ASSESSING PATIENTS' PERCEPTION AND LEVEL OF SATISFACTION WITH MEDICATION COUNSELLING PRACTICE IN GHANA (A Cross-Sectional Study)

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***Abstract*- The concept of patient trust is fragile, risky, and exploitable due to the fact that patients are vulnerable by virtue of their need for care which increases the risk associated with the care relationship. The role of pharmaceutical service provision is to enhance satisfactory care and build trust through planning interventions and providing pharmaceutical care issues, among others. This study seeks to assess patients' perception and their level of satisfaction with medication counseling practice for patients attending the chest clinic pharmacy. The study also determined the Sub-TB types among patients attending the Chest Clinic Pharmacy as well as the relationship between patients' perception and medication adherence.**

Methodology: A mixed-method approach was used for this study. The study participants were patients who patronized the services of the Chest Clinic Pharmacy between September 2022 to November 2022. Structured validated questionnaires and interview guides drawn from other studies were designed, validated, and used to collect information. To reduce bias, data collection was performed by none Chest pharmacy research officers. Stringent measures were taken to ensure that data was complete and consistent. A redcap tool was used to collect the data from entries made which were triangulated and edited, coded, transcribed, cleaned, and analyzed using Microsoft Excel tool 2019 and SPSS version.26.0 and the results were presented in descriptive statistics such as frequencies, percentages, tables, and figures. and descriptive statistics and results presented in tables and figures.

Findings: The study successfully sampled 89 patients that attended the clinic at the chest clinic and used the services of the chest pharmacy. After data cleaning and organization, the sample size was reduced to 88. 56.82% (50) of the participants were males and 43.18% (38) were females. A greater proportion of these participants (about 78%) fell between the ages of 20-50 years, 20.45% of them were aged 50 years and above. Only 1.4% (1) were aged between 13-19 years.

Married people comprised 48.86% (43), and 34.09% (30) were single. 11.36% (10) and 5.68% (5) were separated and divorced respectively.40.91% (36) were self-employed, 29.55% (26) were unemployed, and 21.59% (19) were employed. 7.95% (7) were students. 9.09% (8) had no education at all, 29.55% (26) has basic education, 35.23% (31) had secondary education, and 26.14% (23) had up to tertiary education. 67.05% (59) constituting more than half of the participants were Christian, 25% (22) were Muslims and only 7% (7.95) were free thinkers

Conclusion: Overall support received from the pharmacy staff, a greater portion of the patients (~90%) expressed levels of satisfaction with the service received

***Keywords*: level of satisfaction, perception, Medication counseling practice, Pharmacists**

Introduction:

Patient satisfaction is an attitude resulting from a person's general orientation towards a total experience of health care. It is a key determinant and a legitimate measure of the quality of care. In developing countries, a number of satisfaction studies have been conducted especially on outpatient services. The most important responsibility of pharmacists is to

practice pharmaceutical care by ensuring that patients receive the right drug, the right dose, the right time, the right frequency, and the right dosage while respecting the individualism and uniqueness of the patient. Patient satisfaction is an important indicator in evaluating the quality of pharmaceutical care provided. Service quality has become an important topic in view of its significant relationship to profit, cost saving, and market share [1]. Researchers in Service marketing have developed nineteen service quality models from the period 1984-2003, [2] These models share a single primary goal - to offer managers insight into the components of service quality for improving organizational offerings. The service quality model "SERVQUAL"' ranks as the most important of these models. It is based on the assumption that service quality is a function of differences (gaps) between customers' expectations and perceptions along five quality dimensions: reliability, responsiveness, tangibles, assurance, and empathy. In addition, favorable customer perception of service quality will have a positive relationship with overall customer satisfaction and in turn, their behavioral intention; repeat purchases, and willingness to recommend the service to others [3] The Special Issue on Arts, Commerce and Social Science © Centre for Promoting Ideas, USA www.ijbssnet.com 132 Consequently, providing high service quality to customers, offers a firm an opportunity to differentiate itself and gain a competitive advantage in the market [4]. Furthermore, research works on quality healthcare have usually suggested poor service delivery in terms of; long waiting times, a frequent shortage of drugs, and the poor attitude of health providers as factors affecting patients‟ satisfaction with quality healthcare [5]. In spite of this, constant monitoring and evaluation of the policyholder's views on the quality of healthcare are necessary for quality improvement purposes, which will provide some kind of feedback to health professionals and policymakers [6]. Facing the increasing demand for health care has not only a quantitative but also a qualitative dimension. In this context, this paper would investigate (a) Patient expectations and perceptions toward the service quality of Chest Clinic. (b) The relative importance of service quality dimensions. (c) The relationship between overall service quality and (d)overall patients' satisfaction and their willingness to recommend the services of healthcare providers to others. Although many empirical studies have been performed for evaluating the quality of health services in developed and some developing countries, limited empirical research in this area has been carried out in Korle Bu Teaching Hospital. Parasusman et al [7] undertook a series of research projects which gave birth to the service quality model "SERVQUAL". Initially, the model was based on 10 dimensions of service quality – later reduced to 5 dimensions, encompassing: Tangibles (physical facilities, equipment, and appearance of personnel), Reliability (ability to perform the services accurately and dependably), Responsiveness (willingness to help customers and provide prompt services), Empathy (caring and individualized attention given to customers, which includes both access to and understanding of the customers. And Assurance (providers' knowledge, courtesy, and ability to convey trust and confidence). The SERVQUAL instrument contains 22 pairs of Likert scale questions designed to measure customers' expectations of service and the customer's perception of a service provided by an organization. To assess service quality, the gap for each question is calculated based on comparing the perception score with the expectation score. The positive gap score means that customers' expectations are met or exceeded, while the negative score means the opposite. In general, service quality is divided into two main components; namely, they are: technical and functional quality [8] [9] Technical quality (clinical quality) is defined as the technical diagnosis and procedures (e.g., surgical skills), while functional quality refers to the manner of delivering the services to the patients (e.g., attitudes of pharmacists, doctors, nurses, and others toward the patients, cleanliness of the facility, quality of the hospital, courtesies, etc.).Since most patients lack the capacity to evaluate the technical attributes, the service marketing approach, which focuses on functional quality perceived by patients, has been widely used to evaluate health services [10]

Methodology:

A mixed-method approach was used for this study. The study participants were patients who patronized the services of the Chest Clinic Pharmacy between September 2022 to November 2022. Validated structured questionnaires and interview guides drawn from other studies were designed, validated, and used to collect information. To reduce bias, data collection was performed by none Chest pharmacy research officers. Stringent measures were taken to ensure that data was complete and consistent. A redcap tool was used to collect the data from entries made which were triangulated and edited, coded, transcribed, cleaned, and analyzed using Microsoft Excel tool 2019 and SPSS version.26.0 and the results were presented in descriptive statistics such as frequencies, percentages, tables, and figures.

Study area:

Data collection: Data collection was done at the Chest Clinic Pharmacy between 1st September 2022 to 30th November 2022. Structured validated questionnaires and interview guides drawn from other studies was designed, validated, and used to collect information. To reduce bias, data collection was performed by non-Chest pharmacy staff research officers

Statistical analysis:

Stringent measures were taken to ensure that data is complete and consistent. were triangulated and edited, coded, transcribed, cleaned, and analyzed using Microsoft Excel tool 2019 and SPSS version.26.0 and the results were presented in descriptive statistics such as frequencies, percentages, tables, and figures. and descriptive statistics and results presented in tables and figures.
Ethical Considerations: Ethical Clearance was sought from the Institutional Review Board of the Korle Bu Teaching Hospital.

Results:
Socio-demographics
The study successfully sampled 89 patients that attended the clinic at the chest clinic and used the services of the chest pharmacy. After data cleaning and organization, the sample size was reduced to 88. 56.82% (50) of the participants were males and 43.18% (38) were females. A greater proportion of these participants (about 78%) fell between the ages of 20-50 years, 20.45% of them were aged 50 years and above. Only 1.4% (1) were aged between 13-19 years.
Married people comprised 48.86% (43), and 34.09% (30) were single. 11.36% (10) and 5.68% (5) were separated and divorced respectively.40.91% (36) were self-employed, 29.55% (26) were unemployed, and 21.59% (19) were employed. 7.95% (7) were students. 9.09% (8) had no education at all, 29.55% (26) has basic education, 35.23% (31) had secondary education, and 26.14% (23) had up to tertiary education. 67.05% (59) constituting more than half of the participants were Christian, 25% (22) were Muslims and only 7% (7.95) were free thinkers

Table1

	Variables	Frequency	Percentage (%)
Sex	Male	50	56.82
	Female	38	43.18
Age	13-19	1	1.4
	20-29	19	21.59
	30-39	24	27.27
	40-49	26	29.55
	50+	18	20.45
marital status	Married	43	48.86
	Single	30	34.09
	Divorced	5	5.68
	Separated	10	11.36
Occupation	Employed	19	21.59
	self-employed	36	40.91
	Student	7	7.95
	Unemployed	26	29.55
Education	None	8	9.09
	Basic	26	29.55
	Secondary	31	35.23
	Tertiary	23	26.14
Religion	Christian	59	67.05
	Muslim	22	25
	Freethinker	7	7.95

Disease State

With regard to the breakdown on diagnosis, 68.18% (60) were suggested by X-ray to have had tuberculosis, 19.32% (17) were not suggestive and 12.5% (11) had not done an x-ray. 57.95% (51) were actually confirmed by gene Xpert to have had tuberculosis. 75% (66) had the pulmonary type of tuberculosis while only 25% (22) had extrapulmonary

Table2

	Variables	Frequency	Percentage (%)
x-ray	Suggestive	60	68.18
	not suggestive	17	19.32
	not done	11	12.5
Gene Xpert	Detected	51	57.95
At all	not detected	30	34.09
	not done	7	7.95
type of TB	Pulmonary	66	75
	Extrapulmonary	22	25

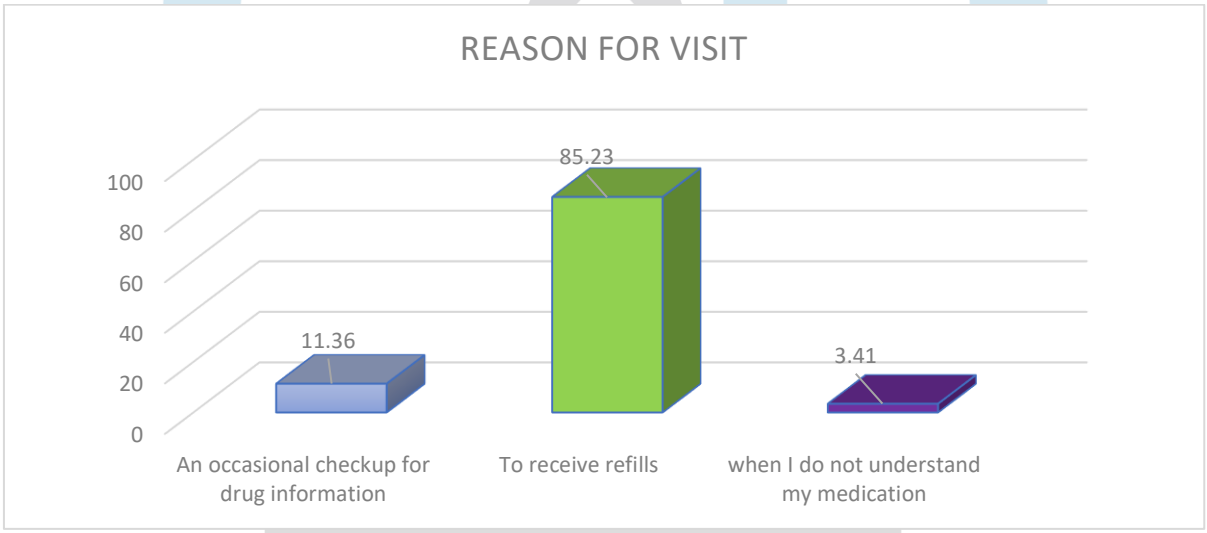


Fig 1 Reasons for Visit to The Chest Clinic Pharmacy

when asked what took these participants to the chest pharmacy, almost all of them (85.23%) stated they usually visit to receive refills of their drugs. Only 11.36% visited for an occasional check-up for drug information and just 3.41% visited when they don't understand their medication.

Frequency Of Patient's Visits to The Pharmacy

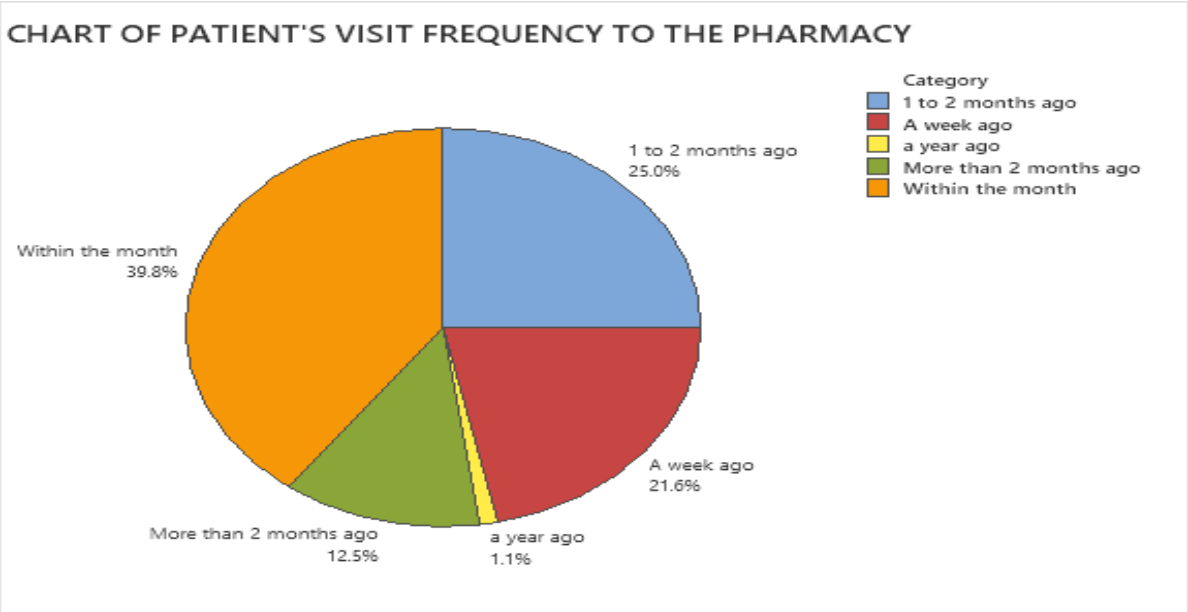


Fig2

The last time these patients visited the pharmacy before this current visit was 39.8% within the month, and one to two months was 25%. 21.6% made their last visit within the week, 12.5% were more than 2 months ago and 1.1% about a year ago.

Performance Satisfaction of Pharmacists and pharmacy staff

56.82% constituting majority of the patients do not trust that the pharmacists had checked their medication for signs of drug interaction during their visit. Yet only 5% could actually confirm that checks were not done at all while 37.5% believe that checks were done. The results also show that 28.41% of the patients say that the pharmacists invited them to discuss their Tb disease condition. 43.18% and 28.41% said they were not invited and were not sure respectively ever being invited for such a discussion. 48.86% of patients say that the pharmacists explained to them why they should take their medication and about 51% cannot confirm such an explanation or had one at all. But in all, over 87.5% of these patients will one way or the other recommend someone to the chest pharmacy. Only 3.41% actually say they will not do so and 9.09% were indecisive as indicated in Table 3 below.

	Variables	Frequency	Percentage (%)
check your medications for signs of drug interactions during visits.	No	5	5.68
	Yes	50	37.5
	not sure	33	56.82
invited by the pharmacist to discuss your TB condition?	No	38	43.18
	Yes	25	28.41
	not sure	25	28.41
Did they explain to you why you have to take your medications?	No	26	29.55
	Yes	43	48.86
	not sure	19	21.59
Would you recommend someone to the chest clinic?	No	3	3.41
	Yes	77	87.5
	not sure	8	9.09

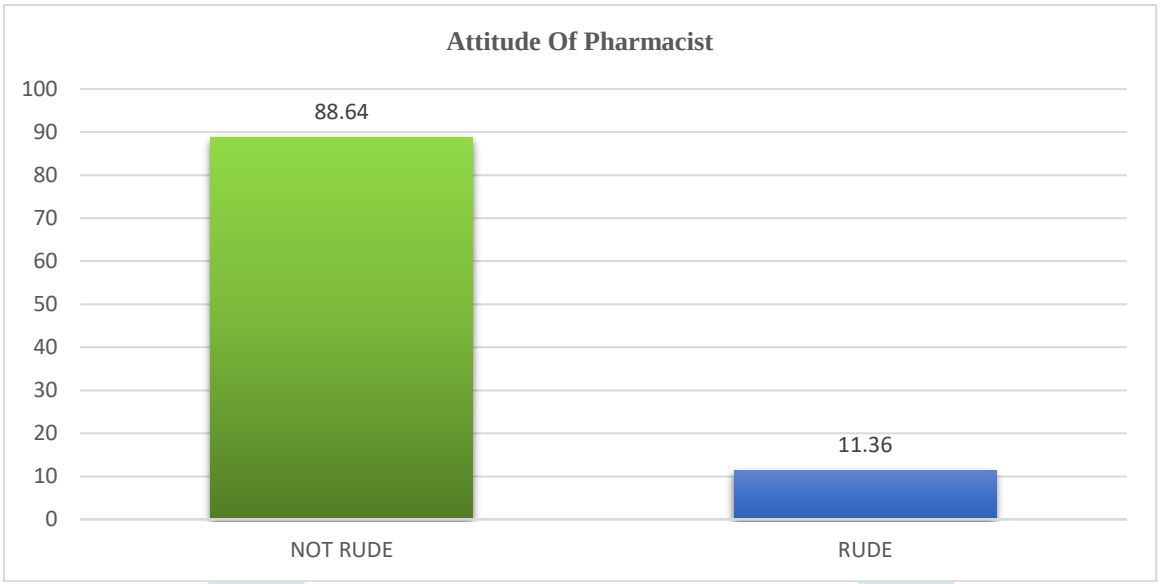


Fig3 Attitude of Pharmacy Staff

88.64% attested that the pharmacy staff were not rude but rather showed an acceptable attitude towards them. Only 11.36 % complained of rude attitudes from the staff at the chest.

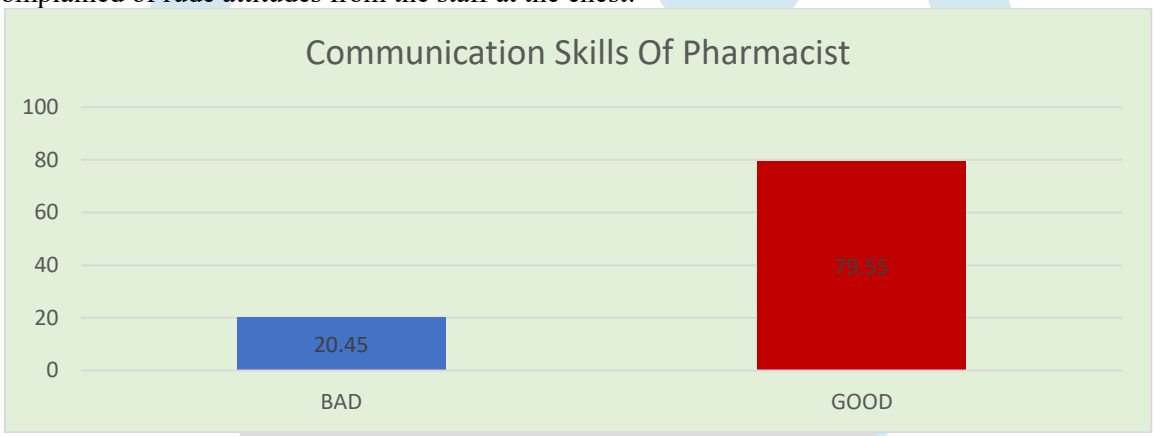


Fig4 Communication Skills Of Pharmacists

79.55% of the patients think that the pharmacists and the entire staff communicated well. However, 20.45% thought that the communication could have been better. Although the staff showed an overall good attitude to most of these patients, a section of them still wished that the communication be improved as shown in figure 4 above.

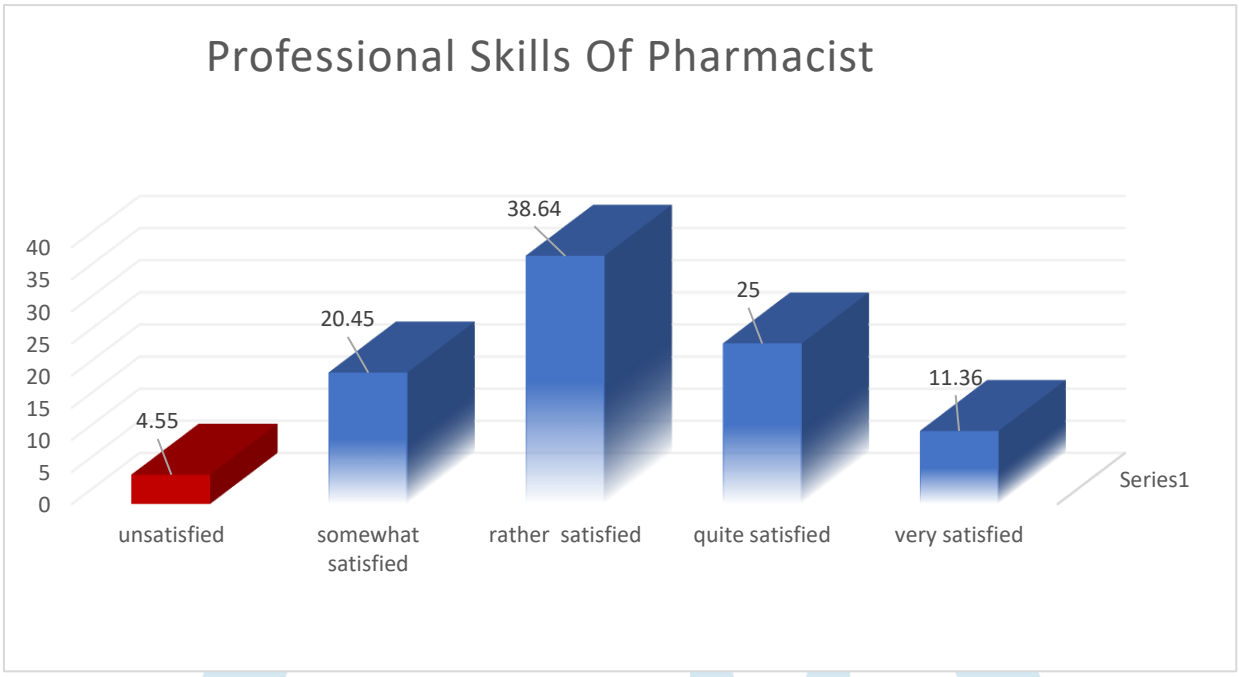


Fig5 Professional Skills of The Pharmacy Staff

38.64% expressed some level of satisfaction with their professional skills with 11.36% being very satisfied. Only 4.55% of the patients expressed straightforward dissatisfaction with the professional skills of the pharmacy staff as indicated in Figure 5 above.

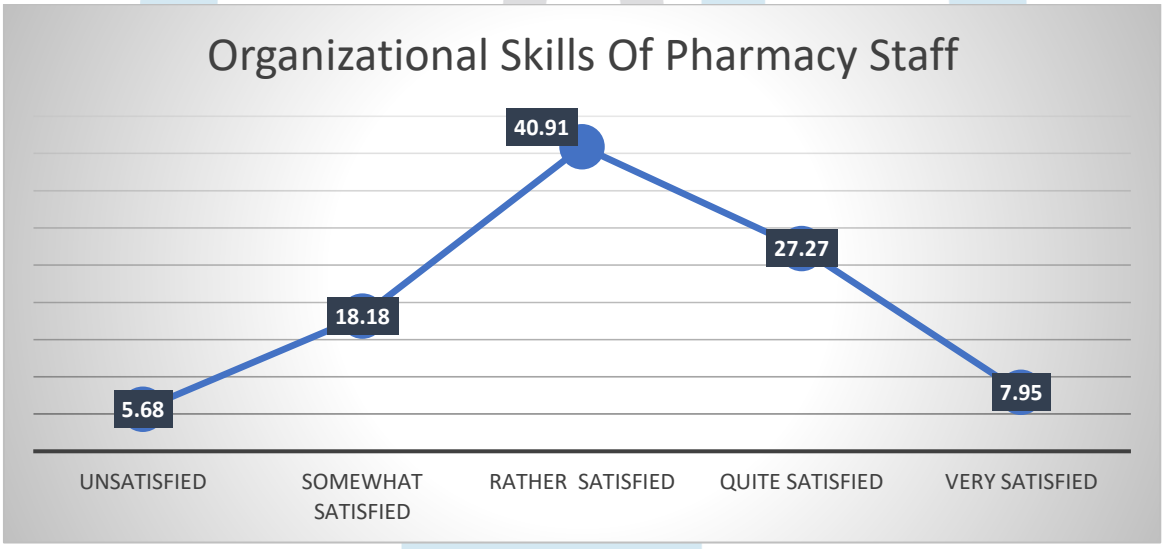
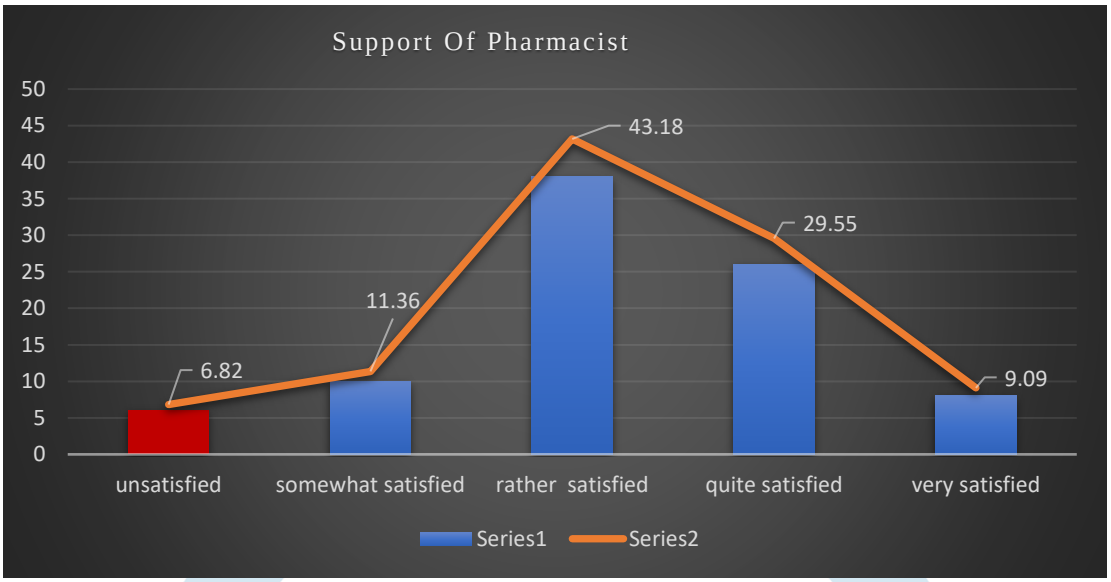


Fig 6 Organization of The Pharmacy Unit

About 41 % of the participants were rather satisfied ,27.27% quite satisfied,18.18% Were somewhat satisfied 7.95% were very satisfied. Overall,94.4% of participants were satisfied with the organizational skills of the staff. Only 5.68% say they were dissatisfied



Fig, 7 Overall Support of The Pharmacy Staff

Over ~90% of participants in this study say they received adequate support from the pharmacy staff and therefore satisfied. 6.82s% patients were unsatisfied with the total support received from the pharmacy at the chest clinic.

Discussion

Evidence has shown that nonsatisfaction by patients to services rendered such as in the case of medical and pharmaceutical services lead to increased morbidity and mortality. This can also result to nonadherence of medicals and ultimately poor quality of care and a potential increase in the risk of patients with a possible lifelong disability ([11]). The potential risks of morbidity and premature death could be reduced by counseling patients. The results of this study show that 56.82% were males and 43.18% females. 78% (majority of the patients) sampled were between the ages of 20-50years. Only 20.45% of the participants were aged 50years and above with 1.4% were between the ages 13 to 19years. and above. These have similarity to those of earlier reports by Selvinet al [12]. Documented evidence indicates that literacy status is a factor in the self-care of disease conditions and that this can have an impact on the treatment outcome in patients [13]. Only 26.14% of the patients sampled in this study had tertiary education whilst 29.55% and 9.09% received basic education and no education respectively. It is therefore expected that patients receive adequate counseling commensurate with their level of education for their medication and other services to ensure adherence and thereby reduce drug related morbidity and mortality. An Australian study revealed that patients with high educational status respond better to interventions than those with lower literacy levels [14]. Thus, educating patients about their medications and other services [15] will go a long way in self-management. In fig 1, over 85% of the participants said they visited the pharmacy in order to refill their prescriptions while over 11% said they visited in order to assess drug information. On the level of satisfaction with pharmaceutical care and the attitude of the pharmacists and pharmaceutical care staff regarding care to our clients, as shown in figure 2, the results showed that 88.64% of the participants were very satisfied with the level as well as the attitude of service offered. 50% of the study participants showed satisfaction with the professional skills of the pharmacy staff in terms of counselling and service delivery as indicated in figure 5. With regards to the organizational skills of the Pharmacists and pharmacy staff, over 94% of the participants were well satisfied as depicted in figure 6. The time of communication and professional counselling rendered to patients determines the extent of which they adhere to treatment modules.79.55% of them thought that the pharmacy staff communicated to them clearly and unambiguously(well) with the exception of 20.45% who opined that the kind of communication received needs to be improved. Professional counseling given to patients about lifestyle modifications. Due to the fact that patients are vulnerable when they visit the hospital, it is expected that health professionals assist them in any way they can. Overall satisfaction rating of services provided to patients receiving antikocks medication medications along with other comorbid disease states is >90%. According to the Journal of Patient Experience 7(3) patients plays a crucial role in the management and prevention of chronic complications [16] depending on how motivated they are. It is also realized that adherence to medications when enhanced through counseling, proper communication coupled with the needed assistance will produce satisfactory outcomes. The results compare favourably to a similar study in Malaysia, where it had been observed that the role played by pharmacists in educating patients about their disease states goes a long way in the management and improvement of medication adherence [17]. Research has shown that satisfaction and medication adherence are important indices of care, despite the level of one's educational status [18]. According to Bidderman et al, it has also been documented that the level of satisfaction among patients with low educational background was found to be low [19]. In a similar study, it has been noted by Bener et al that [20] patient satisfaction was favourably associated with higher levels of education but lower in patients having diseased-

related complications. Apparently, another study in Khartoum, concluded that satisfaction levels were lower in primary healthcare centers in comparison to specialized centers [21].This study showed high levels of satisfaction among educated patients. A similar study from Saudi Arabia revealed that patients who are well-educated had better knowledge of their complications [22]. Consequently, attending to the specific needs of patients especially, through professional counseling results in improving their level of satisfaction. In adequate counseling services generally leads to poor pharmaceutical care. In a study conducted by Al-Laif et al [23] males appeared to be more satisfied with counseling received when compared to females in both hospital and retail outlets and this compares to our study. A similar study conducted at community pharmacy outlets revealed that male pharmacists providing counseling services in community pharmacies could have been the reason attributed to the low satisfaction levels shown in females. [24]. Another study reported that only 26% of discharged patients received pharmaceutical counseling for their medications as compared to this study where 50% of the participants were satisfied. [25]. According to Paravattil et poor patient counseling practice was occasioned to the fact that pharmacists were focusing mainly on drug names [26]. They also observed in their study that [27] chronic disease management skills of pharmacists were lacking with many of them referring patients back to physicians. This is contrary to the fact that counseling by hospital pharmacists had been shown to be beneficial to patients, in helping them to adhere to medication regimen [28].It is critical that hospital pharmacies play this supportive role to help educate patients about their disease and medication states during prescription filling. This definitely will help tuberculosis patients in improving self-care management and ultimately their quality of life. Patient counseling should be an integral component in the management of comorbid states in tuberculosis. This study has showed that even though there are adequate communication skills with regard to counseling practices as well as high satisfaction levels in relation to services provided by hospital pharmacies for tb patients with comorbid conditions.
Limitations of the study: only respondents who were available during visits to the clinic and gave their consent were enrolled in this study.

Conclusions:
Overall support received from the pharmacy staff, a greater portion of the patients (~90%) expressed levels of satisfaction with the service received
Recommendations: Patients must be provided with appropriate chairs for sitting and in areas m clearly marked. A suggestion box must be provided in a designated area. A monthly review of patients' concerns must be instituted.
Conflicts of interests: Conflict of interest: Authors have no conflict of interest to declare.
Acknowledgments: The head of the Unit, Department of Medicine, (KBTH), the Staff of The Biostatistics unit (KBTH), Korle Bu Teaching Hospital (KBTH), The Records Unit, Chest, Khadija N. Nortey, all the nurses and participants for their support and co-operation in this work.

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