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Research Article

Assessment of Consumer Satisfaction with Health Care Services in Community Pharmacies in Sierra-Leone

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ABSTRACT

This study examined community pharmacy healthcare services accessed by consumers; determined their level of satisfaction with such healthcare services; and assessed the relationship between consumers' level of satisfaction and consumers' demographic characteristics. A cross sectional survey of 583 participants was conducted using a pretested self-administered questionnaire presented in a 5-point Likert scale. Descriptive and parametric techniques were used to summarize data at $P < 0.05$. Mean age of consumers was 35.2 years \pm 5.39 SD. Services most sought after were patients counseling (87.8%), purchase of prescription and non-prescription medicines (82%), purchase of non-drug products (74.1%) and treatment of minor ailments (71%). Services least sought after were screening services (5.3%), health education (4.6%), monitoring device (4.5%), and sexuality education (3.6%). About (84.8%) of participants reported they had good satisfaction. Moderate satisfaction was 50.4 %, and poor satisfaction was 38%. Their degree of satisfaction was significantly associated with age ($p = .031$), gender ($p = .012$) education ($p = .016$) and occupation ($p = .004$). Satisfaction-related statements that had good scores were: information provided by pharmacists, and quality of drugs. Moderate scores were rate of service delivery, insufficient stock. Statements with poor scores were unavailability of pharmacists in their work place, inadequate hospitality of pharmacy staff, and prices of medicines.

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INTRODUCTION

There has been a growing demand for measures that link services to consumer needs, desires, and satisfaction especially in enterprises such as the banking sector, aviation industry, and community pharmacy. Community pharmacy represents one of the health care facilities that is most accessible to people because of its high volume of customer patronage, long extended working hours, and the absence of prior appointment before consulting the pharmacist for advice on health issues (Eades, Ferguson & O' Carroll, 2011). In developed countries such as in the United Kingdom and Poland, efforts were made to evaluate customer service by assessing not only how well services can be met, but also how

much satisfaction was derived from such services (Merks et al, 2014). Meanwhile, in developing countries including Sierra-Leone, there is paucity of information on consumers' satisfaction from community pharmacy services. Satisfaction could be viewed as the degree to which one's needs and wants are adequately met (Kevrekidis, Minarikova, & Makos 2018). Satisfaction is perhaps a function of expectation vis-à-vis the quality of actual services provided or rendered. Therefore, the narrower the gap between expected and actual service, the higher the degree of satisfaction. Meanwhile, an improvement in the level of satisfaction derived from community pharmacies, has a greater effect on clients' decision on the choice of community pharmacies to patronize. Furthermore, such clients

would likely recommend pharmacies that adequately provide desired satisfaction and possibly make repeated purchases from such pharmacies. It has been argued that frequent monitoring of the level of satisfaction of service users is important because it could act as a corrective measure in ensuring constant improvements in the quality of service (Thaddaeus et al, 2009). An assessment of consumer needs and satisfaction is the first and most important step in improving pharmaceutical services in community pharmacies. There is need to also identify other key or core areas that must be addressed by any service improvement initiatives in community pharmacy. Hosting new services and improving on existing ones require funds. Community pharmacists and pharmacy staff members also need continuous training to improve on skills relevant to serving an emerging generation of complex and enlightened customers. Improvements in information communication technologies and the global ascendancy of consumer rights movements lend credence to the need for service improvements to prioritize consumers' needs. Correctly identifying and satisfying consumer needs therefore becomes even more pertinent for community pharmacy survival. A recent Scottish study (Newlands et al, 2018) on service quality improvement in community pharmacy found six main areas: promoting the appropriate sale and supply of over-the-counter medicines; patient counselling for prescribed medication; pharmaceutical care to promote medication adherence; promotion and delivery of a Minor Ailment Scheme; pharmaceutical care of vulnerable patients; and effective use of community pharmacy workforce.

Funding model of Community Pharmacies in Sierra Leone

Unlike in the UK where community pharmacies are funded by the government (www.psn.org.uk/funding) through reimbursement based on the volume of prescriptions filled and performance (enhanced services completed), community pharmacies in Sierra-Leone have no formerly established funding model (Bateman, 2007; WHO, 2011). While social health insurance arrangements are currently being proposed, no definite framework have been implemented anywhere in the country

(Pharmacy Board of Sierra Leone 2015). Currently, most community pharmacies in Sierra Leone, obtain funds for their businesses through personal cash savings, loans from relatives, friends, financial institutions and other informal sources such as cooperative societies. They only derive revenues from price mark-up of medicines while out-of-pocket payments from clients remain the predominant mode of payment for products and services offered (Pharmacy Board of Sierra Leone 2015).

In fact, a lot of studies on consumer satisfaction with community pharmacy services had been carried out in Malta, Uganda and United Arab Emirates (Wirth et al, 2011; Alkol et al, 2014 & El-Sharif et al, 2017) just to mention but a few. However, to the best of our knowledge, no study on consumers' satisfaction with health care services provided by community pharmacies has been carried out in Sierra-Leone.

The objectives of this study were to determine community pharmacy healthcare services sought after by consumers; determine their level of satisfaction with such healthcare services and assess the relationship between consumers' level of satisfaction and their demographic characteristics. These were with a view to providing more information on consumers' satisfaction with community pharmacy health care services.

Community Pharmacy Practice in Sierra-Leone

Community pharmacy practice in Sierra-Leone is dominated by pharmacy technicians who are in the majority but are trained alongside pharmacists who hold B. Pharm degrees (College of Medicine and Allied Health Sciences, 2019). They are both called pharmacy professionals (PP) (College of Medicine and Allied Health Sciences, 2019). The PP manage drug distribution and supply in the pharmacy outlets by carrying out routine pharmacy activities such as dispensing, prescription interpretation, patient counseling, pharmaceutical care, public health related activities, administrative and management activities (James & Cole 2016). However, the undergraduate training of pharmacists in Sierra Leone is largely product-centred with minimal exposure to clinical care issues (James & Cole 2016). Majority of pharmacists in Sierra-Leone prefer working in hospitals than going into community practice because

the former is well organized, more dignifying, and better remunerating (James & Cole 2016). The pharmacy law in Sierra-Leone stipulates among other things, that the pharmacy technicians shall practice under the supervision of certified pharmacists but are permitted to dispense non-prescription and prescription medicines (The Government of Sierra-Leone (2001). All PPs are expected to participate in the Continuing Professional Development (CPD) programme yearly in order to accumulate at least 30 credit units within a span of three years to qualify for recertification (Betema 2007).

MATERIALS AND METHODS

Study Area

The study was a cross-sectional descriptive survey of consumers of community pharmacy services, which was conducted from February to April 2019 in Sierra Leone. The population of Sierra Leone is 7.4 million people who speak three major languages namely Temne, Mende and Krio. Majority of the population speak and understand English Language too (UN, 2016).

Eligibility of the Subjects

Customers who had visited community pharmacies to purchase goods and seek healthcare services for the past three years and were not below the age of 20 years were recruited for the study. Subjects who were excluded from the study, include persons who did not seek health services from community pharmacies in the last three years and were below 20 years of age.

Ethical Clearance

The research and ethics committee of College of Medicine and Allied Health Sciences, University of Sierra Leone (COMAHS-USL) and the Pharmacy Board of Sierra Leone gave approval to conduct the study.

Study Population

The study population was 2,863,185 respondents aged ≥ 20 years and were made up of private and public sectors employees, artisans, traders, unemployed and retirees from various educational backgrounds. The population was selected using cluster sampling

technique.

Sample Size Determination

Raosoftware sample size calculator was used to determine the sample size using 5% margin of error and a confidence interval of 95% from the study population (Raosoftware, 2018). The sample size for the study was computed to be 504. Since a minimum of 80% response rate was intended, a larger sample size of 600 respondents was approached with self-administered questionnaire.

Questionnaire Design and Administration

The study adapted previously validated survey instruments used in similar works conducted in Nigeria, Kuwait, United Arab Emirates, and India (Oparah & Kikanme, 2006, Jayaprakash, Rajan & Shivam, 2009, Awad, Al-Rasheedi, & Lamay, 2017, El-Sharif et al, 2017). The questionnaire was drafted in English language and translated to local languages for wider understanding. The questionnaire was divided into three sections namely, sections A, B, and C. Section A contained 5 items such as age, gender, educational, qualification, and occupation which were used to explore demographic characteristics of the respondents. Section B consists of items used in identifying the healthcare services sought after and accessed, by the consumers of community pharmacies. Other parameters in this section were: number of times/years consumers have been visiting community pharmacies and the reasons for seeking healthcare services in community pharmacies. Section C consist of 10 statements on satisfaction with community pharmacy healthcare services which were presented in a 5 point Likert scale as strongly agree (5), agree (4), uncertain (3), disagree (2), and strongly disagree (1) for consumers to choose a rating that best represent their opinion. The questionnaire was administered in public places such as shopping malls, supermarkets, police stations, post offices, and government ministries. All the statements and questions were grafted in such a way that they elicited appropriate responses on the objectives of the study. The questionnaire was pre-tested on 30 consumers who did not participate in the final study. Results from the pre-tested questionnaire were used to effect corrections in the first version of the questionnaire for clarity and readability where necessary. Written

informed consent to participate in the study was sought and obtained from the consumers whose anonymity was assured before the questionnaire was administered to them by hand. Purposive sampling technique was actually used to choose and pick respondents who best meet the purpose of the study, based on our prior research skill and knowledge. The researchers and trained enumerators courteously approached customers of community pharmacies as they came out from the pharmacies and politely introduced themselves before briefing the customers what the study was all about as contained in the approved research protocol. The protocol contained details of the objectives and procedure of the study, risk and benefits for participating in the study and the expected duration of respondents' participation. All these were mentioned to the customers before questionnaire was administered to them by hand to fill. Furthermore, verbal informed consent was sought and obtained from each participant. To obtain maximum cooperation and participation, pen or biro was given to any participant who had no writing material to fill the questionnaire. It took each participant about 16 minutes to fill each questionnaire. Thereafter, the filled questionnaire was meticulously cross-checked for completeness before each participant was thankfully disengaged.

Statistical Analysis

Data were analysed with the Statistical Package of Social Sciences (SPSS, version 20; SPSS, Chicago, IL, USA). Results were presented as frequency, percentages, medians (IQR) and mean±SD. Cronbach's α test was used to test the internal consistency of the survey instrument. Responses to statements on level of satisfaction with community healthcare services accessed by the consumers, were scored using a scoring format of 5,4,3,2,1 where 5 represents maximum possible score and 1 least possible score. The maximum possible score for the 10 statements on consumer satisfaction was estimated to be 50, while the least score was estimated to be 10. The actual computed score was then compared to the maximum possible score and presented as percentages. Furthermore, for quantitative representation, a total score of 70 per cent and above was regarded as good, 50-70 per cent was considered a moderate score while below 50 per cent was considered as a poor score. The relationship between

consumers' demographic characteristics and level of satisfaction from healthcare services in community pharmacies, was determined using Mann-Whitney U and Kruskal-Wallis tests for non-parametric but continuous variables and Post hoc test (one-way analysis of variance), depending on the number of comparative groups present at $p < 0.05$.

RESULTS

A total of 583 filled questionnaires were harvested out of 600 questionnaires that were administered. Therefore, the response rate of the administered questionnaire was 97.2 per cent. Majority of the consumers ($n=412$; 70.7%) were in the age bracket of 30-39 years. The mean age (mean±SD) of the consumers was 35.20 ± 5.39 years. Male to female ratio was 1:1.2 and most of the consumers were not only married ($n=462$; 79.2%) but also educated ($n=531$; 91.1%). Majority of them ($n=365$; 62.6%) were professionals such as lawyers, accountants, and teachers/lectures. The demographic characteristics of consumers is presented in Table 1.

Table 1. Demographic characteristics of consumers N=583

Characteristics	Frequency (%)
Age (Years)	
20-29	65(11.2)
30-39	412(70.7)
≥40	106(18.1)
Gender	
Male	316(54.2)
Female	267(45.8)
Marital Status	
Married	462(79.2)
Single	121(20.8)
Educational Level	
Primary	14(2.4)
Post Primary	569(97.6)
Occupation	
Trader	53(9.1)
Teacher	280(48.0)
Lawyer	18(3.1)
Accountant	39(6.7)
Student	40(6.9)
Lecturer	28(4.8)
Self employed	33(5.7)
Civil Servant	47(8.1)
Unemployed	19(3.3)
Retired	26(4.5)

Majority of the consumers ($n=376$; 64.5%) had been patronizing community pharmacy for up to three years while another group of respondents ($n=101$; 17.3%) had visited community pharmacies for more than 10years. More than 62% did not represent

professional characteristics of the population. It was cleaned from the filled questionnaire by some respondents who claimed that they were professionals. The consumers purchased prescription and non-prescription medicines, non-drug products and treated minor ailments such as body pains, fever, and cold/flu. A large percentage of them ($n=342$; 58.7%) also consulted the pharmacists for medicine information and health services that had to do with health education and promotion. However, patient counselling ($n=512$; 87.8%) was the most prominent healthcare service rendered by community pharmacies; while the least services sought after by consumers were pregnancy test ($n=31$; 5.3%) and techniques of how to use contraceptives ($n=27$; 4.6%).

The healthcare services provided and sought after by the consumers are summarized in Table 2

Table 2. Health services accessed in community pharmacies.

S/N	Healthcare Services	Frequency (%)
1	Patient counselling	512(87.8)
2	Purchase of prescription medicines	511(87.7)
3	Purchase of non-prescription medicines	478(82.0)
4	Purchase non-drug products such as drinks, cosmetics etc.	432(74.1)
5	Treatment of minor ailments such as malaria, pain, fever, cold/flu, diarrhoea	415(71.2)
6	Medicine information services especially on dose, side effects etc.	312(53.5)
7	Medicine use review	309(53.0)
8	First aid services	68(11.7)
9	Immunizations or vaccination	53(9.1)
10	Monitoring blood glucose, blood pressure (screening services)	31(5.3)
11	Advice on smoking cessation, dieting, exercises, weight management etc.	27(4.6)
12	Purchase of monitoring devices such as glucometer, sphygmomanometer etc.	26(4.5)
13	Advice on family planning, contraceptive use, pregnancy etc.	21(3.6)

The summed agreement ratings (strongly agree and agree) of responses for the satisfactory statements revealed that consumers were most satisfied with the

quality of drugs received from community pharmacies 493 (84.6%), and information they received from the pharmacist about their health 530 (90.9%). Consumers were moderately satisfied with questions the pharmacist ask them before dispensing medications 399 (68.4%) to them, the rate at which new things were learnt each time they interact with the pharmacist 361 (61.9%), responses by pharmacists to their questions 383 (65.7%), community pharmacy service delivery time 380 (65.2%), inability of the pharmacy to meet all their needs 369 (63.3%). However, they were least satisfied with the prices of medicines in the pharmacy 233 (39.8%), availability of the pharmacists each time they visit the pharmacy 382 (65.5%), and the hospitality of the pharmacy staff 380 (65%). The total satisfactory median score for community pharmacy services was 27[IQR10] out of a maximum score of 50. This reflected a moderate score (Table 3).

Good satisfaction had a total mean score of 4.25 on a 5-point scale which gave 84.5%. Moderate satisfaction had a total mean score of 2.52 on a 5-point Likert scale which represents 50.4%. Poor satisfaction had a total mean score of 1.88 on a 5-point Likert scale which is 38% (Table 3)

There were significant differences between consumers' level of satisfaction and independent variables of age, gender, educational levels and occupation ($p<0.05$). However, females, married participants, and those ≥ 40 years of age were more satisfied with community pharmacy services than those in the lower age groups. There was no significant difference between consumers' level of satisfaction and marital status ($p=0.053$). The demographic profile of consumers and the relationship with their levels of satisfaction with community pharmacy services were summarized and presented in Table 4.

DISCUSSION

The most sought after services by consumers of community pharmacy services were the purchase of prescription, non-prescription medicines, and non-drug products. Other needs were to consult the community pharmacists on minor ailments such as headache, pains; health and medicine information about side effects of drugs, dosages and receive first aid treatment. These findings corroborate the results obtained in similar studies conducted in Malta, South Africa, United Kingdom and Sweden (Wirth et al, 2011, Boman, Truter & Venter 2006, Bell, McElnay & Hughes, 2000, Larsson et al, 2008). Generally, people seek and receive information from community pharmacists on health-related issues especially during patient counselling which is a primary role of community pharmacists in patient-centred

Table 3: Consumers' response to satisfaction-related statements about community pharmacy services N=583

S/N	Healthcare Services	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	Median (IQR)	Mean ± SD
		5 No (%)	4 No (%)	3 No (%)	2 No (%)	1 No (%)		
1	I am satisfied with the information from the pharmacist about my health	320(54.9)	210(36.0)	23(3.9)	19(3.3)	11(1.9)	4(1.0)	4.39±0.84
2	I am satisfied with questions that the pharmacists ask me before giving me my medications	298(50.9)	223(40.0)	8(1.37)	30(5.15)	14(2.4)	4(1.0)	4.32±0.93
3	I am very satisfied with the responses to my questions by the pharmacist	289(49.6)	214(36.2)	15(2.6)	12(2.06)	53(9.1)	4(1.0)	4.16±1.17
4	I am satisfied with medicines that I receive from pharmacies	295(50.6)	198(34.0)	6(1.0)	28(4.8)	56(9.6)	3(1.0)	4.08±1.35
5	I am satisfied with the quick services I receive from the pharmacy staff	67(11.5)	140(24.0)	3(0.52)	200(34.3)	173(29.7)	3(1.0)	2.53±1.43
6	I am satisfied with the pharmacy because I learn new things every time I interact with the pharmacist	89(15.3)	73(12.5)	60(10.3)	193(33.1)	168(28.8)	3(1.0)	2.52±1.42
7	I am satisfied with the pharmacy because my needs are always met each time I come to the pharmacy	37(6.4)	161(27.6)	20(3.43)	210(36.0)	155(26.6)	3(1.0)	2.51±1.31
8	I am satisfied with the availability of the pharmacist each time I visit the pharmacy	63(10.8)	50(8.6)	30(5.2)	227(40.0)	213(36.5)	1(1.0)	1.99±1.20
9	I am satisfied with the prices of medicines in the pharmacy	72(12.4)	11(1.9)	23(4.0)	192(32.9)	285(48.9)	1(1.0)	1.92±1.36
10	I am satisfied with the hospitality of the pharmacy staff	30(5.2)	22(3.8)	6(1.03)	234(40.1)	291(49.9)	1(1.0)	1.74±1.03

1

Table 4: Relationship between consumers' level of satisfaction and their demographics.

Characteristics	Frequency (%)	Median (IQR) Satisfaction Score	<i>p</i> value
Age(years)			
20 -29	65(11.2)	31(8)	0.031*
30-39	412(70.7)	32(8.5)	
≥40	106(18.1)	39(9)	
Gender			
Male	316(54.2)	23(9)	0.012*
Female	267(45.8)	27(10)	
Marital status			
Married	462(79.2)	28(10.5)	0.053
Single	121(20.8)	27(11)	
Educational level			
Primary	14(2.4)	29(10)	0.016*
Post primary	569(97.6)	30(11)	
Occupation			
Trader	53(9.1)	26(8)	0.004*
Teacher	226(38.8)	24(6)	
Lawyer	18(3.1)	25(10)	
Accountant	39(6.7)	31(11)	
Student	40(6.9)	19(9)	
Lecturer	28(4.8)	17(10)	
Self employed	33(5.7)	31(10)	
Civil servant	101(17.3)	35(9)	
Unemployed	19(3.3)	27(11.5)	
Retired	26(4.5)	25(14)	

care. The more community pharmacists offer patient-centred care; the more customer loyalty is likely to be enhanced. In addition, very few respondents as revealed by this study, visited community pharmacies to receive first aid treatment, vaccination or immunization, and health education on life style modification from pharmacist. This result is at variance with the outcome of a study carried out in England (Bell, McElnay & Hughes, 2000). In that study, pharmacists on the Isle of Wight successfully vaccinated nearly 10% of the people living on the island against influenza. The patients in turn approved of the convenience and speed of service associated with receiving vaccinations at community pharmacy rather than in physician's office. The reason for the low percentage of respondents who sought clinical services from community pharmacies could be either that consumers are not aware of the clinical knowledge that community pharmacists have or that they believe that community pharmacists may not be able to offer effectively clinical services as physicians and nurses would do. In this regard, it may not be out of place to advice community pharmacists to embark on awareness creation in order to make their capabilities and skills known to the

public in a subtle and responsible manner. This could be done by teaming up with other healthcare professionals to execute immunization and other public health programmes.

Furthermore, only a small number of respondents reported in this study, that they sought screening services such as monitoring of their blood pressure, blood sugar, weight as well as undertaking pregnancy tests in community pharmacies. Screening services belong to the extended role that pharmacists are expected to play if they must advance the frontiers of pharmaceutical care. However, respondents did not seek much of these screening services probably because of limited information about the capabilities of community pharmacists. In fact, in a similar study conducted in Oman, Saudi Arabia, about half (190) participants regarded pharmacist as a mere vendor/dispenser (Jose, Al- Shukihi & Jimmy, 2015) rather than a care giver.

The sub-optimal provision of information to consumers of community pharmacy services on the use of contraceptives and issues about family planning techniques as reported in this study, agrees with the findings of a study conducted in the United Arab Emirates. In that study, patients who received information about the responsible use of oral contraceptives were low (El-Sharif et al, 2017). Arguably, the low demand of services such as information on family planning and immunization, among others, could also be that most customers are unaware of such services offered by community pharmacists. It could also be due to the lack of conducive pharmacy environment which is needed to enhance clients' confidence and sense of privacy when accessing such services. Moreover, community pharmacies should be seen as safe health spaces (Knox et al., 2014). Studies have identified concerns about confidentiality and lack of privacy as barriers to customers' participation in and demand for screening services offered by community pharmacies (Taylor et al., 2012).

Cultural reasons were adduced to explain their result. Meanwhile, findings from a similar study carried out in Uganda contradicted the result obtained from our study. In that study, pharmacists in Uganda, provided intramuscular contraceptives to patients who eventually preferred pharmacists to other healthcare personnel in carrying out such activities because they believed that the exercise with pharmacists reduced waiting time, and was more convenience (Alkol et al, 2014). Therefore, variations in study outcomes could be attributable to variations in study settings and perhaps differences in study populations. However, in the case of this study, the inadequate training of community pharmacists in public health pharmacy, (Erku & Mersha 2017; Osemene & Erhun 2018) could be

responsible for the dearth of information received by consumers on family planning issues as well as the use of oral contraceptives. These findings again reiterate the need for community pharmacists to undergo periodic training in order to upgrade their skills in order to match the challenges that may be associated with the expanded scope and role of pharmacists in modern pharmacy practice. The importance of training for all cadre of pharmacists in optimizing their pharmaceutical public health knowledge had been identified and extensively discussed in extant literature published in Scotland, New Zealand, Nigeria, and Canada to mention but a few (Oparah & Okojie, 2005, Brewster, 2005 Pleger et al, 2008, & Sheridan et al, 2008.). In addition, undergraduate curriculum for pharmacy school's in Sierra-Leone should be reviewed with more focus on clinical pharmacy courses such as public health and sexuality education as mentioned elsewhere (James & Cole, 2016). Inadequate community pharmacist clinical practice skills could be a serious concern for pharmacy profession because pharmacy practice is shifting focus from medication supply to direct patient care (Oparah & Okojie, 2005.). It is therefore strongly suggested that practicing community pharmacists should have the requisite skill needed to render patient-centred care which has become the hallmark of modern pharmacy practice.

There is no uniform framework for the cost components of community pharmacy in Sierra Leone neither are prices of medicines and professional pharmacy services regulated. Competition and market forces drive these variables. However, there are basic cost elements which may include rents, statutory fees, staff salaries, maintenance of facilities, taxes, cost of goods and services, among others. Concerning advertising of services, there are legal restrictions to above-the-line adverts. Community pharmacists however explore below-the-line advert channels (professional journals, word of mouth, and other similar means including modern digital technologies) to reach prospective clients.

Cost structure has to do with various types of expenses a business incurs and they are broadly group into fixed and variable costs. In the community pharmacy setting, the cost of service delivery is of utmost importance. In Sierra Leone, setting up a community pharmacy business is a herculean task. Sierra Leone is a poor country in West Africa. Majority of the community pharmacists, rent (fixed cost) their shops. A lot of monies are expended in registering the pharmaceutical premises with the Pharmacist Board of Sierra Leone which is the only authorized body to issue operational licence to practice as a pharmaceutical chemist. This licence is renewed at a fee annually (Pharmacy Board of Sierra Leone, 2015). Moreover, cost structure of community pharmacy in Sierra Leone is not different from what obtains in small scale business enterprises in under developed economics. The implicated fundamental costs of

running a community pharmacy in Sierra Leone include fixed cost, variable cost, sunk (historical), direct and indirect cost, administrative cost over-head cost, out-of-pocket-cost, cost of revenue generating activities, cost prescription and operating cost. Materials that are routing consumed during delivery of a service is usually considered as a direct variable cost of service delivery (Betema 2007). Dispensing of prescription is personal cost especially to the pharmacist (Rupp 2011). Pharmacist in Sierra Leone do regulate their own costs. This they do by regulating over-head cost such as personnel cost; for instance, the numbers of employee which are usually between 2-6 persons comprising two to three sales personnel, a driver and a watch man.

Generic drugs are mostly sold because they are cheap and yield high turn-over. Branded drugs are fewer but attract higher profits. Prices of medicines are fixed by putting some percentages as mark-ups to the cost of purchase (Osemene et al, 2020). Such mark-ups are not regulated. In all, profits are obtained by making sure that the sum of fixed and variable costs exceeds total cost (Adenika 1975).

Consumer's level of satisfaction was very good in areas of information that pharmacists gave to them concerning their health; types of questions the pharmacist asked consumers before dispensing their medications, and quality of medicines received from the community pharmacies. These findings were consistent with the results obtained in a study conducted in Canada (Brewster et al, 2005). The areas that consumers rated very well/good had to do with patient counseling which remains the main trust of pharmacy practice and most pharmacists are specialists in this aspect based on their training.

In this study, some consumers reported moderate satisfaction with services such as rate and effectiveness of service delivery, availability of goods, and acquisition of new knowledge following interactions with pharmacists. This finding is comparable with results obtained from studies carried out in Nigeria (Oparah & Kikanme 2006), and Oman (Jose, Al-Shukhihi & Jimmy, 2015) where consumers of community pharmacy services reported that they were moderately satisfied with the quality of pharmaceutical services received from community pharmacies.

Moderate satisfaction experienced by customers of community pharmacy services implied that the community pharmacies did not met all their expectations. To improve consumers' satisfaction in this regard, community pharmacy staff should endeavour to offer quick services to their customers. By so doing, patient waiting time could be reduced which invariably may enhance service quality in community pharmacies. Patients experience of waiting especially in a health care delivery system, could influence their perceptions about service quality. Improved patient

waiting times (in form of reduction in patient waiting times) have been shown to be positively correlated with improved service quality scores in community pharmacies in Nigeria, United Arab Emirates, Pakistan (Afolabi & Erhun, 2003; Bader et al., 2019, Shoaib et al., 2018).

Majority of the consumers were less satisfied with the prices of goods and services offered by community pharmacies. They believed that the prices of community pharmacy services and goods were on the high side. The high prices may be as a result of quality of products and services offered in the pharmacies which the consumers themselves had rated very high. In most cases, health care costs remain high in developing economies including Sierra-Leone because majority of patients make out-of-pocket payments for their medications (James & Cole, 2016). The National Health Insurance Scheme which allows workers to pay a-quarter of the costs of health care while the government pays the balance bill should be introduced. Even in advance countries such as UK and Canada, state-funded minor ailments exists (Mansell et al,2015). However, community pharmacies should justify the high prices of their goods and services by providing value-added services and products that should match and exceed consumers' expectations as well as introduce new product lines. Again community pharmacists should strike a balance between professional and business practices. This could create better impressions on the minds of consumers that the added services justify the payment of additional costs consumers were made to pay (Saka, Omoloye & Adeosun 2016). Moreover, community pharmacists could reduce health care costs without compromising quality by selling generic brands of medicines rather than high-cost branded alternatives (Atolaibi & Abdelkarim, 2015).

The unavailability of community pharmacists in their pharmacies/premises most of the time which was reported by consumers in this study, remains a reoccurring problem facing pharmaceutical practice in both developed and developing countries (Saka, Omoloye & Adeosun 2016). Hence the level of satisfaction of consumers of community pharmacy services was very low in this regard. This result was similar to the findings of a study carried out in South-western Nigeria which stated that pharmacists were not always available to provide medication information (Saka, Omoloye & Adeosun 2016). Accessibility and availability of community pharmacists could enhance patient care and build confidence in the minds of consumers. Constant flow of communication between consumers and community pharmacists could enhance trust, public image of community pharmacists as well as foster stronger relationship between community pharmacists and consumers. Through constant communication between the pharmacists and consumers, a conducive pharmacy environment for professional roles may be established

which has been found to develop and improved general customer satisfaction (Pinto et al, 2014). It is expected, that community pharmacists should be at their duty posts most of the time to offer among other things, medicine information services to their customers. If community pharmacists make themselves available most of the time in their work place, they would build stronger relationship with customers, stimulate future loyalty and patronage, which in turn could improve consumer's satisfaction with their services (Saka, Omoloye & Adeosun 2016). However, as was opined elsewhere, the parlous economic situation in most developing nations, has compelled most professionals to seek and create additional sources of income to augment whatever is realized from their current practice (Saka, Omoloye & Adeosun 2016). This could be one of the main reasons why most of the community pharmacists were not always available in their premises to attend to consumers' needs.

In this study, consumers' satisfaction was found to be low in terms of hospitality to consumers by community pharmacy staff. Normally, it is expected that pharmacists and staff of community pharmacies show courtesy and utmost respect to customers at all times. Kotler (2000) argued that pharmacy services will remain sub-optimal except staff are prepared to offer excellent services to consumers. This notion was also expressed elsewhere that those who are in the best position to deliver personal caring level of service in community pharmacies are the front-line staff which consists of clerks, technicians, and drivers (Satterfield 2017). These are the groups of people who frequently come in contact with patients/consumers. Therefore, pharmacy staff must see and treat consumers not as numbers, prescriptions, patients, but as people (Satterfield 2017). Courtesy to customers not only help to build relational association with consumers, but also build market share and ensure repeat purchase. Health workers must have the right attitude toward customers. It is even expected that they should be willing to assist and show empathy to patients or clients (Kinberlin et al, 2011). If all these were done, consumers may have felt more satisfied with the level of service offered by the community pharmacies.

Furthermore, females and consumers above 40years of age expressed more satisfaction with community pharmacy services than males and other younger age groups. This result is comparable with the findings of a study carried out in India (Jayaprakash, Rajan & Shivan, 2009). The possible reasons for females and older customers to have expressed higher satisfaction with community pharmacy services than their male counterparts and younger age groups are as follows: females and older age groups could be more prone to health challenges and are likely to have exhibited better health-seeking behaviours by visiting pharmacies more

frequently and as such were able to build stronger customer relationship with the pharmacies and should have derived more satisfaction. This study further revealed that there were significant differences between the demographics of consumers such as marital status, educational level and occupation with level of satisfaction obtained from community pharmacy services. These findings were also in line with results from a study conducted in Bangalore City, India (Jayaprakash, Rajan & Shivan, 2009). However, our findings are not in agreement with a study conducted in Oman (Jose, Al Shukihi & Jimmy, 2015) which reported no differences ($p > 0.05$) between satisfaction of consumers of community pharmacy services with their demographics. Possible explanations for these variations in study results, could be attributed to differences in the study settings, exposure of consumers, and consumers' knowledge of the roles of community pharmacies and perhaps the degree of expectations of the different consumer segments in terms of demographics since satisfaction is a function of expectation.

Limitations of the study

It was a cross-sectional survey that may not have adequately addressed the level of consumers' satisfaction because satisfaction itself, is dynamic and could change with time and space. A longitudinal survey may be preferable. Satisfaction in service provision could also be viewed as the gap between the level of current service and the future expectations of consumers. The latter was not looked into in this study and therefore could form basis for further study.

CONCLUSIONS

The study revealed the services sought after and accessed by consumers of community pharmacy services as patient counseling, purchase of prescription and non-prescription medicines, treatment of minor ailments, medicine information services, health education and promotion, screening services and sexuality education. However, the levels of screening services and sexuality education offered by the pharmacies were very low. Satisfaction derived by consumers was good for quality of community pharmacy products, and information provided by pharmacists about their health. Moderate level of satisfaction was reported in the areas questions asked by the pharmacists before medications were given to consumers, responses to consumers' questions by community pharmacists, and rate of service delivery by the pharmacies. Low levels of satisfaction were reported in prices of products purchased from community pharmacies and availability of community pharmacists, and hospitality of community pharmacy staff. Furthermore, the level of satisfaction of consumers was significantly associated with their age, gender, level of education, and occupation of consumers.

The study therefore recommends that to improve consumers' satisfaction generally, training of the pharmacists and pharmacy staff is good but more importantly, value-added services should be provided, efforts should be made to develop stronger relationship with consumers in order to improve loyalty, not necessarily offering either new or unique services; and availability of the pharmacists is key.

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