patients with mental disorders	2.83(1.015)	51(42.5)	33(27.5)	36(30.0)
I feel confident and comfortable enough to provide pharmaceutical care to patients with mental health problems	2.37(0.907)	81(67.5)	25(20.8)	14(11.7)
I feel comfortable asking patients for the reason for use of psychotropics and also discussing their symptoms with them	2.18(0.840)	89(74.2)	22(18.3)	9(7.5)

Table 7:
Barriers to providing pharmaceutical care to patients with mental illness

Variables n=120	Mean±(SD)	Agree n (%)	Neutral n (%)	Disagree n (%)
Communication with mentally ill patients is hard	2.67(0.88192)	(57)47.5	42(35.0)	21(17.5)
They do not adhere to their medications	2.76(0.90745)	54(45.0)	36(30.0)	30(25.0)
They distract other patients while trying to spend time with them	2.85(0.91348)	46(38.3)	42(35.0)	32(26.7)
They do not adhere to lifestyle modifications	2.60(0.86384)	60(50.0)	39(32.5)	21(17.5)
Not well trained to handle mentally ill patients	2.88(0.99209)	50(41.7)	31(25.8)	39(32.5)
Inability to identify mentally ill patient	3.28(0.83196)	24(20.0)	40(33.3)	56(46.7)
No access to prescriber concerning drug related problems	2.58(0.92275)	65(54.2)	33(27.5)	22(18.3)
Limited patient information	2,26(0.84511)	85(70.8)	23(19.2)	12(10.0)
Patients feel uncomfortable with such conversations hence do not open up about their symptoms	2.38(0.85192)	79(65.8)	27(22.5)	14(11.7)
Inability to monitor outcomes as patients may never return to pharmacy	2.23(0.84478)	88(73.3)	20(16.7)	12(10.0)
Lack of encouragement from the manager or 47head office; as spending time with them can put I and my job at risk	3.30(1.08929)	27(22.5)	40(33.3)	53(44.2)
There not enough space for counselling	3.10(1.08929)	40(33.3)	33(27.5)	47(39.2)
Patients may unexpectedly present with their symptoms such as hostility, inattentiveness, cognitive dysfunction, irritability	2.36(0.80748)	80(66.7)	29(24.2)	11(9.2)
Follow up for adverse drug related problem is not easy	2.18(0.77766)	88(73.3)	25(20.8)	7(5.8)
Time is a major constraint in patient counselling	2.40(0.99071)	70(58.3)	32(26.7)	18(15.0)
There are no sufficient drugs available to community pharmacists in Ibadan for mentally ill patients	3.35(1.00126)	25(20.8)	40(33.3)	55(45.8)

DISCUSSION

In the present study, community pharmacists revealed that while they were willing/interested to provide pharmaceutical care to individuals with mental illness. Only 42.5% of the respondents in the study reported having satisfactory knowledge level on pharmacotherapy of patients with mental disorder, which is consistent with previous studies (Rickles et al., 2003; Maslen et al., 1996; Bells et al., 2006; Rubio-Valera et al., 2014; Mey et al., 2014). This study shows that only one-tenth of respondents had specialized training in mental illness, while 29.2% of respondent had good level of knowledge on mental illness suggesting that respondents do not have adequate training and education on management of mental illness, this was also proven in similar studies carried out in other countries (Malak, 2020; Margarita et al., 2019). For provision of pharmaceutical services, pharmacists were less involved in assessing the medication-related therapeutic outcomes than they were with the more traditional roles of assessing of dispensing drugs, provision of drug information and counselling of patient. This finding suggests that the focus of pharmaceutical care that emphasizes pharmacists being responsible for therapeutic outcomes has not been fully realized. Previous studies have also reported that pharmacists provide fewer pharmaceutical services to patients with mental illness than for other patient groups (Rickles et al., 2003; Phokeo et al., 2004; Mohammed 2008). Little is known about the full extent to which students are educated about these topics' psychiatric pharmacy in Nigeria, there is a need to analytically appraise and standardize psychiatric pharmacy education among both pharmacy students and practicing pharmacists. A study found a gross level of dissatisfaction among final year pharmacy students with the adequacy of their training to offer mental health services. This study, interestingly, included as participants, students from both the Doctor of Pharmacy (PharmD) and Bachelor of Pharmacy (B.Pharm) programs which are the two extant pharmacy curricula in Nigeria (Saka et al., 2020). Though it is advocated and approved that pharmacist in Nigeria participate in continuous educational programs to update their professional skills and knowledge, evidence suggests that such personal endeavors might not yield an equally skilled population of community pharmacists especially as far as mental health services are concerned. This was emphasized by Aluh and colleagues (Aluh et al., 2020) in evaluation of mental health literacy among pharmacists where some knowledge gaps and misconceptions about mental illnesses were found among practicing pharmacists coupled with a high level of stigma and desire for social distance, comparable to pharmacists in developed countries (Aluh et al., 2020). A recommendation from most research is moving beyond didactic education and engaging students through interpersonal exposure. Direct patient contact, visits to psychiatric care settings and shared practical training experiences are possible strategies. It was proposed that the training curriculum (B.Pharm, Pharm.D and the Mandatory Continuous Professional Development Program) for pharmacists in Nigeria be reviewed and\ or expanded to provide adequate psychiatric pharmacy knowledge for pharmacy undergraduates and pharmacists which should also impact on the extent of mental health care services they can offer during their practice (Adebayo et al., 2021) .

One of the major reasons why some community pharmacies did not stock psychotropic drugs was few requests. This could be because of financial constraint on the part of the patients, mainly because purchase is usually out of pocket in Nigeria and psychotropic medications are not covered under national health insurance scheme (Olufemi et al., 2013). Most patients might not continue to obtain medication after the first set obtained in the hospital as ran out as especially when symptoms are seemingly controlled. Another possible reasons for few requests could be stigmatization, patients may feel more comfortable obtaining their medications in the hospital than obtaining it in the community pharmacy where they are not sure whom they might meet. When individuals can 'humanize' mental illness through personal connections, it makes sense that they would develop less misunderstanding and fear and exhibit less avoidance (Hinshaw, 2009).

Half of respondents agreed that one's beliefs would affect one's ability to provide pharmaceutical care. This is consistent with what was reported in a similar study by Mohammed et al., 2008. The most frequently cited barriers are inability to monitor outcomes as patients may never return to the pharmacy, and uneasy follow up of adverse drug related problems. These two most frequently cited barriers can be correlated together mainly because if patients never return to the pharmacy after purchase of medication, monitoring of outcome as well as adverse drug related problems may be difficult. It can be perceived that stigmatization might be a cause patient do not return to the same pharmacy for their medications, as anticipated stigma from health care providers has been identified as a factor in people's reluctance to seek help for mental illness (Knnak et al., 2017).

Another cited barrier by respondents includes patients feeling uncomfortable having conversations about their symptoms which may also be linked to stigmatization. Adequate counselling at every opportunity may help patients feel more comfortable coming back as well as discussing their symptoms. This makes patients aware of their need for pharmaceutical care services provided by pharmacists, because most are unaware of pharmaceutical care services as expanded roles of community pharmacists (Yin et al., 2019). Findings from this study highlights the need for future training of pharmacists, policy making, and improved practice of pharmacists towards mental health care.

Policies to ensure collaborations between community pharmacists and other health care professionals should be put in place to encourage a joint care of patient and an easy access of pharmacist and other health care providers to patient information. Policies that encourage training and workshops regarding mental illness at intervals during practice will help community pharmacists become better at management of mental illness and provision of pharmaceutical care. Mental illness is now a globally recognized problem and should be included in the national health insurance scheme to help patients afford their medications, and policies should be made to make this available at community pharmacy level.

Education system should incorporate modules on psychotherapy, reduction of stigma (teaching that help health care providers know what to say and what to do), and more focused in-depth training such as first aid training, which

teaches participants how to identify, understand and respond to signs of mental illness. Additionally, exposure to or social contact with mentally ill patients via workshops, psychiatric rotations, or follow up programs at mental institutions will help improve community pharmacists' level of experience as well as influence their attitudes to provision of pharmaceutical care positively. It has been documented that pharmacist who attended continuing education courses on mental disorders were more confident in interacting with these patients (Yin et al., 2019; Maslen et al., 1996). Introduction of psychiatric pharmacy may be needed in the educational curricula in Nigeria.

As shown by this study there are calls for pharmacists to fulfill enhanced roles for patients with mental illness, including engagement in screening and risk assessments, wider provision of medication reviews and adherence intervention as well as participation in shared decision making. Printed materials about mental health, disease states and common medications, are types of resources that pharmacists can provide to sensitize patients about their mental health, their need for pharmaceutical care as well as the ability of the community pharmacists to meet that need. Furthermore, good record keeping practices, persistent follow up, and deliberate effort to spend time with patients who are mentally ill and their care givers will play a role in improving patients' treatment outcomes. To the best of our knowledge, this survey is the first to be carried out amongst community pharmacists in Ibadan Nigeria regarding their perception about mental healthcare and barriers to providing pharmaceutical care to patients with mental disorders.

The inherent limitation of self-reported study may not be totally excluded, especially in questions related to age group of majorities of prescription, gender of majority of patients, as well as average number of psychotropics sold in a month. It should be noted that this study only justifies the state of management of mental illness at community pharmacy level in Ibadan, despite this, the study still offers a key insight into the community pharmacists' perception about mental disorders and the barriers to providing pharmaceutical care services to patients with mental illness thereby illuminating the area of focus to bridge the knowledge and practice gaps.

In conclusion, many community pharmacists are positive toward their interest in mental healthcare. The main barrier to providing pharmaceutical care services, however, is the inability to monitor outcomes as patient may never return to pharmacy. About a quarter of the respondents claimed that they did not stock any psychotropics due to minimal prescription requests. Findings can be used by the relevant healthcare authorities in the design and implementation of programs and workshops targeted toward training community pharmacists. This will hopefully encourage more community pharmacies to sell psychotropics and provide pharmaceutical care services to this subset of patients, which will subsequently result in patients who are able to function in society and contribute to the economy.

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